Gang members or vulnerable youth?

Reshaping how we think of gang-involved youth:

An examination into their emotional and mental health needs

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Abstract

Mental health difficulties, conduct problems, and emotional maladjustment predict a range of negative outcomes, and this may include gang membership. However, few studies have examined how behavioral, emotional, mental health, and socio-cognitive factors all relate to adolescent gang involvement. Consequently, the relationship between gang membership and a range of psychological constructs is, to date, not well understood. The research described in this thesis sought to investigate, and develop further understanding of, youth gang members' affective and mental health experiences, their behavioral outcomes, and engagement of socio-cognitive processes. A systematic review on gang members' mental health and emotions via narrative synthesis revealed how gang members may be at increased risk of suffering from mental illnesses and negative emotions, such as anger and rumination. Utilizing a mixed-methods design, a qualitative case study and longitudinal study with two-time points were conducted to develop an understanding of the psychological processes related to gang involvement. Pattern-matching techniques and mixed analyses of variance (ANOVA) revealed that gang-involved participants suffered from higher levels of psychological distress and reported higher levels of depression, posttraumatic stress symptoms, moral disengagement, and rumination. Gang-involved youth also had higher levels of conduct disorder and exposure to violence, but they did not differ from non-gang youth on levels of emotional distress and feelings of guilt. The results suggest gang members may benefit from clinically tailored interventions to support their emotional, mental, and socio-cognitive needs. Implications regarding prevention and intervention efforts to tackle the effects of gang involvement, especially concerning the mental ill health and emotional well-being of gang members, are discussed.

Key words: emotions, gangs, mental illness, moral disengagement, psychological

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Thesis Outline

Chapter One: Definition and the Problem with Gangs

Ongoing definitional debates have dominated the literature on gangs and a wealth of empirical research has been conducted on how a gang should be defined. Chapter One provides an overview of this debate and includes consideration of the varying perspectives on defining gang membership, some of the problems with current representations of gangs, and concludes with recent developments which see many researchers and institutions adopting a like-minded definition. This chapter also describes the problems posed by gangs and provides a rationale for why reshaping the view of youth gang members from mere perpetrators of violence to vulnerable youth is paramount to effectively responding and tackling gang membership effects.

Chapter Two: Gang Membership, Mental Illness, and Negative Emotionality: A Systematic Review of the Literature

Following the discussion on defining gangs and their strong relationship with violence, this chapter reviews the current literature and examines whether gang members are at increased risk of psychological and emotional distress. Employing a systematic approach to review the literature, selection criteria was adopted to address whether gang members experience higher levels of mental health problems, including anxiety, depression, paranoia, personality disorder, and trauma compared to non-gang members. Moreover, the extent to which the literature examines gang members' emotions was also explored.

Chapter Three: Is it Merely a Case of "Mad and Bad"? A Case Study Approach to Examining Gang Involvement

To develop understanding of the findings revealed via the systematic review in Chapter Two, a qualitative case study of gang membership was conducted. Based on the unified theory of gang involvement, which syndicates the most prominent theories of gang

membership and includes a consideration of psychological processes, the case of HY, a 28-year-old, black British male, previously part of a renowned gang in the United Kingdom is presented. Qualitative analytic techniques, such as pattern matching, were used to explore and identify possible causal links between factors to examine how unified theory applied to HY's pathway to gang involvement. The findings illustrated how HY was not merely "mad and bad" as he described himself, but that over the course of a decade, individual characteristics, social, and environmental factors preceded stable gang membership.

Chapter Four: Rethinking How We View Gang Members: An Examination into Affective, Behavioral, and Mental Health Predictors of UK Gang-involved Youth

The systematic review also revealed a need for empirical gang research that was longitudinal and conducted at multiple-sites. Chapter four reports on a quantitative study that examined 91 adolescents at baseline (time one) and after three months (time two) at three different sites to compare non-gang and gang-involved youth on levels of mental health, conduct problems, emotions, and socio-cognitive processes. The findings are discussed in relation to a public health approach that focuses on primary, secondary, and tertiary responses to tackling gang involvement.

Chapter Five: **Discussion: Implications, Limitations, and Future research**

The purpose of this chapter is to discuss the findings of the research presented in the thesis, especially concerning pathways to gang involvement based on HY's case in Chapter Three and the mental health needs of gang-involved youth reported in Chapter Four. The findings are discussed with a particular focus on clinical and policy implications and consideration of the limitations of the research. The chapter concludes with how future research can address the gaps of current research and work towards an evidence-based, less punitive approach to gangs, which includes a responsive and tailored prevention and intervention response.

Publications

Chapter Two

Subject to minor revisions (i.e. an updated literature search), Chapter Two has been previously published as:

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Chapter One

Definition and the Problem with Gangs

"*A definition is more than a description of what we mean it is an instrument that we use as a basis for identifying an object*".

(Wood & Alleyne, 2010, p.101)

Gang Membership: A Definition

Sound conceptual definitions are the bedrock of rigorous scientific research. Yet, issues related to poorly formulated definitions continue in social science research (Podsakoff, MacKenzie, & Podsakoff, 2016). In the study of gangs, definitional issues continue to cloud the literature amid considerable debate of how best to define and measure gang membership (Decker, Melde, & Pyrooz, 2013; Esbensen, Winfree, He, & Taylor, 2001). This has resulted in researchers and practitioners, media outlets, and policy makers using divergent and inaccurate conceptualizations of gang membership (see Aldridge, Medina, & Ralphs, 2008; Curry, 2000). In the continued pursuit of establishing an agreed definition, which as posited by Wood and Alleyne (2010) is crucial for correctly identifying any entity, numerous arguments have been put forward. There are those who have expressed concern regarding the very label of gangs, stating that the term would create misconceptions, inadvertently marginalize ethnic minority groups, result in harsher policy responses, and/or take the focus away from youth violence more generally (Aldridge et al. 2008; Ball & Curry, 1995; Sullivan, 2006). In contrast, some scholars have also suggested that self-identification of gang membership is valid and others posit that offending behaviors and violence are not necessarily hallmarks of gang membership (Esbensen et al., 2001; Everard, 2006).

Interestingly, Thrasher's (1927) work on 1,313 gangs in Chicago identified 'good' and 'bad' gangs, positing that criminality was not a defining feature of *all* gangs (see Esbensen et al., 2001). Similarly, more recent researchers, such as Everard (2006) suggest

how gangs may also form as a means to *avoid* delinquent behavior and criminality. However, Wood and Alleyne (2010) argue that interest in gangs stems from their criminality and violence. Furthermore, such disparate interpretations of gang membership would result in difficulties formulating conclusions that are meaningful and apply to the *same* entity (Wood & Alleyne, 2010); and in the 'under- or overestimating' of gang activity (Esbensen et al., 2001, p. 106). Thus, clarifying the definition of gangs compared to other violent and non-violent youth groups and conducting academic research based on an agreed definition may help clarify the arguments for and against gang research.

Thrasher's (1927) influential work on Chicago-based youth provided some of the earliest accounts of gang involvement. According to Thrasher (1927), gangs were organized groups in socially disorganized communities who formed through conflict in response to disillusionment towards conventional societal norms and institutions. However, researchers have noted numerous problems in defining a gang. For instance, Thrasher (1927) attributed *social disorganization* (i.e. a breakdown in conventional social norms), and consequently gang membership, mainly to ethnic minority youth who found it difficult to adapt to conventional cultural customs. However, recent evidence provides evidence against the ethnicity-gang nexus. Research has reported similar levels of gang membership across ethnic groups (Esbensen, Brick, Melde, Tusinski, & Taylor, 2008) and that gang membership is based on the ethnic demographic of a particular neighborhood rather than ethnic minorities per se (Fagan, 1996). Thus, this variability in the measurement of gangs fueled through stereotypical representations of who is or is not more likely to be in a gang may also result in the over-representation of ethnic minorities in gangs. This has already occurred on a global scale, in the United States (Tapia, 2011), the United Kingdom (Cockbain, 2013; Davison, 1997), and the Antipodes (Poynting, Noble, & Tabar, 2001).

The research presented in this thesis is based on a sample of gang-involved youth in

the UK and so issues relating to how gangs are defined in the UK is an important consideration. Of particular concern has been the prevailing view that antisocial 'gang' behavior is primarily an 'ethnic problem'. Researchers have expressed concern that focusing on the ethnic composition of gangs' risks marginalizing ethnic minority youth from the most deprived communities (see Aldridge et al., 2008).

Indeed, this overrepresentation of black and minority ethnic (BAME) individuals within the gang discourse is reflected in a recent review by Williams and Clarke (2016) who examined the criminalization of black and minority ethnic youth in England and Wales. The authors reported "that the gang label is disproportionately attributed to BAME people" (Williams & Clarke, 2016, p.10). In the current thesis, it must be noted that it was not the intention of the researcher to stigmatize BAME communities. Rather this was due to convenience sampling in geographical areas where gang membership reflected the ethnic composition of communities in the relevant areas (see Chapters Three and Four). Thus, conflating ethnicity and gang membership diverts attention from the wider individual, social, and environmental risk factors, which youth who are vulnerable to gang membership may experience regardless of their ethnic background. Therefore, a consistent definition is needed for comparative research that applies across ethnic groups and is able to clearly distinguish what makes a gang different to other groups, including their emotional and mental health needs.

Using an agreed definition is of particular significance to valid and reliable empirical research on gangs and would enable a more effective understanding of how-to best approach gang membership, rather than the heightened focus on ethnic minority youth and current retaliatory approach (Aldridge et al., 2008; Densley, 2011). Furthermore, it is important to note that much of the research on gang members has been generated from studies on delinquent youth conducted in the United States, such as the Denver Youth Survey (Esbensen

& Huizinga, 1993), the Rochester Youth Development Study (Thornberry, Krohn, Lizotte, & Chard-Wierschem, 1993), and the Seattle Social Development Project (Battin, Hill, Abbott, Catalano, & Hawkins, 1998). Consequently, knowledge and policy implementation regarding gangs in Europe and the UK has relied on representations of gang involvement in the US, despite clear contextual differences, such as differences between the UK and the US in the legalized use of firearms (Aldridge et al., 2008; Densley, 2011). Hence, some researchers such as Aldridge et al. (2008), have called for further research on gangs in the UK and expressed the need for "empirical observation that provides the benchmark for comparison" (p. 34).

In an attempt to develop and understand the nature of gangs in Europe, including the UK, a network of researchers developed the Eurogang Research Program (Weerman et al., 2009). The main aim of the program was to support the development of rigorous, *comparative* research, based on a standardized definition of gangs and a mixed-methods approach. Following numerous discussions, the network reached agreement of what constitutes a street gang and distinguished between *definers*; features vital to define a group as a gang, and *descriptors;* descriptive aspects of a group, which do not determine gang membership, but may distinguish one gang from another, such as having a gang name or adopting particular symbols (Weerman et al., 2009).

The definers of gang membership are (1) *a group identity*, identifying with a group of at least 3 members and having a sense of '*we-ness',* (2) *durability*: the gang exists for a minimum of three months, (3) *street-orientation*: the gang spends the majority of time in public spaces unsupervised by authority figures, such as parents or teachers, (4) *youthfulness*: although some group members may be adult gang members, the majority of members are adolescents or young adults aged between 12 and 25 years, and (5) *illegal behavior*: criminality is a core aspect of the "group's identity" (see Weerman et al., 2009, p. 20).

Despite on-going difficulties in reaching an agreed definition internationally and in the US (Augustyn, Ward, & Krohn, 2017; Gilbertson & Malinski, 2005); in Europe, many researchers have adopted the Eurogang definition of a gang. That is not to say there are not critics of the Eurogang definition, such as Densley (2011), who argues that some of the definers of a street gang, such as street-orientation may actually be part of the gang's 'business' objectives (e.g., selling drugs). Nonetheless, for the purpose of *comparative research*, the research described in this thesis adheres to the Eurogang definition. Others, such as the Metropolitan Police, have also adopted a similar definition to the Eurogang network. For instance, the Metropolitan Police definition incorporates the definers of *identity*, *durability*, *youthfulness*, *street orientation*, and *criminality* and defines a gang "…as a relatively durable, predominantly street-based group of young people who see themselves (and are seen by others) as a discernable group, and engage in a range of criminal activity and violence" (Mayor Office for Policing and Crime, 2018, p. 10). Accordingly, and in keeping with emerging academic literature on gangs that has also adopted the Eurogang definition (Mallion & Wood, 2018; Medina, Cebulla, Ross, Shute, & Aldridge, 2013; Osman & Wood, 2018; Weerman, Lovegrove, & Thornberry, 2015; Wood & Alleyne, 2010; Wood & Dennard, 2017), a gang is defined as "any durable, street-orientated youth group whose involvement in illegal activity forms part of its group identity." (Weerman et al., 2009, p. 20).

The Problem with Gangs

> *"Group membership is key to human social existence. Families, ethnic groups, friendship networks provide us with identities that define us, shape our attitudes and beliefs, and inspire our behaviors".*
>
> (Wood, 2014, p. 710)

International concern about gangs, including in the US and UK, stems largely from gang members' heightened relationship with violence (Chu, Daffern, Thomas, & Lim, 2012;

Decker et al., 2013). Research notes how gang involvement is associated with increased offending behaviors and serious violence even when compared to non-gang peers who are "demographically similar" (Melde & Esbensen, 2013, p. 144). Consequently, adolescent gang involvement gains widespread attention from professional and public audiences because of the serious implications it has for youth involved and the social fabric of communities (Densley, Adler, Zhu, & Lambine, 2016). Research shows how gang-involved youth engage in disproportionate amounts of non-violent and violent offences, including against property, robbery, and weapon use (Taylor, Freng, Esbensen, & Peterson, 2008; Thornberry, 1998; Thornberry, Krohn, Lizotte, Smith, & Tobin, 2003). Hence, gangs exert a unique influence on levels of violence, which distinguishes adolescent gang members from other forms of delinquent youth groups (Decker, 1996; Melde & Esbensen, 2013). Thus, in line with Wood's (2014) thoughts on group membership, *gang* membership for some youth may inspire attitudes, beliefs and behaviors, which are problematic due to their *antisocial* nature.

Recently in the UK, gang-related homicide increased from 29% in 2016 to 37% in 2018 and gang-related knife-crime involving victims under 25 is higher (57%) than that committed by non-gang members (34%; Mayor Office for Policing and Crime, 2018). Most concerning is that children as young as aged 10 are involved in gangs and a recent report estimates that 27,000 10 to 17-year olds are street gang members (Children's Commissioner, 2018: p.15). Unsurprisingly, these children tend to have a range of needs, including poor mental and emotional health (McDaniel, 2012; Mayor Office for Policing and Crime, 2018). Furthermore, alongside adverse family environments, poor mental health, and special educational needs, risk of gang affiliation is also deemed a current category of vulnerability (see Children's Commissioner, 2018). Thus, it is unsurprising that gang-related violence is an urgent Government priority and that government responses intend to address gang-related issues (HM Government, 2016).

A recent report by the Centre for Social Justice (2009) states that "gangs…are young people who feel marginalized and disenfranchised in their communities" (p. 11). Accordingly, perceptions of gangs may provide some understanding as to their appeal. Evidence suggests how gangs may be perceived favorably by some youth, as a means of providing comradeship, are seen to compensate for the role of the family for youth who experience adverse family environments, and can provide a sense of belonging and loyalty; ultimately gangs are perceived to help youth meet their unfulfilled needs (Centre for Social Justice, 2009; Vigil, 1988). Hence, risk factors, such as disorganized neighborhoods, mental health difficulties, poor school performance, and troubled family relationships can "push" youth into gangs, whilst respect and status (Klein, 1995), which also link to gang membership, can "pull" (i.e. attract) youth towards gang involvement (Gebo, 2016; Wood & Alleyne, 2010). This suggests that gangs may be a needs-motivated response for youth with *pre-existing* vulnerabilities. Moreover, the sense of support youth may acquire from gang membership in the short-term may distance youth from prosocial controls and peers and further into the criminality and violence associated with gangs (Wood, 2014).

Methodological constraints, such as researchers examining only the rate of violence after youth join a gang, has resulted in limited understanding of the role gangs have on the *level* and *nature* of offending. In response, Melde and Esbensen (2013) employed multi-level, repeated measures modelling to analyze school-based data from 3,700 youth and investigated whether gangs provide "a unique social forum" for violent offences (p. 143). That is, does gang involvement increase the likelihood of violent offending above and beyond the increased opportunities that may be available to already delinquent youth? Findings showed how youth gang involvement significantly increased the likelihood of engaging in violent crime and that violence-related offences were most prominent during active gang involvement (Melde & Esbensen, 2013). This suggests, in line with previous contentions, that

group processes specific to gang membership play a large role in what makes gangs so problematic (Klein & Maxson, 2006; Wood, 2014).

Wood (2014) refers to social psychological theories to provide theoretical insight into the "specific group processes" that may motivate youth to join a gang, accept and engage in behavior. This includes how such theories can provide insight into the gang's antisocial beliefs and norms, including engagement in criminality and violence, and contribute to shaping gang members' socio-cognitive processes. Wood (2014) points to theories such as uncertainty-identity theory (see Hogg, 2000) and social categorization theory (Tajfel & Turner, 1986) to demonstrate how adolescents may be inclined to join a gang. For instance, in line with uncertainty-identity theory, which suggests that individuals with a poor sense of identity may opt for group membership, individuals may then assign themselves to a group that they then use to identify themselves and others with in line with the group's norms and values, as per social categorization theory (see Wood, 2014). Consequently, Wood suggests how youth who have been shown to have low self-esteem, experience social exclusion, and difficult school experiences (Hill, Howell, Hawkins, & Battin-Person, 1999; Howell & Egley, 2005) may turn to gangs to have their basic needs met, reinforce their perceived negative world view, and attempt to maintain a positive sense of identity (Watkins & Melde, 2016; Wood & Alleyne, 2010).

According to unified theory, a theoretical model of gang involvement that unifies the most prominent theories of gang membership whilst also considering psychological and pro-social pathways (see Chapter Three for an in-depth discussion), youth may already be aware of gangs in their neighborhood. Positive perceptions pertaining to the benefits of gang membership may motivate gang joining. Furthermore, once youth join the gang and experience a sense of 'we-ness" (see Weerman et al., 2009), gang members may put aside their personal needs and act in accordance to group norms, which are antisocial in nature and

disregard potential negative consequences (e.g. law enforcement; Hennigan & Spanovic, 2012). Thus, even with the high levels of violence associated with gang membership and the high levels of violent victimization that members may experience due to gang membership (Peterson, Taylor, & Esbensen, 2004), gangs can enable young people to build their self-esteem and as the gang's reputation increases, such as through engagement in violence, this may transfer to higher levels of individual self-esteem (Dukes, Martinez, & Stein, 1997; Wood, 2014); keeping youths engaged with gangs.

Although gang membership can be temporary with most gang-involved youth staying in the gang between one and two years (see Esbensen & Huizinga, 1993; O'Brien, Daffern, Chu, & Thomas, 2013), gang involvement can have a detrimental long-term impact on youths who join them. Employing a developmental, life-course perspective, which "focuses attention on changes that take place over the entire life span by examining the trajectories that people enter and move along" (Krohn, Ward, Thornberry, Lizotte, & Chu, 2011, p. 993), Korhn et al. (2011), investigated whether gang involvement was associated with adverse long-term outcomes in adulthood from age 25 years and onwards. The authors referred to a longitudinal study of development, the Rochester Youth Study, which followed a large sample of youth from adolescence to adulthood, aged from 14 to 31 years of age. Findings revealed a statistically significant (negative) effect of gang involvement on the transition from adolescence to adulthood. Gang members experienced more adverse outcomes, including lower levels of attainment and early parenthood in adolescence. Once in adulthood, gang members were unable to maintain healthy family relationships, experienced financial instability, and continued criminal offending. Therefore, in addition to gang members' pre-existing vulnerabilities, including mental health problems and their heightened experiences with violence as perpetrators and victims, gang membership negatively impacts on youth being able to fulfil healthy and successful lives in adulthood. In order to effectively support

young people at risk-of gang involvement and those already gang-involved, a compassionate and holistic approach is required to address their wide-ranging needs, including their mental and emotional health. Thus, rethinking how we view and treat gang members, who also happen to be vulnerable young people, is paramount.

Towards a Public Health Approach

There is growing consensus that a public health approach should be adopted to address youth violence and this includes gang involvement (Gebo, 2016; Neville, Goodall, Gavine, Williams, & Donnelly, 2015). The public health approach "takes a population-based approach and aims to improve the health and safety of the population" (Neville et al., 2015, p. 323). The approach is based on a four-stage model, which states (1) 'the problem', (2) involves identifying risk and protective factors associated with youth violence and/or gang involvement, (3) develops and evaluates responsive interventions at varying levels, and (4) implements successful programs (see Dahlberg & Krug, 2002). Prevention operates at three distinct levels; (1) *primary* (before youth become gang-involved or engage in violence, a public health approach would ensure access to inclusive, quality provisions, including education, healthcare, and employment regardless of "socio-economic, ethnic, or gender status"; Gebo, 2016, p. 378), (2) *secondary* - once youth join a gang interventions should be put in place to prevent escalation of gang involvement and violence, and (3) *tertiary* - long-term support to rehabilitate and prevent continued gang involvement and violence is provided (Neville et al., 2015).

Gebo (2016) argues that given the difficulty in distinguishing between risk factors which result in youth violence and those which lead to joining a gang, the public health approach at primary and secondary prevention stages may be better utilized when focusing on youth violence rather than specifically on gang involvement. However, *group processes* conducive to gang involvement and the vital significance of these processes in members'

adherence to group norms, including gang-related violence, may explain why gang youth are more delinquent and violent, compared to non-gang delinquent youth (Klein, Weerman, & Thornberry, 2006; see Wood, 2014). Research also demonstrates how compared to violent men, gang members self-report greater levels of mental health difficulties and violence (Wood et al., 2017).

More recently, qualitative research by Deuchar and Ellis (2013) on the outcomes of a secondary prevention initiative in Scotland, which used a collaborative approach between youth work and schools to support young people at risk of criminality and gang involvement, reported positive changes in participants attitudes and emotions. These changes included participants' reflecting on their delinquent behavior, becoming aware of the negative consequences associated with gangs and increasingly aware of the positive opportunities available to them, and expressing improvements in emotional adjustment, such as increased empathetic responses and reduced feelings of anger. The intervention consisted of workshops delivered by youth workers on issues such as antisocial behavior, emotion regulation, and gangs. Thus, although Gebo (2016), understandably, argues that a focus on successful violence prevention efforts should outweigh a 'gang-specific' focus at primary and secondary levels, an understanding by professionals engaging in primary and secondary prevention efforts of the issues relating specifically to gang membership, including gang members' emotional and mental health needs, would add further value to successful prevention initiatives at these levels.

More recently in the UK, a public health approach to youth violence, including gang membership has been adopted in Scotland. The Violence Reduction Unit (VRU; Mayor Office for Policing and Crime, 2019) was developed to target violence at all levels, including in the community, education, and the home by utilizing a range of community initiatives supported by multi-agency stakeholders (e.g., professionals in the criminal justice system,

education, health care, and outreach programs). Following implementation of the VRU, homicide reduced by 39% between the years 2008 and 2018 (Homicide in Scotland, 2018). As part of the VRU, a gang-specific intervention program titled 'Community Initiative to Reduce Violence' (CIRV) was developed to tackle gang membership effects and violence in Glasgow (Violence Reduction Unit, 2009). In line with the public health approach, the CIRV incorporates a community-based, deterrent, and rehabilitative approach to gang-related violence. In addition to the VRU, which provides primary prevention, the CIRV addresses anti-social behavior and violence through secondary and tertiary prevention by providing at-risk or gang-involved youth with self-development programs, extra-curricular activities, such as sport, and mental health support (e.g., counselling). The success of the VRU in Scotland has led to the adoption of a public health model for youth and gang-related violence in London, England, which has in recent years recorded a rise in gang-related homicide (Mayor Office for Policing and Crime, 2018, 2019). Research on gang members' wide-ranging needs including their behavioral, emotional, and mental health needs would provide further evidence to support public health approaches to gang membership.

Indeed, there remains gaps in our knowledge of gangs and the risk factors synonymous with gang membership do not render every young person with adverse childhood experiences, (ACEs; defined as "potentially traumatic events that can have negative lasting effects on health and wellbeing," Boullier & Blair, 2018. p. 132), as gang-involved. However, young people who may be lured to gangs may have specific needs, including mental health difficulties, above and beyond those which make youth engage only in violence, but not join a gang. Thus, empirical gang research must begin to examine and understand the vulnerabilities specific to gangs and in turn these must be considered at primary, secondary, and tertiary levels of prevention within any public health approach.

Consequently, the findings presented in this thesis seek to contribute to the evidence base of a public health approach to tackling gang membership.

Chapter Two

Gang Membership, Mental Illness, and Negative Emotionality: A Systematic Review of the Literature

To date, gang membership has received scholarly attention, theoretically and empirically, from an array of disciplines; including criminology (Gordon et al., 2004; Howell & Egley, 2005; Klein & Maxson, 2006; Melde & Esbensen, 2013), sociology (Boruda, 1961; Eitle, Gunkel, & Van Gundy, 2004), and more recently, psychology (Beresford & Wood, 2016; Wood & Alleyne, 2010; Wood, Kallis, & Coid, 2017). In this breadth of literature, researchers have frequently examined how proclivity for gang involvement may be heightened by risk factors spanning five core domains: community, family, individual, peer, and school (Thornberry et al., 2003). These risk factors include, but are not limited to, individual factors, such as anti-social beliefs and behavior, low-self-esteem, and substance misuse (Bjerregaard & Smith, 1993; Curry, 2000; Hill et al., 1999); school and peer group factors, such as low attainment and engagement with delinquent peers (Craig, Vitaro, Gagnon, & Tremblay, 2002); family influences including disruptive family relationships, economic hardship, and poor parental supervision (Thornberry et al.,2003; Eitle et al., 2004); and community factors associated with neighborhood delinquency and disorganization (Hill et al., 1999; Howell & Egley, 2005; Thornberry et al., 2003). However, some risk factors, such as delinquent behaviors and exposure to violence, have also been linked to the onset of mental health difficulties among gang-involved youth (see Madan, Mrug, & Windle, 2011).

Currently, empirical research examining the association between gang involvement and mental illness remains in its infancy. This is despite research showing how stressful life events are associated with negative emotional and psychological outcomes (Low et al., 2012;

Turner, Wheaton & Lloyd, 1995; Vinokur & Selzer, 1975) and that gang involvement is associated with cumulative stressors across domains, such as risk factors across individual (e.g., low self-esteem), environmental (e.g., community exposure to violence), and social domains (e.g., family problems, such as parental separation; see Hill et al., 1999; Wood & Alleyne, 2010). This suggests that examining links between gang membership and mental illness could deepen our understanding of gangs and as such, is a nexus, which warrants further investigation.

Links between gang membership, criminality, and violence are widely and deeply rooted in the international gang literature (Decker, 2007; Melde & Esbensen, 2013). Research in Europe (Coid et al., 2013; Klein et al., 2006; Wood et al., 2017), the United States (US; Melde & Esbensen), the Caribbean (Katz, Maguire, & Choate, 2011), and Asia (Pyrooz & Decker, 2013), illustrates how gang members are involved in higher levels of generalist and violent offending compared to non-gang offenders (Battin et al., 1998; Esbensen et al., 2001). Gang members also experience a range of adverse stressful life events before gang membership (see Howell & Egley, 2005) and whilst they are members their experience of violence exceeds pre-and/or post membership levels (Melde & Esbensen, 2013). Given how untreated mental illness links to cyclical offending patterns (see Marks & Turner, 2014) and how factors, such as low attainment and self-esteem, which are also among the risk factors for gang membership (see O'Brien et al., 2013), are linked to elevated levels of recidivism (see Matz, Stevens-Martin, & DeMichele, 2014); it is surprising that consideration of the mental health of gang members has not been examined more closely. Especially since research shows how gang members who receive psychotherapeutic interventions (according to their risk, need, and responsivity, see Andrews & Bonta, 2003), are less likely to reoffend than untreated gang members (Di Placido, Simon, Witte, Gu, & Wong, 2006).

The aim of this review is to synthesize current literature on gang members' mental health and their emotions. Consideration of how mental illness and emotions link to gang involvement before, during, and/or following gang membership may have significant implications for theory development, empirical directions, and prevention and intervention programs that seek to reduce gang membership. Findings will help identify empirical and theoretical gaps related to the affective and mental health needs of gang members.

Definition of Gang Membership

Further to the discussion in Chapter One on the definition of a gang, this systematic review refers to the gang as "any durable, street-orientated youth group whose involvement in illegal activity forms part of its group identity." (Weerman et al., 2009, p. 20).

Definition of mental illness

Two main classification systems for defining mental disorders are: The World Health Organization (WHO) International Classification of Diseases (ICD-10, 2016) and the American Psychiatric Association's (APA) Diagnostic and Statistical Manual of Mental Disorders (DSM-5; APA, 2013). Despite some similarities, such as the consideration of clinical symptoms and/or behaviors resulting in distress, there are differences between their definitions of mental illness (Tyrer, 2014). In contrast to the ICD-10, which provides descriptive guidance on numerous mental and behavioral conditions, the DSM-5 adheres to set diagnostic criteria and is more widely employed for research purposes (Tyrer, 2014). The DSM-5 has also been revised "to better fill the need of clinicians...and researchers for a clear and concise description of each mental disorder organized by explicit diagnostic criteria" (APA, 2013, p. 5). For the purpose of this review, mental illness was defined using the DSM-5 definition as a, "clinically significant disturbance in an individual's cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning" (APA, 2013, p. 20).

Rationale for Systematic Review

Findings from the UK (Coid et al., 2013; Egan & Beadman, 2011; Wood & Dennard, 2017; Wood et al., 2017) and US (DeLisi, Drury, & Elbert, 2019; Harris et al., 2013; Madan et al., 2011) show that gang involvement relates to a range of problems such as antisocial personality disorder (ASPD), anxiety, conduct disorder (CD), depression, and posttraumatic stress disorder (PTSD). Research by Egan and Beadman (2011) examined whether antisocial personality constructs, such as lower levels of agreeableness, conscientiousness, and impulsivity, would be associated with higher scores of gang embeddedness in a sample of 152 imprisoned offenders in the UK. Gang embeddedness was based on the extent to which participants identified as gang members in adolescence, prior to custody, during time in prison, and/or expressed an intention of future gang membership. Scores were summed, with higher cumulative scores (i.e. participants who reported gang membership at all levels, including expressing future intention of gang membership) demonstrating greater gang embeddedness. Path analysis revealed antisocial personality predicted gang involvement and accounted for 50% of the variance in the degree of embeddedness to the gang. This suggests that gang involvement may reaffirm pre-existing antisocial attitudes.

More recently, Coid et al. (2013) identified that gang members in the UK, compared to violent and non-violent men, suffer higher levels of, and seek more professional help for, mental health difficulties such as anxiety, psychosis, and substance abuse. Furthermore, affiliate gang members (who have loose associations to the gang) have been found to be as at risk of mental illness as core gang members (who are committed to the gang; see Petering, 2016). In contrast, Wood et al. (2017) show how gang members experience higher levels of anxiety, ASPD, psychosis, and substance abuse, compared to gang affiliates, but both had levels higher than other violent men. This seems to suggest that as gang membership deepens, so too do mental health problems. Comparisons between gang and non-gang prisoners also

shows that gang members suffer higher levels of anxiety, paranoia, and PTSD, – and that each relates strongly to exposure to high levels of violence before incarceration (Wood & Dennard, 2017).

To date, links between gang membership and emotional health has received limited attention. Indeed, Moran (2014, p. 556) states, "gangs - a highly conspicuous youth subculture – are only tangentially analyzed in emotional terms". It makes sense that a range of emotions, such as anger, guilt, rumination, and shame may be experienced by gang members, due to their perpetration of violence and their victimization (Peterson et al., 2004) and, potentially, their mental health problems. Yet, without research specifically examining gang members' experiences of emotions, we cannot know how these factors relate to gang involvement or to gang members' mental health. This review attempts to develop understanding on gang members, their mental health, and emotionality by reviewing how current gang research has addressed the mental and emotional needs of gang members thus far. Accordingly, consideration of how affect and mental illness relate to gang involvement may advance intervention and policy developments, including the need to adequately fund holistic treatment programs to support gang members' rehabilitation.

Although research suggests that gang membership generally attracts discontented adolescent males (see Pyrooz & Sweeten, 2015; Watkins & Melde, 2016), it also shows increasing levels of female gang involvement (De La Rue & Espelage, 2014; Snethen, 2010; Thornberry et al., 2003). Given the relationship between gang membership and violent offending (Melde & Esbensen, 2013) and the association between offending and the increased risk of violent victimization (see Katz, Webb, Fox, & Shaffer, 2011), both males and females can suffer violence due to gang connections. Moreover, due to the consistent evidence regarding the relationship between how childhood and/or adolescent exposure to violence, particularly when coupled with community violence exposure, is related to mental

illness (Cecil, Viding, Barker, Guiney, & McCrory, 2014; Kelly. Anderson, Hall, Peden, & Cerel, 2012; Mazza & Reynolds, 1999), investigating the relationship between gang involvement and mental illness in male and female gang members seems crucial for effective tackling of gang membership.

Aims of this Review

The aim of this review aim was to systematically review the literature on the mental and emotional health of gang members. Findings will: (1) provide an overview of the current landscape on how gang involvement links specifically to the mental and emotional health of gang members; (2) highlight gaps in the literature to inform future empirical work; and (3) discuss the implications of findings for research and policy and support the development of clinically tailored and responsive gang-focused interventions. To this end, this review addressed the following research questions:

(1). Do gang members suffer from higher levels of mental health problems (e.g., anxiety, ASPD, depression, paranoia, perpetration-induced trauma (PT), and PTSD) compared to non-gang members?

(2). To what extent does the literature examine gang members' experience of emotions, such as anger (including angry rumination), guilt, and shame?

Method

Selection Criteria

Recent developments in evidence-based practice identify the use of specific frameworks to help guide appropriate and relevant literary searches, such as the Participants, Intervention, Comparison, and Outcome (PICO) framework (Schardt, Adams, Owens, Keitz, & Fontelo, 2007). This highlights the importance of developing inclusion and exclusion criteria that are methodologically and practically sound (see Fink, 2005). Thus, studies

included within this review were screened for eligibility based on the following criteria in close adherence to the PICO framework.

Inclusion Criteria

1). ***Participants.*** Research suggests that males and females suffer violence due to their gang involvement (Thornberry et al., 2003), with adolescents aged between 11 and 15 years being at greatest risk of gang joining (Esbensen et al., 2008). Despite the temporary nature of gang membership (see O'Brien et al., 2013; Peterson et al., 2004), research examining adult gang members suggests that they too experience mental health difficulties and violence (Wood et al., 2017). This suggests that although gang membership may be transitory for some youth, gang membership effects may well develop into adulthood. Thus, female and male, adolescents and adults, identified as gang-involved, formed the population sample.

2). ***Comparison.*** To ensure the outcomes reflect potential differences between gang and non-gang members, papers with delinquent, gang members, non-gang members, and violent men in clinical, community, and/or forensic populations were included.

3). ***Outcomes.*** Studies with outcomes relevant to the research questions under review were synthesized and presented. The outcomes included: emotions, mental health and/or illness, rumination, shame, guilt, and trauma.

4). ***Study design.*** To prevent 'intervention-selection bias', the systematic review included various design types (Petticrew & Roberts, 2008). Randomized Controlled Trials (RCT's), experimental studies, quantitative, and qualitative studies, and non-experimental research designs, such as thematic analyses, meta-analyses, and systematic literature reviews were included. Due to limitations accessing gang populations (e.g., gang members may conceal their membership from researchers), sample sizes of all studies were considered.

Exclusion Criteria

1). Due to time restrictions, the researcher was not able to examine research in other languages. Thus, studies published in languages other than the English language were excluded.

Search Process

To maximize the efficacy of the search process, a scoping review was conducted to identify relevant search terms. An automated search was conducted using electronic databases listed in Table 1.

Table 1

Electronic databases utilized in a systematic automated search to identify peer-reviewed research.

Electronic Databases	
Academic Search Complete	PsycINFO
Cochrane Database of Systematic Reviews	PubMed
Criminal Justice Abstracts	Scopus
National Institute of Clinical Excellence (NICE)	Web of Science
PsycARTICLES	

Literature Search

The following search terms were utilized in various combinations: anger, anxiety, juvenile delinquency, depression, emotions, gangs, guilt, mental health, mental illness, paranoia, perpetration, personality disorder, posttraumatic stress, rumination, shame, trauma, and violence (see Appendix A for definitions of search terms). To account for changes in vocabulary, subject headings for each database were scoped, and truncation was used to avoid excluding research papers in error. A Boolean search was also conducted. Figure 1

shows the search process at each stage ranging from the identification of papers to papers included within the narrative synthesis.

Petticrew and Roberts (2008) suggest reviews that include only automated, electronic searches may introduce unintentional bias. Thus, the inclusion of hand searches was important to ensure studies were extracted as per the inclusion/exclusion criteria rather than an inadequate search process. Earlier theories of gang membership have been reviewed extensively, such as Thrasher's (1927) theory of social disorganization and Sutherland's theory of differential association (1937; Sutherland & Crerrey, 1960, 1974; see Wood & Alleyne, 2010 for review). Hence, a two-part search strategy, dated from January 1980 to May 2019, was conducted to focus on emerging literature examining early risk factors for gang membership (Fagan, 1989; Hill et al., 1999, Thornberry, 1987). The search strategy included an electronic and manual search of reference lists for all extracted studies meeting the inclusion criteria was employed. A total of 26 papers were extracted: qualitative (n = 1), quantitative (n = 21), and theoretical (n = 4). Most of the quantitative studies utilized cross-sectional design (n = 17), and a minority of the papers employed longitudinal design (n = 4).

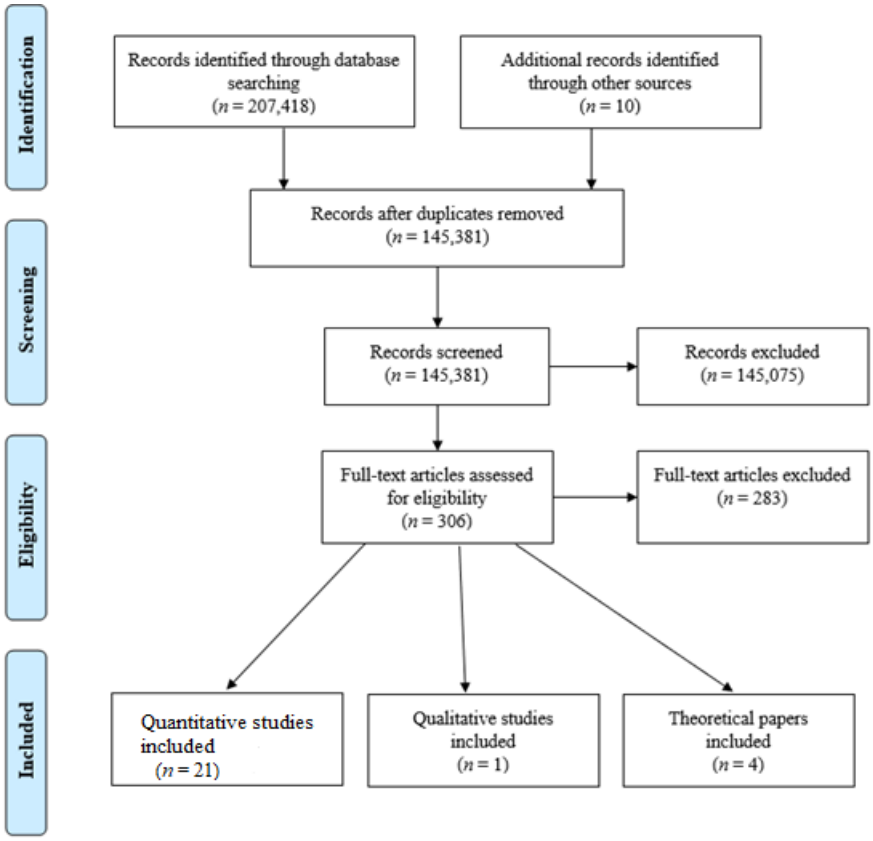


Figure 1. Search process of systematic review adapted from the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA; Moher, Liberati, Tetzlaff, Altman, 2009).

Data Extraction

Research papers were screened using the title and abstract. Selected papers were then screened for the study outcomes. The full texts for studies meeting the inclusion criteria were subsequently reviewed by the primary reviewer and assessed using the quality criteria by Kmet, Lee, and Cook (2004; see Appendices B and C). From each study, the following information was extracted: author(s), date of publication, country of study, study aims, design/measures (e.g., gang membership and mental health measures), sample, and comparison group characteristics (e.g., participant numbers, membership status; non-gang, gang members), and study outcomes. To ensure the researcher had adequately reviewed studies in line with the quality criteria, a training exercise was conducted whereby a random sample of papers (35%) were assessed by a secondary reviewer to increase the reliability of

the assessment. Any disagreement between the researcher and reviewer was resolved through discussion (see Kmet et al., 2004).

The results were described using a narrative synthesis with a list of all summary scores presented in Tables 2 and Appendix D. The quality assessment criteria devised by Kmet et al. (2004) for multidisciplinary research was utilized. In line with this criterion, research papers employing longitudinal design, with summary scores of 0.90 or higher, were considered 'high-level' quality papers. In contrast, papers employing cross-sectional designs with scores of less than 0.50 were deemed 'low-level' quality papers.

Results

Do gang members suffer from heightened levels of mental illness compared to non-gang members? There was clear evidence of an association between gang membership and mental illness. This was demonstrated through both cross-sectional (Coid et al., 2013; Wood et al., 2017) and longitudinal (Watkins & Melde, 2016) studies highlighting the need for practitioners, researchers, and law agencies to consider links between gang membership and gang members' mental and emotional health. Papers employing a cross-sectional design, such as Coid et al. (2013), Wood et al. (2017), and Wood and Dennard (2017) demonstrated that gang involvement links strongly to adverse mental health. For instance, Coid et al. (2013) via random location sampling in the UK, compared gang members, violent men, and non-violent men, aged 18 – 34 years on measures of violence, gang membership, psychiatric morbidity (e.g., ASPD, anxiety, depression, psychosis, and substance abuse), and use of mental health services. Similar to Wood et al., their findings illustrated an association between gang membership and psychiatric morbidity whereby gang members displayed the highest levels of psychiatric morbidity and service use, followed by violent men, and non-violent men.

Moreover, Dupere, Lacourse, Willms, Vitaro, and Tremblay (2007) showed how youth suffering from anxiety and hyperactive behavior were more likely to join a gang, and that gang involvement was even more likely if youth resided in neighborhoods characterized by instability, such as high delinquency levels and/or poverty. Thus, these findings are consistent with theories of gang membership, such as interactional theory (see Thornberry et al., 2003) and the unified theory of gang involvement (see Wood & Alleyne, 2010), and demonstrate how a range of factors, including individual, environmental, and social factors may exacerbate the risk of vulnerable youth joining a gang. However, given the cross-sectional nature of studies, the causal nature of gang membership and psychiatric morbidity could not be established. That is, it could not be demonstrated whether gang membership linked to an increase in risk of developing a mental health condition or whether mental health conditions pre-dated gang membership.

The screening process revealed one high-level research paper with a longitudinal design examining developmental trends between gang membership and depression. Using data from a longitudinal study of adolescent to adult health across two-time points (see Appendix D for details on design and measures), Watkins and Melde (2016) examined: (1) whether adolescents who later decided to join a gang, compared to the general population, reported significantly higher levels of depression and suicidal internalizing and externalizing symptoms; and (2) whether gang membership aggravated these symptoms. Their findings showed that adolescent gang-members, compared to non-gang adolescents, had higher levels of mental health indicators prior to their membership. They also found that once part of a gang, levels of depression and suicidal ideation increased. Indeed, Watkins and Melde (2016) concluded that “if gang youth suffer from internalizing problems manifested through depression…, coupled with the well-documented enhancement effect of gang membership…, their risk for serious mental and physical health problems in late adolescence and early

adulthood are exacerbated." (p. 4). Thus, mental illness may increase their likelihood of joining a gang, but once in a gang, they experience further mental health deterioration. This suggests a difference exists between youth who join a gang and those who do not, where pre-existing mental illness may be deemed a risk factor for prospective gang involvement.

The longitudinal work of Watkins and Melde (2016) is valuable and provides a positive contribution to the literature examining the mental health of gang members. Firstly, a robust statistical analysis using propensity score analysis was used where gang membership was assessed at baseline (time point 1) and at 12 months (time point 2), to determine whether a causal relationship exists between mental health difficulties (specifically depression and suicide ideation) and gang membership. Secondly, a range of confounding variables were controlled for to reduce the risk of inaccurate estimates on mental health outcomes. Thus, this allowed for an increasingly reliable means of estimating whether a bi-directional relationship exists between gang membership and mental health outcomes.

There are, however, limitations to the work of Watkins and Melde (2016). As stated by the authors, employing a national school sample meant that gang members may have been significantly under-represented; especially as gang members have higher levels of educational absenteeism compared to non-gang peers (Peterson et al., 2004). Thus, longitudinal work that provides an additional focus on contexts where gang members are known to operate (e.g., communities with high gang presence and/or forensic samples) may better inform the literature. Furthermore, unlike Wood et al. (2017) who examined the differences between gang members and gang-affiliated individuals, Watkins and Melde (2016), similar to other research, such as Coid et al. (2013), failed to account for differential levels of gang involvement and mental illness. However, in support of Wood et al.'s finding of differential levels of gang membership, Maxson (1998) suggests that "the terms 'wannabe', 'fringe', 'associate'…reflect the changing levels of involvement…of gang

membership…" (p. 2). Thus, some studies are limited because of their narrow take on gang involvement (i.e. they are either gang members or not). The findings by Wood et al. suggests that gang involvement may be more complex with important distinctions to be made between levels of gang involvement, such as between those with loose affiliations to a gang and individuals who identify as gang members and their levels of mental illness.

Across studies, discrepancies were identified in levels of the same mental illness. Some cross-sectional (and cross-cultural) studies report how gang members, as demonstrated in the UK by both Coid et al. (2013) and later by Wood et al. (2017), suffered significantly lower levels of depression, whilst in the US, Petering (2016) and Watkins and Melde (2016), found higher depression among gang-involved youth. There may be various explanations for these differences. First, although similarities exist between gangs in the US and the UK, such as similarities in gang-related delinquency (Bennett & Holloway, 2004), cross-cultural differences between samples have been noted, such as differences in age (e.g., gang-involved individuals in the UK are generally younger; Alleyne & Wood, 2010) and gang involvement may be motivated by several factors, including territorial inter-gang violence (see Klein et al., 2006). Second, Coid et al. (2013) and Wood et al. (2017) utilized sample data from men aged 18-34 years. In contrast, Petering (2016) and Watkins and Melde (2016) recruited adolescent samples. Thus, it may be that adolescent gang members, who may not yet be fully immersed in gang life, were more likely to self-report their experiences with depression, especially since depressive symptoms may have motivated their gang involvement. Due to the dynamics of gang membership, younger gang members may also fear becoming ostracized from the group if they show vulnerability and are perceived as 'weak' (see Watkins & Melde, 2016), which may have contributed to their experiences of depression. Older gang members, on the other hand, may have adopted coping strategies, such as engaging in violence to cope with depressive symptoms, and in turn may experience other mental health difficulties, such

as anxiety from their experiences of violence (see Coid et al., 2013). Thus, contrasting findings may result from demographic and socio-cultural differences and the duration of gang membership between samples (adolescent vs. adult members). Age may also have influenced how participants self-reported their experiences of mental illness.

Similar to variations in the conceptualization of mental illness, variation in the measures of mental illness across studies may also explain inconsistent findings. Coid et al. (2013) and Wood et al. (2017) employed the Anxiety and Depression Scale (Zigmond & Snaith, 1983), which required participants to score 11 or more on indictors of depression. The measure of depression used by Petering (2016) and Watkins & Melde (2016) was the Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977) and this required a lower score of 7. Both measures have high internal consistency, (*a* =.83; Bjelland, Dahl, Haug, Neckelmann, 2002; vs. *a* =.85 - .90; Radloff, 1977) respectively and are suited for a variety of populations. The Anxiety and Depression Scale was designed for clinical settings and the CES-D for the general population. The rationale for employing each measure with gang members is understandable. Gang members are likely to attend emergency hospital departments due to gang-related violence *and* also live in the community. Nonetheless, using different measures prevents conclusions being drawn regarding the relationship between gang membership and mental illness.

Due to the cross-sectional design employed in most studies, the causal mechanisms between mental health and gang involvement could not be inferred. However, cross-sectional papers, especially those of a higher quality (e.g., >0.90; see Table 2 and Appendix D for quality assessment of quantitative studies and summary scores), suggest that there are links between gang membership and mental illness. Studies (Coid et al., 2013; Petering, 2016; Wood et al., 2017) show that gang members experience mental ill health and that this relates to their exposure to violence. Furthermore, recent research also casts light on the role of

behavioral disorders, specifically Oppositional Defiant Disorder (ODD), CD, and ASPD as accounting for the relationship between gang membership and criminality (DeLisi et al., 2019). DeLisi et al. (2019) reported that when behavioral disorders were included in a hierarchal regression model, gang membership no longer yielded significant effects on police contact in adolescence and total number of arrests. For police contacts in adolescents, ODD and CD were significant predictors of police contact, and ASPD significantly predicted higher number of arrests. Similarly, to Egan & Beadman's (2011) findings on gang embeddedness and the role of ASPD, this suggests that gang members may have pre-existing personality disorder and that is this that may account for their engagement in criminality and violence, rather than solely gang membership. Yet, at present, the ability to draw conclusions regarding the underlying mechanisms surrounding gang membership, mental health and personality disorder remains unclear. This is corroborated in a recent review of the literature by

Table 2

Number of studies meeting Kmet et al's (2004) quality assessment by question.

Question No.	Y	P	No
1. Question or objective sufficiently described?	21	0	0
2. Is design evidenced and appropriate to answer study question?	17	4	0
3. Method of subject selection described and appropriate?	14	7	0
4. Are subject characteristics sufficiently described?	14	7	0
5. Is random allocation to treatment group described?	N/A	N/A	N/A
6. Is interventional and blinding of investigators reported?	N/A	N/A	N/A
7. Is interventional and blinding of subjects reported?	N/A	N/A	N/A
8. Are outcome measures well defined and robust to measurement?	17	4	0
9. Is the sample size appropriate?	14	6	1
10. Is the analysis described and appropriate?	18	3	0
11. Is some estimate of variance reported for main outcomes/results?	15	6	0
12. Are confounding factors controlled for?	13	5	3
13. Are results reported in sufficient detail?	18	3	0
14. Do the results support the conclusions?	12	9	0

Beresford and Wood (2016) who concluded that although there is a scarcity of research in the area, gang-related violence is associated with behavioral, social, and psychological factors.

Kelly's (2010) review of the effects of gang violence on adolescents concluded that anxiety, ASPD, depression, and use of violence were among the outcomes associated with adolescents' exposure to gang-related community violence. However, Kelly (2010) also stated how "…these studies had limitations, including use of convenience samples, self-reports, and cross-sectional surveys, and a lack of causal links between variables" (p. 67).

For example, research by Harper, Davidson, and Hosek (2008), examining African-American homeless youth on negative emotions, substance use, and antisocial behavior, concluded that gang members had higher levels of mental illness, as well as higher involvement in antisocial and violent behavior. However, use of self-report measures, a small sample size, and one-time point prevented clear and causal conclusions. Such methodological constraints are also found in the Harris et al. (2013) study, which reported that gang membership linked to higher conduct disorder, oppositional defiant disorder, PTSD, and substance abuse. Thus, methodological limitations continue to cloud our ability to draw definitive conclusions on the gang-mental health nexus.

Some studies used additional sampling techniques to increase the reliability of estimates relating to gang membership effects (see Marshall, 1996). For example, in Coid et al.'s (2013) study of males aged 18 to 34 years, random location sampling was employed to over-sample populations with high levels of gang activity. Thus, the ability to estimate an association between gang membership and psychiatric morbidity was enhanced. However, since gang membership also occurs in rural areas (Watkins & Taylor, 2016), the need to sample populations in both urban and rural communities is important to further understanding about the differences (if any) between gangs in diverse geographical locations. This suggests that robust longitudinal, multi-site, empirical work is needed to develop understanding of the causal mechanisms surrounding gang membership and mental illness.

In most papers, gang membership was self-reported (see Appendix D). Indeed, self-reported gang membership is considered a reliable form of identifying gang membership (see Esbensen et al., 2001); and it is of interest *and* importance to gauge how youth who self-report and identify themselves as gang members also report their mental health experiences. They may be at risk youth who present a range of social, emotional, and behavioral needs, which need to be understood, responded to, and treated. Their identification with gangs may

form part of a significant group process, whereby the gang provides a social support network and promotes a sense of belonging and safety (see Wood, 2014), which may be seen as a means of reducing personal suffering. However, self-reports are vulnerable to subjective interpretations of belonging to a gang. Consequently, inaccurate conclusions may be drawn and impact on intervention and policy initiatives.

Although Esbensen et al. (2001) note that self-nomination is valuable in assessing gang membership, objective measures are surely the 'gold standard' methodology because they reduce the likelihood that individuals will 'big themselves up' or 'play themselves down' – in other words, have their own agenda for the responses they give. Accordingly, ensuring consistency when measuring gang membership is crucial if professionals - researchers and practitioners are to develop their understanding of gang members' mental health. A robust, gang measurement tool, such as the Eurogang Youth Survey (Weerman et al., 2009), allows professionals to establish gang membership via a series of questions in addition to a self-report assessing whether youth *also* perceive themselves as gang members (Esbensen & Weerman, 2005). However, only a handful of studies in this review (n = 4) used the Eurogang definition. This suggests that inconsistencies in the definition of a gang may also lead to at best incomparable and at worst, inaccurate conclusions about the links between gang membership and mental illness.

Gang-related violence and mental illness. Across papers, the role of violence featured prominently and was associated with mental illness. Coid et al. (2013) reported how positive attitudes towards violence and frequent experiences of violent victimization linked to an increase in levels of ASPD and service use. Wood et al. (2017) supported these findings and demonstrated how affiliate and gang members, both of whom had higher symptom levels of mental illness than non-gang violent men, would respond with violence if they felt disrespected and yet affiliates, who were less involved in a gang and hence its violence, had

lower levels of mental ill health. This supports other findings (Mrug, Loosier, & Windle, 2008), which show how higher levels of internalizing and externalizing conditions, such as anxiety, PTSD, and psychosis, link to violence. Corcoran, Washington, and Myers (2005) suggest that the mental health of gang members and their antisocial behavior is what separates them from non-gang-involved youth and both need to be addressed in gang interventions. Yet, despite evidence showing an association between gang-related violence and mental illness, directionality could still not be determined.

Madan et al. (2011) noted how witnessing community violence and delinquency positively mediated the relationship between suicidal behaviors and gang membership. However, their results showed no direct association between gang membership and anxiety or depression. Since gang members typically have lower levels of attainment (Levitt & Venkatesh, 2001), it is possible that members are unable to articulate specific affective and mental health difficulties and potentially engage in externalizing behaviors, such as suicidal behaviors, to ease the distress of internal suffering. Moreover, Madan et al.'s cross-sectional assessment cannot explain whether, and if so, how, gang membership influences mental health over time. Equally, it cannot explain the role that mental health plays in joining a gang. Thus, in line with previous contentions, the need remains to understand why some youth exposed to the *same* risk factors (e.g., suffer from mental health and reside in unstable, poor locations) do not join a gang, whilst others do (Thrasher, 1927; see Watkins and Melde, 2016). The scant longitudinal work available so far, suggests that pre-existing mental health difficulties may contribute to young people's decisions to join a gang and, in turn, this supports the notion that gang membership results from a range of pre-existing risk factors (Howell & Egley, 2005; Thrasher, 1927; Watkins & Melde, 2016; Wood & Alleyne, 2010).

Some authors theorize that gang members may be considered as similar to child soldier victims and perpetrators in war because adolescents who experience traumatic events

at a crucial period in their life development may be increasingly susceptible to suffer 'developmental trauma' (Kerig, Wainryb, Twali, & Chaplo, 2013). Recent findings support this by showing how street gang prisoners, compared to non-gang prisoners, have experienced more exposure to violence and also have higher symptom levels of anxiety, paranoia, and PTSD (Wood & Dennard, 2017).

Building on this theoretical proposition, Kerig et al.'s (2016) work examined how gang members' mental health may also suffer due to their perpetration of violence. The authors found that both male and female gang members experienced traumatic events and presented posttraumatic stress symptoms, such as dissociation, numbing, and perpetrator trauma (PT). They reported how male gang members were more likely to suffer from trauma due to witnessing and experiencing community violence, whereas female gang members were exposed to trauma via emotional abuse. Although no significant differences were found in PTSD outcomes between gang and non-gang members, female gang members compared to non-gang female members were more likely to be diagnosed with PTSD. However, this contrasts with the Wood and Dennard's (2017) findings, but this could be because the Wood and Dennard sample were slightly older (18 – 29 years vs. 11 – 18 years) and so symptoms of PTSD had more time to develop.

Some other conflicting findings were found in cross-sectional studies. For example, Cepeda, Valdez, and Nowotny (2016), who matched samples of delinquents and gang members, compared trajectories of childhood trauma: emotional, physical, and sexual abuse. Cepeda et al. reported lower scores across all trajectories of trauma among gang members, aside from physical neglect. Thus, their findings suggest that gang joining may result from cultural, familial, and social factors rather than mental health. Specifically, gang membership was 'intergenerational' and linked to economic deprivation where families sought to meet financial needs through gang membership. However, Cepeda et al.'s (2016) findings require

careful interpretation. Their findings represent responses from just one Mexican American community, which may not be generalizable to broader socio-cultural contexts rife with gang involvement.

To what extent does the literature examine gang members' emotionality? The search process indicated a limited quantity of literature exploring the links between gang membership and emotionality. The available research evidence, such as Vasquez, Osman, & Wood (2012) demonstrated how gang membership was associated with increased levels of angry rumination – "repetitive thinking about aversive events, including provocations" (Vasquez et al., 2012, p. 89). Recent evidence by Mallion and Wood (2018) demonstrates how compared to non-gang offenders, gang members self-reported increased levels of angry rumination and low-levels of trait emotional intelligence. However, no significant differences were found between groups in callous-unemotional traits. Furthermore, the study by Coid et al. (2013) revealed how rumination and fear and experiences of victimization were associated with higher levels of anxiety. However, as with most studies, male-only samples were recruited, which limits understanding of female gang members' emotional and mental health needs. Vasquez et al., however, did include a female sample, but through conducting a regression analysis, the authors reported that only males involved with gangs experienced high levels of rumination, and were likely to displace their aggression towards innocent others; female gang members did not. Their analyses revealed how gender was significantly associated with affiliation and rumination for males, but only a marginal relationship between female gang-involved youth and ruminative processes was found. This suggests that intervention and prevention work with gang-involved youth may need to target the emotional disposition of gang members, as well as, account for gender differences to ensure varying treatments needs are effectively targeted.

The search process did not identify papers that directly examined shame and guilt in

gang members. However, research examining delinquent populations shows how guilt is linked to lower levels of delinquency and shame is linked to increases in levels of offending and risky behaviors (e.g., Schalkwijk, Jan Stams, Stegge, Dekker, & Peen, 2016; Stuewig et al., 2015). Given the links between gang membership and delinquency, empirical research focusing on the gang members' emotions may provide useful insight in the development of intervention programs that aim to mediate cycles of violence. For instance, in one study gang members expressed regret over some of their violence (Wood et al., 2017). This suggests that gang members may experience some guilt due to their involvement in violent acts, but may be reluctant or unable to express such emotions during their membership (e.g., due to fears of being ostracized from the gang). Consequently, gang members may experience continued emotion dysregulation even after leaving the gang (see Melde & Esbensen, 2013). Nonetheless, given the sparsity of research examining gang members' emotions, there is a lack of literature to clarify such speculations and so, currently, we are left with only tentative theoretical propositions. Research needs to examine both the emotions *and* mental health of gang members, as both are likely to inter-relate. Additional research on emotions and mental health, therefore, can further develop our understanding of gang-related needs to enhance the responsivity of gang-targeted interventions.

Discussion

This review provides an overview of the existing research into the mental and emotional health of gang members. Narrative synthesis reveals gaps in the literature and methodological issues that preclude conclusions regarding the causal mechanisms between variables. Studies identified were largely cross-sectional and of those that were not (e.g., longitudinal, retrospective), methodological limitations, such as a lack of comparable groups and inconsistencies with measuring gang membership prevent conclusions from being made. Nonetheless, the findings suggest that gang members are a vulnerable sub-group of offenders

who have a range of mental health and potentially, emotional needs. This review also included female gang members yet they appeared in only a handful of studies. For instance, despite the lack of clarity regarding the causal mechanism between gang membership and mental health, the findings by Kerig et al. (2016) revealed how PTSD symptoms among gang members was associated with the perpetration of violent crimes, but only female gang members had levels of symptoms relevant to the criteria for posttraumatic stress diagnosis. This suggests that gender differences may have significant implications for gang research and interventions, especially given the current reported increase in female gang participation (Snethen, 2010).

The measures for diagnosing mental health in studies also employed differential measures which were designed for varying populations (e.g., measures for clinical vs. community samples). This has clinical implications since some gang members may, dependent on the assessment used, be wrongly, or not, diagnosed. Inaccurately identifying the mental health needs of gang members, who may have a range of unmet needs, may contribute further to maladaptive behavior and contribute to the onset and/or persistence of mental illness. This was demonstrated in the case of 'GH' where an unrecognized mental health illness (PTSD) was missed by clinicians (Bailey, Smith, Huey, McDaniel, & Babeva, 2014). Consequently, the sporadic behavior displayed by GH, was misunderstood and went untreated. Any diagnosis with this population should be approached with caution given that most gang members reside in urban neighborhoods characterized by significant socio-economic deprivation, where delinquency and gang membership may be used as a means of coping (Bailey et al., 2014; Watkins & Melde, 2016). However, as seen with the case study presented by Bailey et al. (2014) and the findings by Coid et al. (2013) and Wood et al. (2017), gang members' elevated fear of victimization, anxiety, and reported increased service use suggests that their needs are several. Thus, future research should learn from existing

studies and engage in multi-agency work including systemic practice between the criminal justice system and mental health services to develop appropriate mental health screening tools specific to gang members.

Indeed, the extent to which current interventions in the CJS, such as gang exit programs include targeting the emotional and mental health needs of gang-involved individuals is unclear (Mayor Office for Policing and Crime, 2014); with trauma-related interventions for gang members only introduced in recent years (Bailey et al., 2014). It is also imperative that emotions are given more attention in the gang literature. The examination of gang members' emotional experience has important implications for their treatment, in addition to, prevention work among vulnerable individuals at risk of gang involvement. For instance, we do not know how emotional experiences, such as guilt vary according to differential involvement and status within a gang. If so, it may be that gang-involved individuals with loose connections to a gang are more 'malleable to treatment' than those more deeply involved in a gang (see Wood et al., 2017). We also do not know how emotions such as angry rumination and guilt link to gang members' heightened engagement in criminality and violence and how these emotions relate to the rehabilitation of gang members. Research that attempts to answer such questions is sparse and as such, this review has identified more questions than answers. Thus, there are significant clinical, research, and policy implications invested in conducting research related to the mental and emotional health of gang members. Nonetheless, methodological issues such as the measurement of mental health and study designs must be addressed if gang research is to influence clinical and policy settings and benefit individuals and communities.

Chapter Three

Is it Merely a Case of "Mad and Bad"?

A Case Study Approach to Examining Gang Involvement

"Too much research 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. 106)

As mentioned in the preceding chapters, research examining gang involvement has spanned decades and a range of studies have sought to identify reasons for gang joining, consequences of membership, and desistence (i.e., processes of exiting the gang; Caldwell & Altschuler, 2001; Decker &Van Winkle, 1996; Pyrooz & Decker, 2011; Short, 1974, Thrasher, 1927; Watkins & Melde, 2016). However, psychological factors associated with gang membership and consideration of these within gang prevention and intervention programs are sparse (see Beresford & Wood, 2016; Coid et al., 2013). Consequently, understanding gang members' criminality and violence, which exceeds comparison groups (see Melde & Esbensen, 2013; Weerman et al., 2009), is limited. Emerging research, however, as evidenced in the systematic literature review in Chapter Two, shows that gang membership links to poor mental health (Beresford & Wood, 2016; Coid et al., 2013; Wood & Dennard, 2017; Wood et al., 2017). That is, gang members are likely to suffer from untreated mental health needs, engage in criminality, recidivism (see Pullmann et al., 2006) and endure life-long negative mental health (Levitt & Vankatesh, 2001). Despite knowing this, there are many crucial gaps in our understanding of, and responding to, gangs.

Gang literature suffers from a lack of in-depth, theoretically driven, case studies of gang membership (Children's Commissioner, 2017). Yet, case studies can provide holistic approaches to a problem and consider a range of contextual, individual, and social factors, which interrelate and impact on individuals (Crisp, 2011). Within case study research,

however, the ‘psychological impact’ of gang life (Sala, p. 29) seems to attract merely a fleeting focus (Bailey et al., 2014). Furthermore, given the disproportionate number of males and ethnic minorities associated with gangs (McDaniel, 2012), an in-depth case study on a previously gang-involved, ethnic minority, male, as is the focus of this chapter, has particular value for considering and understanding the socio-cultural context of gangs when formulating an effective response strategy.

The Unified Theory of Gang Involvement

Criminological and sociological theory and research have provided an invaluable insight into why young people may join a gang. Theories, such as the theory of disorganization (Thrasher, 1927) and strain theory (see Cohen, 1955) consider how societal disorganization and ‘strains’, such as financial instability and unstable family environments, may prompt gang membership. Through either a need to meet individual needs that may have been overlooked by core conventional institutions, such as the family, the school, societal expectations, and/or the increased exposure to criminality through the youth’s immediate cultural context; these theories suggest how young people may turn to gangs as a ‘means to an end’. Although for some, youth membership is temporary, gang membership may adversely impact the lives of youth, particularly adolescents whose membership is stable over longer periods of time (see Thornberry et al., 2003). Thus, researchers need information that helps them to further understand the alternative processes and paths gang members take.

Thornberry et al. (2003) posited a developmental and life-course perspective of gangs, an extension to an earlier model of delinquency (see Thornberry & Krohn, 2001). The model suggests how variations in behavior occur throughout the life span and are a product of behavioral, environmental, and social interactions. Highlighting how a range of ‘trajectories’ are present throughout the life course, Thornberry et al. (2003) analyzed data from a longitudinal sample of adolescents from the Rochester Youth Development. The authors

concluded the likelihood to join a gang was related to the accruing experience of adverse risk factors across numerous developmental domains, including deprived neighborhoods, delinquent affiliations, and family adversity. Furthermore, their findings revealed how gang involvement over a prolonged time linked to harmful long-term consequences, including increased criminal justice involvement and poor education and employment prospects. Howell and Egley's (2005) theoretical model includes early development and theorizes how risk factors in childhood may motivate adolescent gang involvement. Their theoretical framework attests to the importance of early year's prevention and intervention to address emerging developmental risk factors, which may become increasingly problematic in later years. Thus, through this developmental perspective, Thornberry et al. (2003) and later Howell and Egley, demonstrate how gang involvement may be due to the inter-relations that occur between numerous developmental pathways.

Through the developmental, life-course model, gang membership is not considered fixed, and Thornberry et al.'s (2003) findings show how involvement tends to be temporary. Yet, despite this, a drawback of both models is the absence of a pro-social pathway that links to gang desistence. The addition of such a pathway presents an empirical opportunity to examine how youth may transition between trajectories if pro-social opportunities become attractive. Moreover, despite the positive contributions of these models to our understanding of gang involvement, the models focus largely on delinquent behaviors on the premise that gang membership occurs among young people from deprived and urban backgrounds. However, gang membership is volatile in nature (Farah, 2012) and membership is increasingly reaching rural areas (see Watkins & Taylor, 2016); whereby even individuals from seemingly stable backgrounds may be tempted to join a gang (Wood & Alleyne, 2010). Thus, a broader model of gang involvement applicable to youth from diverse backgrounds and which considers how delinquent and pro-social pathways may contribute to our

understanding of why and how youths join a gang and how they might be encouraged to desist.

Unified theory (Wood & Alleyne, 2010; see Figure 2), syndicates the most pertinent of theories on gang membership (see Howell & Egley, 2005; Thornberry et al., 2003), to provide a unified framework of gang involvement, whilst simultaneously advocating the significant role of psychology and pro-social pathways. Unified theory posits how factors across three levels; individual, social, and environmental, underpin potential gang involvement. Organized and disorganized environmental factors, such as stable/unstable family, or community, may link to gang involvement in distinct ways. Indeed, empirical research shows that gang members often have disruptive family environments (Lacourse et al., 2006) and live in deprived communities (Dupere et al., 2007). Wood and Alleyne (2010) conceptualize that neighborhood and family circumstances operate at the same environmental level to influence social factors, such as community policing or parental supervision of youth (i.e., formal and informal control). Additionally, youth suffering adverse life experiences including abuse, family dysfunction, and/or who live in unstable neighborhoods may have poor family relationships, and early exposure to the criminal justice system (Thornberry et al., 2003), but they may also develop poor mental health (see Rytila-Manninen et al., 2014). In turn, these factors can adversely impact their responses to school, home, and peers (Wood & Alleyne, 2010). Thus, unified theory suggests that psychological characteristics, such as mental ill health and low self-esteem can also link to social factors, such as social relationships and school performance, and lead to gang membership.

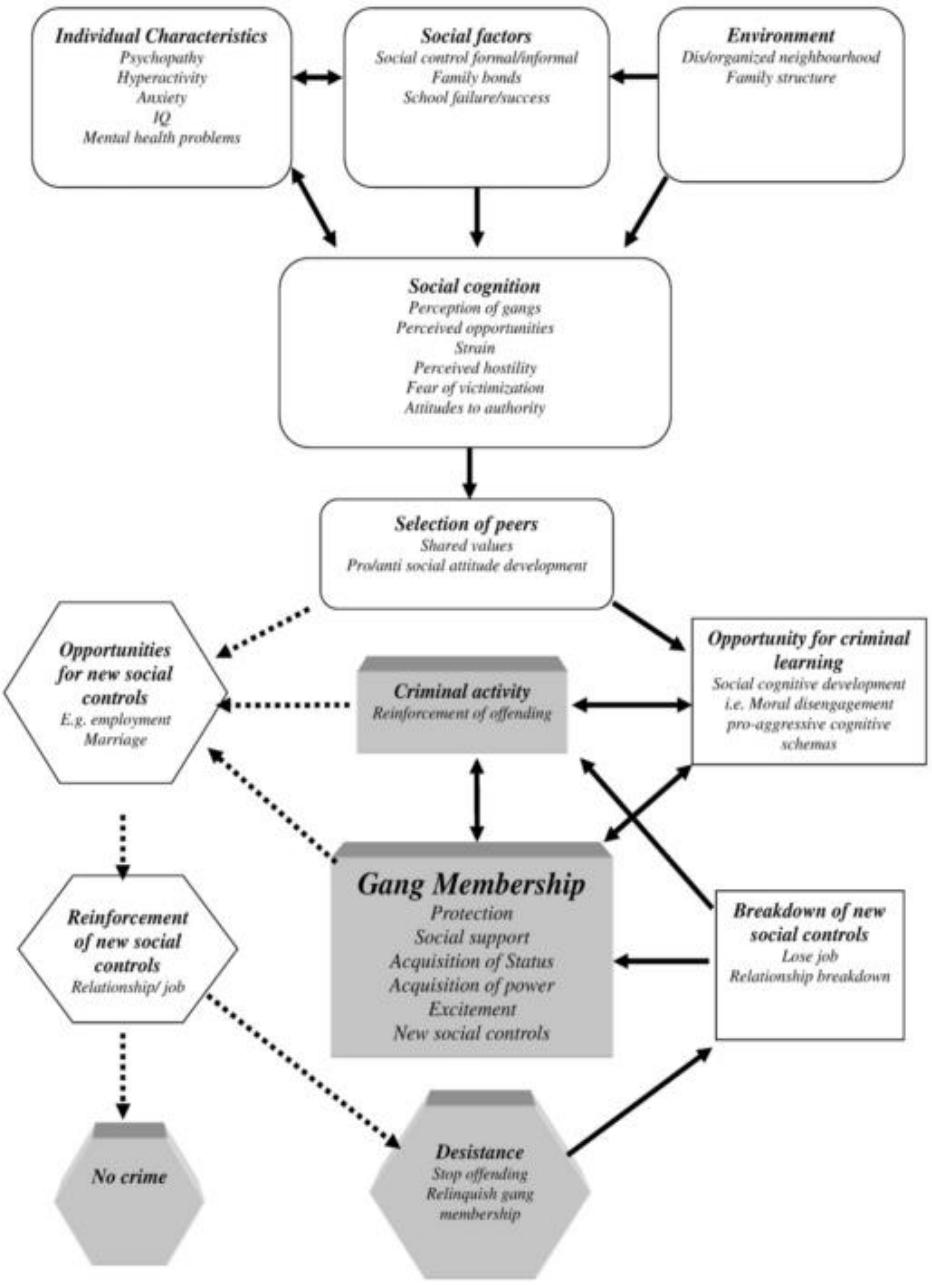


Figure 2. This figure illustrates the unified model of gang involvement (Wood & Alleyne, 2010, p.108).

Through its inclusion of the socio-cognitive processes of gang members, unified theory also considers how perceptions of gangs can be influenced by individual, social, and environmental factors. Through direct experience of gangs (e.g., high exposure in disorganized communities) or indirectly, such as through associating with delinquent, gang-involved youth, youth may develop a normalized perception of gangs that encourages

engagement in criminality and promotes anti-social attitudes and beliefs. Subsequently, a range of factors may result in a 'snowballing' effect, where as suggested by Wood and Alleyne (2010), a perception of gangs may also be associated with how youth perceive the types of opportunities (i.e. positive or negative) available to them and their overall worldview. For instance, gang youth are often undeterred by informal social control processes, such as the family and social officials (see Cepeda et al., 2016). They are also more likely to experience difficulties in school (Howell, 2012) and have a low sense of self-worth (see Esbensen & Deschenes, 1998). Thus, it is unsurprising that gang youth may hold hostile worldviews and perceive a lack of legitimate opportunities that they blame on authority figures (e.g., family or school staff; Wood & Alleyne). Unified theory suggests that to bolster esteem and support individual negative perceptions, such as of authority figures, youth select peers with 'shared values' (e.g., delinquent peer groups).

Youth may also turn to gang membership for protection from actual, or fear of, violent victimization (Melde, Taylor, & Esbensen, 2009; Peterson et al., 2004) and for support, acceptance, and belonging (Owen & Greeff, 2015). Selecting peers with similar attitudes and beliefs presents opportunities for criminal learning, which in turn, may influence individuals' socio-cognitive processes and lead to moral disengagement from pro-social codes of conduct (see Bandura, Barbaranelli, Caprara, & Pastorelli, 1996). By morally disengaging from harmful acts, painful psychological consequences arising from harmful behavior can be reduced and, in turn, make desistence from gang involvement difficult.

The duration of gang membership fluctuates between one and four years (see O'Brien et al., 2013; Thornberry et al., 2003), and so, variations in desistence requires understanding of processes which underpin exiting the gang. Unified theory suggests that when pro-social opportunities, such as romantic relationships and/or employment opportunities are available and reinforced, individuals may desist from criminality and/or gang involvement. However, a

lack of opportunities or the breakdown of opportunities may lead to recidivism and/or gang participation.

Research investigating risk factors related to gang involvement provides empirical evidence for unified theory, including how individual and social factors, such as pre-existing delinquent beliefs, peer influence, and educational outcomes (Craig et al., 2002; Hill et al.,1999), and environmental factors such as family breakdown and deprived neighborhoods (O'Brien et al., 2013), are associated with gang membership. However, despite empirical research showing how gang involvement and mental illness are linked, the mental health-gang membership relationship is not yet clear. Unified theory presents a 'preliminary framework' (Wood & Alleyne, 2010, p.107), and so provides a theoretical foundation to explore and examine how mental illness relates to the pro- and anti-social pathways outlined; or how pathways map to gang members' experiences. Given how the systematic review in Chapter Two revealed how gang members are more likely to self-report higher levels of mental health and emotional difficulties compared to non-gang members, this chapter aims to identify and develop understanding of the potential "causal links" (Baxtor & Jack, 2008, p. 547) between pathways presented in unified theory, and presents a single case study of an ex-gang member.

Research Questions

The present study investigated the following research questions:

1. How applicable is unified theory to understanding the etiology of gang membership based on an individual case of gang membership?
2. How do individual characteristics, (e.g., mental health difficulties, substance abuse), social factors (e.g., family/peer relationships, school performance), and environmental factors (e.g., family circumstances, community), relate to a single gang member's experience of becoming gang-involved?

3. Do the socio-cognitive processes, criminality, and engagement with delinquent peers that relate to gang membership, as outlined in unified theory, link to this single case?
4. Were the factors that contributed to desistence from gang membership pro social opportunities, as outlined in unified theory?

Method

Design

Yin (2014) suggests that participants who provide specific insights that can broaden understanding of a phenomenon should be considered for case study research. In line with Yin's (2014) criteria for qualitative case study research, this study used a single, contextually-attuned case study design to evaluate the applicability of unified theory in explaining a case of gang membership, including engagement in gangs and self-reported behavioral, criminal, emotional, and psychological factors. Quantitative studies, such as cross-sectional and longitudinal, large-sampled studies, are considered "as a quality standard" for generalization (see Polit & Beck, 2010). However, Yin (2014) suggests that in qualitative research one case study can produce generalizable findings and may provide in-depth insight. Indeed, although the issue of generalizability within qualitative research is contested (see Polit & Beck, 2010 for discussion), case studies may provide a starting point for further empirical and hypothesis testing with larger sample sizes. Thus, the aim of this study was to empirically test the applicability of unified theory to gang membership and identify where the model may be expanded.

Participant Identifying Information

The current study examines the case of HY, a 28-year old Black British male who is currently employed as a gang intervention mentor, but belonged previously to a well-known gang. A convenient sampling strategy was utilized, and HY's employer, an organization

specializing in gang prevention and intervention, was approached for research access to an appropriate participant for a case study.

Interview and Procedure

A meeting was scheduled at a location chosen by HY near his employment. The study aims were explained to HY prior to the interview and HY was presented with an information sheet and an informed consent form (Appendix A).

To examine the applicability of unified theory to understanding the etiology of an individual case of gang membership, a semi-structured interview schedule was devised based on the theoretical concepts of unified theory. Sub-sections included demographics (e.g., age, gender, level of education) and questions related to: (1) individual, social, and environmental factors (four items, e.g., *Can you tell me about your childhood experiences in general?*), (2) criminal activities and opportunities for criminal learning (two items, e.g., *What kind of criminal activity did you engage in as part of the gang?),* (3) social cognition (three items, e.g., *Can you tell me more about whether being in a gang contributed to or shaped certain attitudes about the world, other people, and/or behavior?*), and (4) desistence and pro-social controls (e.g., *Could you please tell me more about how you came to exit the gang?*).

After responding to initial questions relating to individual, social, and environmental factors, (e.g., childhood experiences, family life, neighborhood, and school), HY said he would like to "tell his story" rather than follow an interview schedule. Given that meaningful interviews should be flexible and responsive (Moustakas, 1994), HY's request was respected, and subsequent questions were asked with the schedule in mind, but only if relevant to HY's statements. HY's account, however, addressed many of the items included in the original interview schedule, (e.g., how gang membership shaped his social cognition, attitudes, and beliefs). Some probe questions were omitted in the revised format. For instance, questions relating to fear of victimization and its contribution to HY's violent behavior were not

explicitly explored. Furthermore, although HY shared his account of desisting from gang involvement, some aspects of the pro-social and desistence pathway, such as the breakdown and reinforcement of social controls, were not explored in detail due to time constraints. After the interview, HY was thanked for his participation, and given a debrief sheet.

The interview was transcribed verbatim using word-processing software (for interview transcription, see Appendix G). As part of the 'member checking process', suggested by Lincoln and Guba (1985) to ensure data was reliable and valid, HY was provided with a copy of the transcript and asked for feedback, but he did not request any changes and the transcription was subsequently analyzed.

Ethics

The research was approved by a University Research Ethics Committee. In line with the Ethical Principles of Psychologists and Code of Conduct proposed by the American Psychological Association, HY was fully informed as to the nature of the research, and given the opportunity to ask questions before consenting to participate. Anonymity, confidentiality, and data storage procedures were all fully explained to HY.

Researcher Reflexivity

For transparency, the interviewer's influence on study outcomes were addressed through a reflexivity account employing 'intersubjective reflection'. The researcher reflected and considered how their role may have been perceived by the participant (see Finlay, 2002, p. 215; see Appendix E), and how researcher biases may have shaped the interview and data. For instance, the researcher, who has a background in psychology, has an interest in the mental health of gang members and this was expressed to HY's employer when contacted regarding the study. Although HY was suggested due to his interest in gang members' mental health, the researcher may have focused more on this aspect of HY's experience during the interview. Nonetheless, HY was aware that the interview would focus on symptoms relating

to mental health for which no formal diagnosis existed and that links between HY's account and the researcher's knowledge of diagnostic criteria were to be made. The interview schedule, however, was devised to ensure rigor in the data collection and reduce potential biases. On reflection, an interview schedule, albeit semi-structured, may have interrupted HY's 'voice' and desire to speak freely; an issue often stated by qualitative researchers (see Butler-Kisber, 2010). Instead, HY's wish to share his story and the researcher's response of asking questions relevant to HY's statements created a co-production of knowledge.

Thus, HY was given space to elaborate on his cultural, developmental, and social experiences as a Black British male, rather than being guided by an interviewer-imposed schedule. This experience identifies many of the intricacies associated with the role of participant voice in qualitative inquiry in terms of ethics and transparency of qualitative research (Butler-Kisber, 2010). HY's freedom in sharing his story supports a creation of meaning and allowed authentic insight into the etiology of gang membership from an individual with lived experience. HY's case, therefore, is a valuable contribution to developing and expanding theoretical knowledge of gang membership.

HY expressed highly sensitive details during the interview, including childhood abuse, exposure to violence, and poverty. Consequently, the researcher was aware of the importance of differentiating between empathy and sympathy during the interview with neutrality in the write-up of the overall case-study. Despite HY stating he preferred not to follow an interview schedule, the interview schedule was a means to avoid bias by the researcher. Furthermore, adherence to Yin's case study design and analysis guidance ensured an increasingly reliable approach of evaluating the applicability of unified theory in explaining a case of gang membership.

Analysis

In addition to *research questions* relevant to the case, Yin (2014) states case studies should consist of: (1) *propositions* and 'boundaries' to guide the scope of the study, (2) consideration of the *unit of analysis* (i.e., is the focus on a single or multiple case study design), (3) *linking data to propositions* by using techniques, such as pattern matching, and (4) using set *criteria* to examine the findings, such as by referring to the wider literature.

Propositions and Unit of Analysis

The following propositions were devised for a single unit of analysis (i.e., a single case study) based on the tenets of unified theory:

1. HY's gang membership may be associated with a range of adverse individual, social, and/or environmental factors.
2. Socio-cognitive processes, such as moral disengagement and cognitively reconstructing perceptions of immoral behavior (see Bandura et al., 1996), may have normalized HY's perceptions of crime and facilitated a cycle of criminality and violence.
3. Gang membership may have contributed to HY's prolonged engagement in violence, experiences of victimization, and mental ill health.
4. Pro-social opportunities, such as employment and positive relationships, may have motivated HY's desistence from gangs.

The following 'boundaries' were established to ensure the study adhered to research questions:

1. Gang membership was defined using the Eurogang criteria for membership; "a street gang (or troublesome youth group corresponding to a street gang elsewhere) is any durable, street-orientated youth group whose identity includes involvement in illegal activity." (Weerman et al., 2009, p.20).

2. The time-period of interest included the period before, during, and after membership to draw out the causal mechanisms that may have contributed to, developed during, and/or followed gang involvement.
3. Theoretical propositions adhered to the unified theory of gang membership to test the model's applicability to an individual case of gang membership.

Case Study Analysis

To ensure reliability and validity of data, the case study was safeguarded by (1) *prolonged engagement* with data via repeatedly reviewing the transcription, (2) *peer debriefing***,** was provided to the researcher by the support of a gang research expert, and (3) *member checking* by providing the participant (HY) with the transcript to audit (see Lincoln and Guba, 1985).

Case study analysis was firstly conducted by referring to the propositions set by the researcher and analyzing the data through a process of pattern matching. Pattern matching refers to the "arrangement of occurrences, incidents, behavioral actions, or outcomes…that are apparent in raw data" (Almutairi, Gardner, & McCarthy, 2013, p. 240; Wiebe, Durepos, & Mills, 2009) and that are matched to the theoretical propositions devised by the researcher through their understanding of the field (Almutairi et al., 2013; Yin, 2014). Secondly, the criteria for analysis consisted of evaluating findings in line with theoretical concepts of unified theory by referring to existing literature (Yin, 2014).

To organize and match data to theoretical propositions, a six-step model devised by Braun and Clarke (2006), was adopted. Braun and Clarke's model helped guide the case study analysis and provided an organized, sequential, and rigorous approach to pattern matching data to propositions, and evaluating how the data matched the pathways proposed by unified theory. Thus, the process of pattern matching for this case was developed by following Braun and Clarke's six-step-model of analysis. This consisted of: (1) becoming

familiar with the data by re-reading the transcript numerous times to search for patterns in the case study relating to unified theory's propositions; (2) generating initial codes from data, such as 'family relationships' or 'violence,'; (3) searching for patterns so that data could be organized in line with theoretical propositions; (4) reviewing the data in accordance with unified theory; (5) refining and defining patterns in line with the overarching factors proposed by unified theory (e.g., individual, social, environmental, criminal learning); and (6) producing the report by linking the findings to the research questions, propositions, and referring to the wider literature.

In line with phases one and two of Braun and Clarke's (2006) six-step model, once familiarity with the data was established through transcription and re-reading the transcript, data extracts were grouped according to 'codes', and then categorized based on the tenets of unified model (e.g., individual, social, environmental factors; see Figure 3). Adhering to this process enabled us to examine how the data matched theoretical propositions and the analysis revealed how HY's case of gang involvement links to the tenets of unified theory.

Results

How Applicable is Unified Theory to Understanding the Etiology of Gang Membership Based on an Individual Case of Gang Membership?

This study supports the propositions of unified model by illustrating how a range of factors across domains, including individual, social, and environmental, socio-cognitive processes, and a pro-social pathway contributed to HY's pathway to offending, gang membership, and desistence. Thus, propositions one to four were supported. However, HY's case also demonstrates the complexity of gang involvement. Findings also show how unified theory requires further development, including a consideration of how gang membership may exacerbate pre-existing mental health and how individual difficulties, such as psychological distress and poor emotion regulation should be considered during and following gang

membership, rather than as just a precursor to gang involvement. Furthermore, the case also revealed that gang-tailored provisions may be useful in addition to the pro-social opportunities outlined in unified theory to support desistance from gangs.

Individual, social, and environmental factors. In line with unified theory, HY's childhood was marked by adverse risk factors across individual, social, and environmental domains. HY disclosed a history of childhood abuse by his parents, characterized by emotional, financial, and physical abuse, including repeated beatings by his father, neglect by his mother, and a lack of supervision from a young age. His family's financial difficulties meant that HY was often left home alone without food and was frequently hungry.

> **HY:** *The things that stand out to me most is my dad beating me and my mum leaving me in the house with no food. I'd notice that I never had presents, and for Christmas, there were no presents under the tree. There was a tree, but no presents under it. I remember, from age 8, I would go to friends' houses hoping they would give me something to eat.*

This suggests how unified theory's holistic consideration (e.g., "in which all aspects of an individual are treated and supported"; Koffman, Ray, Berg, Covington, Albarran, & Vasquez, 2009, p. 239) of individual, social, and environmental risk factors as precursors to gang membership is supported by HY's account. Thus, a hostile family environment and poor formal and informal social controls may have simultaneously motivated HY's subsequent involvement with gangs.

As the interview progressed, the interplay between social and environmental factors identified in unified model became apparent. HY described being groomed at age 8 by community members aware of his hostile home life. This demonstrates exposure to a delinquent environment and a disorganized neighborhood. HY recalled that he began engaging with 'olders' (a term used in street culture to identify a hierarchy between younger and older members of communities and/or gangs) and began selling drugs.

HY: *The olders saw that was happening. What they were seeing was vulnerability. They would give me sweets, and stuff like that, but they would ask me to sell (drugs). I saw a guy OD on the floor. He had foam coming out of his mouth and I knew that the stuff I was giving to the men was that. I said to myself, 'I didn't want to be involved with this'.*

Interestingly, HY expresses signs of guilt at an early stage (aged 8), after witnessing an individual overdose on drugs he sold. This suggests that HY was aware not only of his actions, but also of how anti-social behavior made him feel. This behavioral and emotional awareness is absent from unified theory at the individual level and has important implications for prevention and intervention responses. Especially so for those, similarly to HY, who have loose connections with gangs, but who are not yet deeply immersed in gang life. Thus, pro-social pathways may need to be included much earlier in the model. The hostile family environment, as described by HY, seems to have been a significant risk factor for future gang involvement. By age 8, HY's parents had separated and his father continued to repeatedly abuse HY emotionally and physically.

HY: *I kept telling my mum not to send me there and she kept sending me anyway. He was beating me for anything. He'd throw himself down the stairs and say it was my fault. He'd drink alcohol and just act really crazy. That was going on until I was about 13 to 14 years old, but my dad came in and out of my life through those years.*

In addition to violence in HY's immediate family, HY reported witnessing and experiencing extended familial violence. HY also reported how his school performance deteriorated and he became disruptive with peers and teachers. Thus, individual, social, and environmental risk factors occurred concurrently prior to gang involvement.

HY: *It wasn't just my dad. My uncle was beating my aunties, he was beating my mum, and he was beating us. So, violence is what I used to solve a situation. So, in school, I was fighting. The teachers, the pupils - whoever got in my way really.*

HY's childhood and adolescence were also marked with emotional dysregulation and family violence exacerbated his anger.

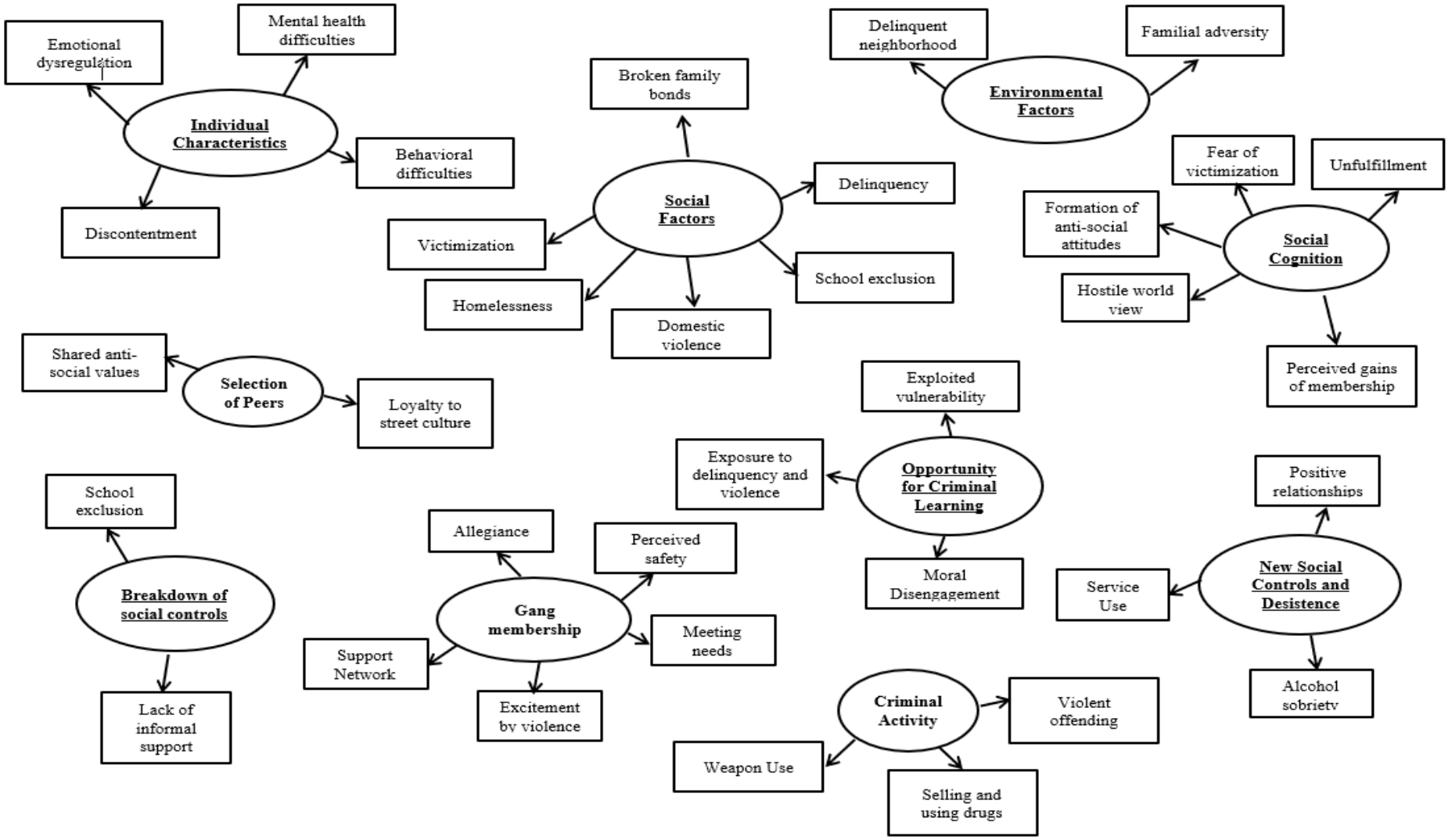


Figure 3. Pattern matching analysis revealed how HY's experience of gang involvement closely links to the propositions of unified theory.

Anger influenced HY's behavior and he described displacing his anger onto others:

> **HY:** *So, now I'm very angry. I'm a violent person, very violent person. I mean, like my dog, I'd set him on people - anyone around me…I was taking it out on people…They were like pain thresholds. Pain release.*

HY claimed to have felt animosity towards authority figures and described contesting teachers' authority due to the authoritative relationship experienced with his father.

> **HY:** *They could have said anything. It's more that control, (that) ruling, tried to rule over me, that authority bit. I would attack that because that's what my dad did, my uncle did. So, it was something that reminded me of them. It triggered me.*

In addition to difficulties regulating emotion, HY reported experiencing anxiety, depression, intrusive thoughts to harm others, paranoia, suicidal thoughts and behavior, and trauma symptoms before and during his gang membership. HY described symptoms which could be symptoms of trauma and Posttraumatic Stress Disorder (PTSD). For example, HY had been exposed to a traumatic stressor (e.g., child abuse; Criterion A) and had re-experienced the event (e.g., emotional and physical reactions when exposed to traumatic reminders; criterion B; see Friedman, Resick, Bryant, & Brewin, 2011). HY also recalled being pressured to abuse drugs by the 'olders', and how abusing substances helped alleviate some of the distressing mental health symptoms he was experiencing.

> **HY:** *So, yeah, they made me take it, but I liked it. It made me forget about everything. It made sense, as weird as that sounds. I got addicted to it.*

As time progressed, HY's mental health seems to have deteriorated further and he described experiencing difficulties before he joined a gang:

> **HY:** *I was 14. I was the boss. I'd wear a bandana around my face. I wouldn't take it off. I was mental at this point. I'd gone mad. I had literally gone mad. I was smoking*

cannabis. I knew I was going mad because I had a personality disorder. I wasn't diagnosed, but I know my thinking was not right.

INT: *What kind of things were you thinking at the time?*

HY: *I was thinking that I wanted to kill any and every person.*

He described experiencing delusions and naming objects he considered to be friends and a means of protection.

HY: *So, at this time now, I had a friend that was a bottle, a glass bottle.*

INT: *Ah, I see. So, your friend was a glass bottle.*

HY: *I would name the bottle and wherever I would go, it would be there. If I didn't have a knife, I had the bottle.*

Additional symptoms, such as suicidal thoughts and behaviors occurred before HY's gang involvement, continued throughout membership, and followed HY's exit from the gang. Thus, HY's case demonstrates how risk factors at each level interrelated and that individual factors, such as the behavioral, emotional, and mental health needs of the individual, requires focus much earlier in unified theory and throughout the pathways.

Social cognition and selection of peers. Strained family relations, school absenteeism, poor school performance and social, emotional, and behavioral difficulties all contributed towards HY's school exclusion at age 13, and his involvement with delinquent peers at a center for youth excluded from mainstream education (known in the UK as a Pupil Referral Unit; PRU). HY claimed that the PRU exposed him to like-minded peers who shared his anti-social attitudes and who also engaged in anti-social behavior. Hence, reinforcing positive attitudes to and engagement in violence. This corresponds to the socio-cognitive process described by unified theory whereby the selection of similar peers provides opportunities for criminal learning. Interestingly, HY also claimed that youth in the center

were reluctant to express pro-social behavior because they feared being victimized by the others.

> **HY:** *Yeah, and even in there I was around more bad kids, and it escalated. It's not good because you're around everyone that's mad and bad. Even the ones that are good, they have to be bad because they know they can't allow someone to run up on them.*

At the same time as HY's school exclusion, HY ran away from home and was homeless. Whilst homeless HY claims to have been sexually exploited by women who gave him food and shelter in return for sexual favors.

> **HY:** *On the streets, there are these women who let you into their houses if you do sexual acts with them. I had to do sexual acts with these women to stay in their houses.*

HY described a need for acceptance, belonging, and safety, which facilitated an attachment and sense of loyalty towards these women.

> **HY:** *You go to these places and it was so crazy, but my basic needs were being met. It was like getting a bit of food here, getting shelter, feeling like a family, but it's not really, and all that sort of stuff I was getting. You got to understand this as well because this is what happens in sexual exploitation. They feel that it's not happening to them. I felt an attachment to the women that were there. I felt it was family. Even though the situation was what it was, they were there for me when no one else was.*

This shows how unmet needs at each of the factor levels in unified theory may have led to HY cognitively reconstructing perceptions of healthy attachments, to normalize exploitative relationships that met his unfulfilled needs. HY claims that he saw the world as hostile and negative.

HY: *I'm an outcast. I'm not really wanted, and I'm let down. I feel let down by my society, family.*

HY also reported how feelings of guilt were rationalized through his negative worldview, in line with moral disengagement processes, and how he maintained a sense of disillusionment and exclusion from society.

HY: *It's a thing where when someone pushes you into it and then you react, you're not seeing it as you've done something wrong. You're just doing it because of the situation that happened to you and that's when guilt comes in.*

INT: *Did you ever feel guilty?*

HY: *Yeah, loads of times, but then you snap back and say, "Wait a minute, but they're pushing us into this situation". Society didn't accept me then and society isn't accepting me now and the consequences are there.*

At the social cognition level, HY recalled his perception of gangs before membership and that although the term 'gang' was not used, he was aware of their delinquency, and cautious of engaging with them.

HY: *Before I went into the gang, I didn't know what the gang was. I saw them as a group because I didn't really use the term 'gang'. …I just saw it as 'those guys'. Just a certain type of guy that I didn't want to be around.*

However, HY recalled that the gang was aware of his callous attitude and, consistent with the selection process in interaction theory (Thornberry et al., 1993), gang members groomed him for fights. HY described how his exposure to familial violence and associations with delinquent peers contributed to his pro-violent attitudes, and disregard for others.

HY: *I remember that I became a hard person compared to the kids around me. The older boys would see potential in me…to groom me and use me for different things. So, to fight and so on because I had that toughness. I'd win.*

HY described how his perception of gangs altered from a group he wanted to avoid, to a group presenting opportunities, including acceptance, belonging, and protection. The gang also offered opportunities for financial gain:

> **HY:** *Once I joined, I'd gone through certain things, which is why I said it's always vulnerable, but when I decided to join, I saw them as friends, family, protection, help when you're in need, you know?*

Unsurprisingly, HY's consistent exposure to delinquency and delinquent groups, led him to adhere to 'street culture' values. This shows how social cognition, shared beliefs and values, and reinforced engagement in criminality and violence, especially antisocial and hostile attitudes towards formal agencies, interplayed before and during HY's gang membership. HY also claimed that, like his peers, he did not fear legal repercussions because the gains of gang involvement outweighed potential costs. The socio-cultural factors outlined by HY as 'street culture' which is not explicitly considered in unified theory, highlights the importance of the socio-cultural context of gangs and warrants greater consideration in the theory as an important socio-cultural and -cognitive influence.

> **HY:** *Well, in the streets, YOU DO NOT CALL THE POLICE…That's why, the police - that's why we're not scared. Do you think they care about what the police are saying? No one really cares.*

HY also revealed how breaking codes of conduct resulted in being violently victimized.

> **HY:** *Yeah, there's things you don't do, like going to the police. You never go to the police, you don't snitch, you don't back out of a fight. If I'm having a fight and you back away, you're going to get it when you come back.*

Thus, although psychological, socio-cognitive processes, were evident in HY's account, the cultural context in which gangs operate needs to be given greater theoretical consideration beyond that of environmental and social factors. Socio-cultural factors could be included

alongside social cognition in leading to the selection of peers and reinforcement of criminality.

Criminal learning and criminal activity. HY recalled how his childhood experiences, exploitation, homelessness, and school exclusion, exposed him to high levels of violence and provided opportunities for criminal learning; all exacerbated by exclusion from school. HY described two instances where, during adolescence, he witnessed extreme violence.

> **HY:** *I see a guy get a samurai sword down his back. He was having a fight with the older boys. So, they got a sword and sliced him.*

HY also recalled witnessing intimate partner violence:

> **HY:** *There was one occasion when I got dragged out of the house. The guy was having an argument with the mother of his child. He starts hitting her, punching her, and he's like, "If I can't have you, no one can.", and then he cut her vagina.*

HY explained how this constant exposure to violence led him to normalize violence and he developed positive attitudes towards violence as a functional response.

> **HY:** *I've seen all this violence, violence is the way I handle anything…I was seeing a lot of violence at a very, very, young age. I was becoming immune to it, desensitized to it.*

HY recounted that exposure to delinquency, homelessness, and violence prompted pro-offending schemas and offending behavior.

> **HY:** *When you're out on the streets, you learn stuff, tricks of the trade. Everything is out there to learn. It's crazy and it's a whole different life…that's the way we live life and it's embedded in us. It's like to act the way that we did, that's the norm.*

HY's exposure to delinquency and opportunities for criminal learning, which began by selling drugs at the age of 8, continued throughout adolescence and early adulthood. HY's

offending became increasingly problematic and he committed assault, grievous bodily harm, and several stabbings. Below, HY describes committing a robbery and 'assassinations' as a mean of retribution on behalf of individuals from the neighborhood. HY reported numerous altercations with the police. He was arrested and cautioned throughout adolescence, was remanded in custody at the age of 13, later released, and then arrested again for robbery in the same year. He served 10 months in prison and had five further juvenile arrests. His last custodial sentence ended when he was 23 years old.

> **HY:** *Before I went to jail, I got arrested many times, but no one would say anything. I'd just be like "No comment." knowing that I'm coming out (and) they're not going to press charges on me. There'd be phone calls happening out on the streets to tell the person to stop because they don't know what they're going to get their family into and all of that.*

HY had several encounters with law enforcement.

Gang membership. HY joined an existing gang when he was 14 years old. This occurred when he was approached to join the gang due to his fearful reputation, pre-existing engagement in criminality and violence, and already being affiliated to the gang.

> **HY:** *I got a name for myself and that's when I got into the gang because I went up in the ranks. They would be there, and they would see me, and they would say, "Ah, this guy is like that. When you're a 'face', people don't like you, but they can't really touch you. I was affiliated with a lot of people, but the reason they're affiliated with me, it's because they know they can't touch me.*

HY's gang membership met many unmet needs. He considered the gang as 'family', was loyal to it, viewed it as a means of achieving status and 'respect', to meet girls, and a form of protection, and self-validation. Over time, he developed strong bonds with other members.

A shared sense of values, as well as group identity, resulted in HY's behavior escalating when he became a gang member. He reported being in the gang increased his violence, especially as it included members from war-torn countries; it helped motivate his own violence.

> **HY:** *Yeah, so, we're talking about Somali's from a third world country. For them to come into London, the level of violence they were showing was higher than usual. Not so much for me because the things I had seen as a young child was very high for someone in London, but they were coming from higher violence. In the sense that while I was robbing phones, they were robbing trainers off your feet. They were on the next level and it took me up to this next level. It made me more vicious. Like before I would be quick to react, but they made me more vicious, kind of evilness coming out of me.*

HY provided numerous accounts of inter-gang violence and violent victimization, but also suggested strong group identity, cohesion and shared anti-social attitudes and behaviors. Consequently, HY held positive attitudes towards weapons, which became stronger via his gang involvement and altercations with rivals.

> **HY:** *That's when it started to get really bad in the South-East area. We was specializing in robbing, smacking people up, but we weren't going around stabbing people because we didn't need to. We were feared, we were top. Because they wasn't, they were scared, and thought 'We need to make a name for ourselves'. They went around stabbing people, like they went on a rampage; stabbed one, stabbed another one, another one, and that got back to us. That's when the war started. That's when we grabbed our tools and people were being stabbed.*
>
> **INT:** *What kind of tools?*
>
> **HY:** *At the time, knives and that, bottles. For me, I told you, I was collecting knives.*
>
> **INT:** *Yeah, from the age of 8 to 9 you said.*

> **HY:** *Yeah, so I would have a Rambo knife, it's like a curly thing. I would have a butterfly knife and they all looked pretty. At that age, I was like, 'Wow, look at this'. The knives and whatever, now I'm in deep. That's my weapon, that's my tool, that's my best friend, my protection right now…there are certain codes that are embedded in the gang.*

HY then reported how the benefits of gang membership were short-lived. He described being overwhelmed by his gang status and that his needs were being met only at a superficial level.

> **HY:** *In the streets, I've got what I need there, the respect, whatever, but it's not actually respect. It's fear. Respect is something different, but remember Maslow's hierarchy of needs. You're looking for your basic needs, so you're getting it, but it's not real, it's something fake. I was saying to myself, 'I was becoming the top guy'. People would give me stuff. They'd give me what I want, whenever I want. Even though all this fame was happening, I was like, 'I don't want to live this life'. It's like the fame was holding onto me and I didn't want it.*

Thus, although unified theory highlights unmet needs as precursors to gang membership, it is unclear how the model considers these needs *during* gang membership, and whether they provide an intrinsic motivation to exit the gang. HY's account demonstrates how being in the gang enhanced his criminality and violence, provided short-term respite from his dissatisfaction across numerous aspects of his life, and facilitated his excitement from violence. However, as HY described, it was the constant exposure to violence and the gang's inability to meet his needs as he approached early adulthood that motivated him to desist from gang involvement and seek support. Thus, unified theory could expand the pro-social pathway to include a response to unmet needs.

New social controls and desistence. HY reported that following his final custodial sentence, he experienced mental health difficulties, and began "educating" himself by

reading. Following release from prison HY was motivated to desist from gang involvement and offending. His pathway to desistence included experiencing guilt and regret, and a motivation to change as he progressed to early adulthood. HY's feelings of regret followed involvement in riots. He explained how these events triggered thoughts of leaving the gang and how he perceived the riot as a metaphor for his life experiences to date.

> **HY:** *So, I saw the place burning down. It killed me. I thought 'That's my life. My whole life has been a riot'. That's what it showed me. I was looking around and that's when I was like, 'I need to change'. I had already been trying to change before that, that's the thing. Yeah, so after the riots, I think that's probably something that I regretted.*

HY then described how he experienced poor emotional well-being together with his mental health difficulties, including anxiety and suicidal thoughts.

> **HY:** *Yeah. The first panic attack was after the riots and I wanted to kill myself. Yeah, so after the riots, I think that's probably something that I regretted.*
>
> **INT:** *So, you had panic attacks? Were you feeling anxious?*
>
> **HY:** *Yeah, I had panic attacks because I was going to kill myself. I was actually going to commit suicide.*
>
> **INT:** *Did you attempt suicide?*
>
> **HY:** *Yeah, I cut my wrists.*
>
> **INT:** *This was after the riots? Up until the riots, had you done anything like that?*
>
> **HY:** *Nah, the cutting came before (gang membership), but this time I was going to end it. It was going to be serious death. Yeah, the mental health side and whatever, I knew there was something wrong with me. So, I handed myself into hospital at the time.*

When asked about symptoms following his exit from the gang, HY reported experiencing intrusive thoughts accompanied by anger. HY also described symptoms of

depression, including some physical symptoms, such as headaches and slow movement, and feelings of social isolation. After leaving the gang, HY reported experiencing flashbacks imagining he was being attacked and was subsequently covered in blood. However, he also recounted how during gang involvement, though he had experienced mental and emotional difficulties, life in the gang had seemed "great" at the time. Yet, exiting the gang provided heightened awareness to his experience of mental ill health and emotion dysregulation.

> **HY:** *It was like some dark cloud was over me and I'm just staying in one place. I'm down, low. My head would drop, like this (HY acts this out). It was taking control of me, my body, and that. There were other things happening. Flashbacks, when I walk out of lifts, someone would stab me in the belly. When I wake up, I would see blood all over me. This is when I'm coming out of it (the gang). When you're in it, it's great, but when you're coming out of it, it's a serious thing. That's what people don't realize. When you're in it, you're just focused (on) whatever happens. When you stop, you realize, "Wow, is that what's wrong with me?". It's really bad.*

This suggests that while the gang may offer a buffer against a lack of social support, the emotional and mental health of gang members deteriorates during and following gang membership. Unified theory, although acknowledging mental health at the individual level of risk factors, does not consider how mental health may be affected during and following gang membership. Indeed, HY also recalled how despite being presented with a range of pro-social opportunities during the desistence process, including a relationship and employment, untreated mental health difficulties continued to impact him. He recalled the positive impact the relationship had on his behavior and how it began to alter his perception of having his needs met via pro-social rather than anti-social mechanisms:

HY: *I stopped going out as much. I found me a woman. She was helping me change from a roadman to a good guy. The relationship was not just fulfilling, it was rehabilitation. She was rehabilitating my mind. She was changing me.*

However, HY also struggled to understand why he was unable to experience positive feelings, despite having these pro-social opportunities (e.g. employment and a romantic relationship) vs. illegitimate means (e.g. criminality and gang involvement).

HY: *I had all this stuff: home, woman, but I was down there. I kept weighing it up, that this doesn't make sense. I knew that something seriously was wrong.*

He sought support and began to see a psychiatrist, he stopped consuming alcohol, found religion, and developed a mentoring relationship with a positive role model.

HY: *And then I got a mentor in my life and that really helped. A male role model that I could look up to, that I never really had. And someone that I could trust as well. He was showing me that and that was really nice to have. I had the church and that was like family to me. That was amazing to have.*

HY received intervention from a non-profit organization focused on supporting young people from marginalized communities and developed a working relationship with a gang consultant to tackle gang-related violence. This led HY to pursue voluntary, followed by paid employment, supporting youth at-risk of gang involvement. HY also began events speaking, which provided him with a sense of 'purpose' and financial gain via pro-social means.

Still, however, HY expressed some negative attitudes towards criminal justice officials and services. He explained how despite receiving treatment from a psychiatrist, which had initially facilitated his recovery, he experienced changes in care (due to staff resignations), and felt unable to establish a relationship with the newly allocated psychiatrist. At this point, HY disengaged from the service and refers to the breakdown of opportunities

posited by unified theory. He also claimed he needed increasing support, which was not provided by parole services following his release, including housing and mental health support. The type of support required by gang members could also be explicitly stated in the model to support the desistence process from gangs. Nonetheless, HY's pathway, in line with unified theory, consisted of pro-social opportunities and controls that were reinforced. In addition, individual characteristics and psychological variables, including the experience of self-conscious emotions, such as guilt and regret, contributed to HY's motivation to desist and formed part of the desistence pathway.

Discussion

The aim of this study was to conduct a theoretically driven case study based on the unified theory of gang involvement (Wood & Alleyne, 2010). The model considers how various factors inter-relate and lead to distinct pathways resulting in criminal offending and/or gang involvement. The model also acknowledges how alternative pathways may support individuals to desist from criminality and gang membership. Although all four propositions were supported by HY's account of his experience before, during, and following gang membership, the findings show how unified theory could be developed further to identify the causal pathways to and out of gangs.

In line with previous research, the risk factors for gang membership included mental health difficulties (possibly anxiety, depression, trauma), poor school performance, adverse family environment, and living in a disorganized and deprived neighborhood (see O'Brien et al., 2013 for review). Indeed, HY's case supports the contentions of policy makers who identify the need for early identification and response to young people at risk of gang membership (UK Home Office, 2015). However, HY's case also highlights the complexity of gang involvement and the need for a holistic approach to underpin response strategies to gangs. That a recent government report identified how current gang prevention efforts have

been unsuccessful in dissuading vulnerable young people from gang-related violence (Home Office, 2015), shows how there remains gaps in understanding of gangs, particularly with regards to addressing members' socio-cultural, emotional and mental health needs.

Unified theory presents three domains with factors at each level as precursors to gang involvement. Interestingly, however, although HY reported risk factors in each domain, his experience with mental ill health and emotion dysregulation appeared to be prominent throughout. This is supported by recent evidence stating how individual factors, including psychological problems, pose the highest risk to subsequent gang involvement, over contextual factors (Home Office, 2015). Thus, although unified theory considers individual factors as precursors to gang membership, focus on individual needs should feature in more depth throughout the theory, especially in relation to the desistence process of leaving the gang.

Our findings also reveal that gang membership is associated with higher levels of violence, and for HY, this exceeded his pre-existing delinquency levels, in line with *enhance*ment models of gang membership, whereby the delinquency levels of youth who were already delinquent increase (Thornberry et al., 1993). Furthermore, HY engaged in both general and violent offending repeatedly; resulting in frequent interactions with law agencies and custodial sentences. However, as he notes, this failed to positively impact on him, which in turn, supports the framework of how reinforcement of negative opportunities, such as that from delinquent peer approval, can hinder pro-social opportunities and desistence.

That HY seemed to have pre-existing mental health difficulties before his gang membership, highlights the importance of interventions considering the mental ill health and emotional well-being of gang members at an early stage. It also requires further empirical consideration to establish the causal relationship between gang involvement and mental illness in youth. This is particularly important as HY described symptoms associated with

anxiety and depression, which have been identified in adult gang members (see Coid et al., 2013; Wood et al., 2017), and among youth exposed to community violence (Kennedy & Ceballo, 2016). He also described symptoms associated with posttraumatic stress disorder (PTSD; see Beresford & Wood, 2017) and poor emotion regulation, including displaced anger and suicidal thoughts and behavior (see Vasquez et al., 2012; Mallion & Wood, 2018; Watkins & Melde, 2016) before, during, and after his gang involvement. Furthermore, although HY claimed he had not had a formal diagnosis, the criteria for Personality Disorder features numerous personality traits, such as callousness, hostility, and impulsivity, in addition to the cognitive impairments, (e.g. delusions) reported by HY (see APA, 2013). That these symptoms were stable from adolescence through to early adulthood, suggest HY may have experienced conduct disorder during childhood/adolescence, which manifested as a personality disorder once he reached adulthood. As no formal diagnoses were made, this is merely speculative. However, previous research has shown that conduct disorder during adolescence and antisocial personality disorder in adulthood link to gang membership (Coid et al., 2013; Howell & Egley, 2005).

Certainly, HY's case highlights the need for targeted interventions that include a strong focus on gang members' mental health. Had these emotional and mental health, in addition to his problems with family and at school, been addressed earlier, then HY may not have become a gang member. Without appropriate provisions and treatment available to youth, and with frequent exposure to and engagement in violence, youth who are vulnerable to gang membership may lose their pro-social opportunities and motivation to leave their gang as they become further embedded in gang behavior, values, and warfare.

HY's disclosure regarding his need for acceptance and belonging, along with his loyalty towards the gang, supports previous findings showing how adolescent boys are attracted to gang membership because of their need for acceptance and belonging (Owen &

Greeff, 2015). Moreover, the importance HY attached to loyalty to the gang supports the theoretical position of Wood (2014) who posited that social processes linked to group identity may facilitate adherence to group norms and gang cohesion. The importance of social processes in gang membership has more recently also been supported by Tolle (2017) who shows how gang membership facilitates social learning and this links to deviance above and beyond aspects of social learning theory. HY reported numerous instances of criminal learning, but that his delinquency and violence peaked during his gang membership, which supports Thornberry's facilitation hypothesis (Thornberry et al., 1993), suggests that gang membership in and of itself influences social learning, as Tolle argues.

Contrary to previous findings that gang members do not experience higher levels of traumatic childhood experiences (Cepeda et al., 2016); HY's account suggests that the abuse he experienced during childhood was a significant factor motivating his decision to join a gang. Petering's (2016) examination of homeless youths, reports how gang members are more likely to report childhood abuse and exposure to family violence, similar to HY, and that adverse experiences, such as homelessness, leave youth at greater risk of gang involvement; a finding supported by research examining adult gang members (Wood et al., 2017). Given that a hostile family environment was pivotal in HY running away and becoming homeless, it makes sense that gang membership offers an attractive alternative. Furthermore, HY's description of his symptoms of trauma supports recent theoretical and empirical work demonstrating how gang membership links to posttraumatic stress disorder (PTSD; Beresford & Wood, 2016; Kerig, Chaplo, Bennett, & Modrowski 2016; Wood & Dennard, 2017). Although we cannot be sure that gang membership aggravated any pre-existing trauma symptoms HY may have had, it is likely that his continual exposure to others' and his own violence before and during gang membership made him highly vulnerable to both victim and perpetrator related PTSD. This adds to the importance of considering the

mental health of gang members, especially given the well-documented links between untreated childhood trauma and its life-long effects, particularly in relation to offending (see Dudley, 2015).

HY also reported using social cognitive strategies such as moral disengagement, specifically attribution of blame, dehumanization, displacement of responsibility, and euphemistic labelling. This supports research findings that gang members are more likely to morally disengage than are non-gang individuals (Alleyne, Fernandes, & Pritchard, 2014; Wood & Alleyne, 2010). Moreover, that HY reported feeling guilt, but then morally disengaged to resolve his guilt, supports Wood's (2014) contentions that moral disengagement is likely to be used by gang members to minimize distress following involvement in violence. Furthermore, the findings also support theoretical propositions that moral disengagement impacts feelings of guilt and may link to aggressive tendencies (Bandura et al., 1996). During numerous points in the interview and consistent with previous work (Alleyne et al., 2014), HY expressed how he used moral disengagement strategies, such as dehumanization and euphemistic labeling to consider individuals outside the gang as the 'enemy' or rival gang members as 'outcasts'. Further evidence of moral disengagement strategies related to the blame HY attributed to his family, to authority figures, and to society overall for his exclusion from mainstream society. Consequently, findings show how a negative world view and adverse childhood experiences link to motivations to join a gang of highly delinquent, like-minded peers, who are excited by violence. This makes intuitive sense given that gangs may, at least in the short-term, provide a means to meet personal needs that might otherwise be provided by a loving, stable family background, as noted in previous work (see De La Rue & Espelage, 2014; Merrin, Sung-Hong, & Espelage, 2015).

Our finding that HY's regret regarding some of his actions seemed to inspire his motivation to change was particularly interesting. There also seemed to be one key moment

that set HY's trajectory out of the gang; he experienced feelings of guilt following a fight and his involvement in the riots of 2011. This supports previous research that shows how gang members feel regret for some of their actions (see Coid et al., 2013; Wood et al., 2017) and findings that show how regret may link to desistance from crime (see Warr, 2016).

The desistence pathway formulated in unified theory was also supported, but findings revealed that individual characteristics, specifically in this case, the role of self-conscious emotions (i.e., guilt) during the desistence process justify closer attention in the theory. Interestingly, however, the findings revealed how consideration of mental health and emotionality in the model could be expanded throughout the model, especially with regards to desistence. HY encountered a range of pro-social opportunities and these were reinforced by means of HY securing employment, developing a positive relationship with a male mentor, and forming a romantic relationship. Each of these, as theorized in unified theory, contributed to his successful exit from the gang. However, HY also expressed that he was already experiencing internal motivation to change, facilitated by regret for some of his actions. This has crucial implications for intervention work with gang members at different stages of gang involvement and may be an avenue that practitioners can explore with gang members in more depth - particularly as it seems to motivate change. Unified theory also needs to expand its pathways to consider the role of individual needs, particularly emotional and mental health needs throughout. It also needs to broaden the pro-social pathway by taking social, mental health and emotional factors into closer consideration and this would strengthen the model further.

Conclusion

To our knowledge, the present study is the first to adopt a case study design to examine the theoretical tenets of gang involvement. This case study provides insight into how multiple risk factors such as violence, mental ill health, and poor emotion regulation, present

before, during and after gang membership. These factors, which appeared in HY's case to be exacerbated by gang membership, made desistence from the gang difficult for him. However, our findings also show how feelings of guilt and regret may motivate desistance from gang involvement and when coupled with pro-social opportunities and social controls, can influence ex-gang members to more positive futures. Future empirical work is needed to examine gang membership on a range of behavioral, emotional, psychological, and social outcomes to gain further insight into the complexity of gang involvement; and to most importantly seek to protect communities and individuals, particularly young people at risk of gang affiliation.

Chapter Four

Rethinking How We View Gang Members: An Examination into Behavioral, Emotional Needs, and Mental Health Predictors of UK Gang-involved Youth

…to tackle gang membership effectively it is vital that we learn to live with the juxtaposition that gang members are violent individuals and also vulnerable victims, and that the current one-dimensional perception that gang members are merely violent perpetrators is amended. (Beresford & Wood, 2016, p. 153)

The etiology of gang membership, as demonstrated through the case of HY (see Chapter Three), is complex and multifaceted, with a range of precursors often occurring simultaneously and across numerous risk factors such as family, individual characteristics, social situations, peer groups, and environmental factors (Raby & Jones, 2016; Thornberry et al., 2003). Yet, the prevailing view of gang members focuses primarily on their criminality and violence (Beresford & Wood, 2016) and punitive approaches such as harsher sentencing laws and inappropriate use of intelligence tools (Densley, 2011; Wood, Alleyne, & Beresford, 2016) cannot address these complexities in full. Thus, addressing the issues posed by gangs is far from straightforward, but it is one that requires "better co-operation and collaboration…between traditionally divergent institutions and agencies…" (Densley, 2011, p. 20).

As gang involvement includes more exposure to violence (Medle & Esbensen, 2013), which in turn is associated with mental illness, such as anxiety and depression and maladaptive affective processes, such as emotional desensitization (Kennedy & Ceballo, 2016; Kerig et al., 2016), research is needed to understand how these relate to gang membership. That is, a better understanding of behavioral, emotional, and mental health difficulties experienced by young people at-risk or involved with gangs (see Children's Commissioner, 2018; see Delisi et al., 2019), will provide an infrastructure for effectively

tackling and reducing gang involvement. Chapter Two (Osman & Wood, 2018) revealed methodological constraints pertaining to a higher number of cross-sectional designs, which preclude conclusions of cause and effect. Moreover, research has noted the need for further longitudinal research on the mental health of gang members (Wood et al., 2017). In response, the current study aims to longitudinally examine the effects of gang membership over time on self-reported behavioral, emotional, and mental health, and socio-cognitive needs (baseline and following three months).

Gang Membership, Exposure to Violence, and Mental Health Outcomes

Exposure to violence, including violent victimization, among gang members is well documented. Peterson et al. (2004) identify how adolescent gang members (12-16 years) are more likely to experience violent victimization before, during, and after gang involvement, including serious violence (60%), compared to non-gang youth (12%; Taylor et al., 2008). This is supported by later findings that active gang members are violently victimized more so (97.8%) than youth who are loosely involved with a gang (79.9%) and non-gang youth (67.1%; Katz et al., 2011). Thus, it is unsurprising that gang members may also experience fear of victimization and may develop mental health difficulties, such as anxiety as a result (see Coid et al., 2013).

Exposure to violence is also associated with internalizing symptoms such as depression and externalizing symptoms such as delinquency and increased aggression (Gorman-Smith & Tolan, 1998; Schilling, Aseltine & Gore, 2007). It is therefore unsurprising that behavioral disorders, including conduct problems, mediate the relationship between gang membership and antisocial behavior (DeLisi et al., 2019). Equally, some authors further note how higher levels of antisocial personality disorder (ASPD) distinguish gang members from non-gang members (Mallion & Wood, 2018). Research examining adolescent indicators of ASPD in adulthood, characterized by emotion dysregulation,

unpredictable and heightened emotional experiences, low empathy, and engagement in violence (APA, 2013; Howard, 2015; Mallion & Wood, 2018), identifies how individuals diagnosed with conduct disorder (CD) in adolescence engage in higher levels of crime and violence and are more likely to develop ASPD in adulthood (Loeber, Bruke & Lahey, 2006). Further research shows how CD and ASPD correlate with anxiety and depression (Goodwin & Hamilton, 2003), and Loeber & colleagues (2006) note how when CD is comorbid with depression, substance misuse (marijuana), and callous/unemotional traits, the risk of developing ASPD increases.

Conduct Disorder in adolescence and ASPD in adulthood also positively correlate with traumatic experiences in childhood, including exposure to violence (Ballard et al., 2015; Holmes, Slaughter & Kashani, 2001). Evidence suggests that exposure to adverse childhood experiences (ACEs; defined as "potentially traumatic events that can have negative lasting effects on health and wellbeing," Boullier & Blair, 2018. p. 132) have a cumulative effect on later behavior. Exposure to ACEs also relates to lower levels of mental and emotional wellbeing (Boullier & Blair, 2018) and the greater the number of ACEs experienced in adolescence, the greater the impact on mental health into adulthood (Chapman et al., 2004; Schilling et al., 2007). A range of ACEs, such as adverse familial experiences, exposure to delinquency and violent victimization, financial hardship, and mental health difficulties have also been linked to a risk of gang involvement and, just as it is with the impact on mental health, the greater the number of ACEs, the greater the vulnerability of the child to gang involvement (Raby & Jones, 2016; Thornberry et al., 2003).

Collectively, the above evidence suggests that youth who become involved in gangs are vulnerable to a range of problems, particularly mental health difficulties (Beresford & Wood, 2016; Watkins & Melde, 2016). Although research investigating gang members' mental health is still in its infancy, there is plenty of evidence that gang members, compared

to non-gang counterparts, are involved in higher levels of criminality and violence (Gatti, Tremblay, Vitaro, McDuff, 2005), which also relate to mental ill health. In line with the "cumulative effects" concept, the more exposed to violence a youth is (e.g., via familial maltreatment), the more s/he becomes vulnerable to mental illnesses (Lynch & Cicchetti, 1998; Lynch 2003), including anxiety, depression (Gorman-Smith & Tolan, 1998; Kennedy & Ceballo, 2013), and symptoms of psychological distress (Foster, Kupermine, & Price, 2004). Consequently, it is unsurprising that gang membership, which strongly relates to violence (Gatti et al., 2005), leads to or aggravates existing symptoms of depression and suicidal ideations in youth (Watkins & Melde, 2016).

Due to their experiences of violent victimization as both perpetrators and victims (see Beresford & Wood, 2016), gang members are more likely to experience symptoms of depression, perpetration trauma (PT), which is trauma from perpetrating violent acts (see Kerig et al., 2016), and posttraumatic stress symptoms (Petering, 2016). However, research examining gang members' mental health (Dmitrieva, Gibson, Steinberg, Piquero, & Fagan, 2014; Madan et al., 2011; Watkins & Melde, 2016) has produced mixed findings. Although Madan et al. (2011) found that suicidal behavior positively related to gang involvement, this relationship was mediated by levels of delinquency and exposure to community violence. They also found no relationship between internalizing symptoms, (e.g., anxiety & depression) and gang involvement. One explanation for Madan et al.'s findings could be that their data includes gang members who still believe that their gang will provide protection and a social support network (Vigil, 1988; see Wood, 2014). However, this perception is likely to be short-lived (see Venkatesh, 1999), and cross-sectional analyses such as Madan et al.'s (2011) cannot capture how perceptions (and mental health) change across time. Only longitudinal analyses could accurately assess this.

Although longitudinal findings regarding gangs and mental health are scarce, findings

so far suggest that youth who join gangs already have higher levels of depression and suicide-related behavior, and these only worsen following gang joining (Watkins & Melde, 2016). This suggests that existing mental health difficulties may be useful predictors of future gang involvement, but also suggests that gang membership can exacerbate existing symptoms. Recent research supports this contention by suggesting that the more deeply involved members are in a gang the more severe is their mental illness (Wood et al., 2017). That is, gang members report more anxiety, are more likely to suffer psychosis, and have ASPD compared to affiliates (i.e. individuals loosely associated to a gang), and non-gang violent men.

Behavioral, Emotional Needs, and Socio-cognitive Processes

In their consideration of the literature, Watkins and Melde (2016) state that "…gang youth are not as emotionally healthy as nongang youth…" (p. 1110). However, emotional correlates of gang membership are rarely examined. Existing studies show how gang members have lower levels of trait emotional intelligence and engage in angry rumination (i.e., repeatedly focus on anger-provoking thoughts; see Mallion & Wood, 2018) and that angry rumination is associated with increased levels of displaced aggression (Vasquez et al., 2012). More recently, the need to examine self-conscious emotions, such as guilt and regret of perpetrating violence in gang-involved populations has also become apparent (see Chapter Three; Bailey et al., 2014; Wood et al., 2017). Indeed, research has pointed to the 'relatedness' between guilt and regret, and Zeelenberg and Breugelmans (2008) state "regret and guilt are emotions that are produced by negative outcomes for which one is responsible" (p. 589). Interestingly, however, the authors conducted three studies and distinguished between *intrapersonal* and *interpersonal* harm (i.e. harm towards the self and that towards others respectively) to examine whether these two forms of harm may instigate different affective experiences pertaining to regret and guilt.

Zeelenberg and Breugelman's (2008) research shows how in situations of *interpersonal* harm, regret and guilt represent similar experiences, including anger towards oneself, self-improvement, personal responsibility for the harmful action, and taking reparative action. Thus, the focus of interpersonal regret and guilt is on 'the other', in comparison to 'the self' as was found to be the case in instances of intrapersonal harm (Zeelenberg & Breugelmans, 2008). Overall, the authors concluded how guilt is experienced mainly when wrongdoing is inflicted on others, whereas regret includes a broader spectrum of emotional experience focused on wrongdoing towards the self *and* the other. Their findings support Baumeister, Stillwell, & Heatherton (1994), who state "from an interpersonal perspective, the prototypical cause of guilt would be the infliction of harm, loss, or distress" (p. 245).

The experience of these self-conscious emotions has rarely been examined in samples of gangs. Whilst both guilt and regret are worthy of attention in the empirical study of gangs, especially as emerging research on emotions has pointed to distinction between the two (see Zeelenberg & Breugelmans, 2008), guilt has been explicitly described by gang members who recall violent acts towards others (see Bailey et al., 2014; see case of HY, Chapter Three). Inclination to experiencing guilt (i.e. 'guilt proneness') has been linked to inhibiting offending behaviors and recidivism among delinquent samples and to motivating reparative action as the individual focuses on their behavior to 'right a wrong' (Tangney, Stuewig, & Martinez, 2014; Tangney, Wagner, & Gramzow, 1992; Tibbetts, 2003). Given how gang members engage in criminality, displaced aggression towards others, and violence (Coid et al., 2013; Vasquez et al., 2012), examining members' guilt proneness may provide insight into how emotional experiences could best be targeted in intervention and prevention gang work, especially given that guilt is considered an adaptive emotion, which can motivate

individuals to modify adverse behavior, and minimize personal feelings of distress (see Roos, Hodges & Salmivalli, 2014; Tangney et al., 2014).

In contrast, callous unemotional traits, which involve a lack of guilt, have also been strongly linked to antisocial behavior, conduct problems (Farrington & Loeber, 2000), and ACEs (e.g., 'early maltreatment'; see Docherty, Kubik, Herrera, & Boxer, 2018). It is further argued that exposure to violence may disrupt affective developmental processes and lead to callous-unemotional traits and emotional desensitization, such as low guilt (Docherty et al., 2018; Kennedy & Ceballo, 2016). Using longitudinal data, Kennedy and Ceballo (2016) reported that exposure to community violence was positively associated with mental health outcomes and aggressive behaviors in childhood and adolescence. Furthermore, in their analysis of data from the Longitudinal Studies on Childhood Abuse and Neglect, Docherty et al. (2018) examined the relationship between adverse events in 4-13-year olds, their self and/or parental reports of conduct disorder (CD) and lack of guilt at age 14. Analyses of four groups; (1) CD-lack of guilt; (2) CD-feel guilt; (3) no CD-lack of guilt; (4) no CD-feel guilt, found that lack of guilt was prominent among young people diagnosed with CD, compared to those not diagnosed. These findings also showed how between ages 9-13, exposure to violence and neglect predict a lack of guilt and a CD diagnosis. This suggests that exposure to violence, which is synonymous with gang membership, has implications not only for behavioral and mental health outcomes, but also for healthy emotional adjustment.

Empirical investigations have reported mainly on the relationship between guilt and mental health outcomes (Fontana, Rosenheck & Brett, 1992; Henning & Frueh, 1997). However, a lack of guilt may also be associated with socio-cognitive processes, such as the use of moral disengagement strategies (Bandura et al., 1996; Ring & Kavussanu, 2017). Grounded in the social cognitive theory of moral agency (Bandura, 1991), the relationship between moral thought and behavior occurs through self-regulatory mechanisms that guide

conduct. Moral agency is exercised via *self-monitoring*, *moral judgement*, and *self-reaction* whereby one 'monitors' their behavior, evaluates their actions based on internal moral values (the judgement function), and then behaves accordingly based on the perceived consequences they attach to their behavior (i.e. *self-reaction*; see Banduara et al., 1996). Hence, it is expected that individuals will engage in behaviors that maintain positive self-evaluation and self-image, and attempt to abstain from wrong-doing. However, behavior deemed to violate pro-social moral standards occurs frequently, and Bandura (1991) posits how such mechanisms of self-regulation can be disengaged from through eight psychological and psychosocial strategies (see Table 3). These processes enable individuals to morally disengage, and set aside their existing morals, and engage in harmful behavior that they believe will benefit them (Bandura et al., 1996).

Indeed, research demonstrates how moral disengagement strategies relate to unethical decision-making (Ring & Kavussanu, 2017). Equally, research has shown that street gang members are more likely to morally disengage than are non-gang offenders (Niebieszczanski, Harkins, Judson, Smith, & Dixon, 2015) by adopting a range of moral disengagement strategies, such as displacement of responsibility (e.g., to other gang members or to victims), and dehumanizing victims (Alleyne et al., 2014). The more the individual benefits from the harmful behavior, such as positive reinforcement from other gang members for violence, which may boost self-esteem, the more morally disengaged the individual will become. Thus, moral disengagement may assuage the normal feelings of guilt that perpetrating harmful acts would arouse in the individual (Bandura et al., 1996). Consequently, the presence or absence of gang members' feelings of guilt may have crucial implications for the treatment of gang-involved youth.

Table 3

Strategies of moral disengagement that may be adopted to transform detrimental conduct into an acceptable course of action (see Bandura et al., 1996, p. 365 – 366).

Moral Disengagement Strategy	**Description of Disengagement Strategy**
Moral justification	Harmful behavior is justified by reframing behavior as serving an advantageous purpose (e.g., serving the gang's objectives).
Euphemistic language	When language is adopted to conceal and minimize the consequences of harmful behavior (e.g., "*the police are all pigs*").
Advantageous comparison	Comparison of one's behavior to that which can be attributed as causing greater harm (e.g., "*what I did was not on that level*").
Displacement of responsibility	Dissociating from harmful behavior by attributing engagement in harmful conduct to others.
Diffusion of responsibility	Responsibility for the action is ascribed to others' involvement also (e.g., "*my part wasn't so bad, it was something we all did together*").
Distorting consequences	Minimizing the effects of harmful conduct by distorting outcomes (e.g., "*we only punched him and I saw him get up, so he can't have been that bad*").
Attribution of blame	Victims may be blamed for adverse behavior (e.g., "it's his own fault, he shouldn't have done that").
Dehumanization	Dehumanizing victims by viewing individuals as unworthy (e.g., he's one of them (rival gang member)).

Current Study

There is a growing consensus that a public health approach should be adopted to address gang membership (Neville et al., 2015). This approach involves identifying risk and protective factors associated with youth violence and/or gang involvement, to develop responsive *primary* (before involvement), *secondary* (as involvement occurs, to prevent escalation), and *tertiary* (long-term support to prevent continued violence) interventions (Gebo, 2016; Neville et al., 2015). The aim of the current study was to identify and understand the effects of gang membership on youth's behavioral, emotional, and mental health, and socio-cognitive needs over time, so as to inform future interventions at all levels in line with a public health approach. Consequently, self-report measures were used to determine whether levels of (1) mental health: anxiety, depression, perpetration trauma (PT), and posttraumatic stress symptoms (PTSS), (2) emotional needs: emotional distress, fear of victimization, and proneness to guilt (i.e., dispositional guilt), (3) conduct problems, (4) exposure to violence via victimization, and (5) socio-cognitive processes (e.g., moral disengagement & rumination), differed between gang and non-gang involved youth over a period of three months.

It was hypothesized that, compared to non-gang youth, gang-involved youth will experience significantly greater levels of mental illness, specifically anxiety, depression, PT, and PTSS, be more likely to have conduct problems, fear of victimization, and to engage in rumination, and moral disengagement. It was also expected that these levels would significantly increase after three months of prolonged gang involvement compared to non-gang youth. Also hypothesized was that gang-involved youth, relative to non-gang youth, would show significantly lower levels of emotional distress and guilt-proneness, and that these lower levels would remain with prolonged gang involvement given the links between exposure to violence and emotional desensitization outlined above.

Method

Design

A longitudinal between- and within-participants repeated measures design was employed. The between-subjects factor was gang membership, which consisted of two levels: (1) non-gang and (2) gang-involved. Time-point was the within-subjects factor with two levels: time one (0 months) and time two (3 months). All participants completed the same self-report measures at time one and time two. The dependent variables consisted of behavioral, emotional and mental health variables, including anxiety, depression, guilt proneness, emotional distress, exposure to violence, PT, and PTSS, and conduct problems. The socio-cognitive variables of rumination and moral disengagement were also included.

Participants

Three co-educational schools in areas identified as having high levels of gang activity by the UK Government (HM Government, 2016) were approached for participation. All were state-funded; one was a mainstream secondary school for ages 11 to 18 years (n = 44), one was a college for ages 16 to 19 years (n = 23), and the third was a Pupil Referral Unit (PRU) for ages 11 to 16 years (n = 24) who were experiencing a range of difficulties, including social, emotional, and behavioral, and permanent exclusion from mainstream school. Consistent with sample sizes from previous gang research (Mallion & Wood, 2018) and with young people in secondary schools (Pearce et al., 2016), 91 participants with a mean age of 14.93 (SD = 1.52, range = 13 – 19 years) took part at time one. Sixty-two per cent identified as non-gang youth (n = 56), 35% as gang-involved (n = 32), and 3% had unspecified status (n = 3). Also consistent with previous categorizations of gang and non-gang members (Wood & Dennard, 2017), participants were categorized as White (33%) or Black and Minority Ethnicity (BAME; 67%; see Table 4 for demographics).

At time two, the data attrition rate was 58% as the sample size had reduced to 53 participants, with 72% identified as non-gang youth (*n* = 38) and 28% as gang-involved (*n* = 15). A similar number of non-gang (*n* = 18) and gang-involved (*n* = 17) youth had failed to attend assessments with the researcher. Reasons for attrition varied across sites. At the secondary school and college, staff had cited exam attendance and sickness as explanations for missed assessments. However, at the PRU, cases varied from police contact, sickness, and school refusal (e.g., truanting).

Table 4

Demographic characteristics of gang-involved, non-gang-involved youth, and overall sample.

Demographic Characteristics	Total Sample	Gang-Involved	Non-Gang
Sample Size (%)	91 (100)	32 (35.2)	56 (61.5)
Mean Age (*SD*)	14.93 *(1.52)*	15.34 *(1.26)*	14.63 *(1.58)*
Gender (%)			
Male	59 (64.8)	25 (78.1)	33 (58.9)
Female	32 (35.2)	7 (21.9)	23 (41.1)
Ethnicity (%)			
White British/Irish	29 (31.9)	5 (15.6)	22 (39.3)
White Other	4 (4.4)	1 (3.1)	3 (5.4)
Mixed Race	13 (14.3)	4 (12.5)	9 (16.1)
Asian British	20 (22.0)	15 (46.9)	4 (7.1)
Other Asian	2 (2.2)	1 (3.1)	1 (1.8)
Black British	23 (25.3)	6 (18.8)	17 (30.3)

Materials

Gang involvement. To prevent inaccurate identification of participants as gang-involved (Mayor Office for Policing and Crime, 2018), gang-involvement was identified using the Eurogang Program of Research Youth Survey (Weerman et al., 2009); a robust screening measure of gang membership, which has gained increasing empirical recognition (see Wood & Alleyne, 2010). This measure includes 89 items including questions on group affiliations, sense of belonging, experiences of violence, and parental management. In line with the Eurogang definition of gangs as "…any durable, street-orientated youth group whose involvement in illegal activity is part of its group identity" (Weerman et al., 2009: p.20), five items were used to assess gang involvement; (1) belonged to a stable friendship group for three months or more, (2) considered this group to be a gang or had friends in gangs, (3) spent most of their time in public spaces, (4) accepted illegal activity as part of the group identity, and (5) that members of the group engaged in illegal behavior.

Anxiety. The Beck Anxiety Inventory (BAI) is a commonly used 21-item measure assessing symptoms associated with anxiety, including panic-related, somatic, and subjective, symptoms (Beck & Steer, 1991; Steer, Kumar, Ranieri, & Beck, 1995). Symptoms are measured on a four-point scale (0-3), and higher totals (range = 0 to 63) indicate higher levels of anxiety. Participants were asked to rate how often during the past month they had experienced symptoms, such as '*numbness or tingling'*, '*feeling hot', 'shaky'* (e.g., somatic-type symptoms), and '*being unable to relax', 'fear of worst happening',* and *'fear of losing control'* (panic and/or subjective experiences of anxiety; Beck & Steer, 1991). The BAI has good internal consistency when used with adolescent samples (Osman et al., 2002). Cronbach's Alpha indicated that for the current study, the BAI had good internal consistency (a = .92; see Table 5 for measures summary table).

Depression. The Beck Depression-II Inventory (BDI-II) was used to assess symptoms of depression, in line with diagnostic criteria for major depressive disorder as outlined in the Diagnostic and Statistical Manual of Mental Disorders (DSM IV and V; APA, 2012; APA, 2013). Each of the 21 items on the BDI-II assesses symptoms on a four-point scale (0-3) with severity of depressive symptomology indicated by the total summed score of all items (range = 0 to 63). The four-point scale ranges from low to high intensity of symptoms; higher scores indicate higher levels of depression. Items include symptoms such as low mood, '*I am sad all the time and I can't snap out of it'*, suicidal thoughts and behaviors, '*I have thoughts of killing myself, but I would not carry them out*', loss of interest '*I don't get real satisfaction out of anything anymore*', and excessive feelings of guilt '*I feel guilty all of the time'*. One item was removed as it was deemed unsuitable for an adolescent sample ('*I have lost interest in sex completely'*). In line with previous research demonstrating good reliability estimates for the BDI-II with an adolescent sample (Osman, Kopper, Barrios, Gutierrez, Bagge, 2004), Cronbach's Alpha indicated that for the current study the BDI-II had good internal consistency (a = .88).

Perpetration Trauma (PT). Given that recent research suggests gang members suffer trauma from perpetrating harmful acts against others (see Kerig et al., 2016), PT was measured as per Kerig et al's (2016) item, '*Have you ever experienced doing or being forced to do something very scary, dangerous, or violent to another person*?'. Participants were asked to indicate their response on a 5-point Likert scale (1 = 'strongly disagree', to 5 = 'strongly agree').

Posttraumatic Stress Symptoms. PTSS were measured using the Posttraumatic Stress Disorder Checklist 5 (PCL-5; Weathers et al., 2013). The PCL-5 may be used for screening purposes and is a 20-item self-report measure corresponding to DSM-5 PTSD symptomology (APA, 2013). The measure includes a brief assessment of ***Criterion A***, (e.g.,

that an individual has experienced a traumatic event, such as death, a life-threatening situation, or serious injury by being directly exposed to the event, as a witness, learning that it happened to a close other, or indirect exposure, such as in a professional setting); ***Criterion B***, re-experiencing the event, such as flashbacks or nightmares; ***Criterion C***, avoidance of feelings and or reminders related to the traumatic event; ***Criterion D***, negative thoughts and or feelings; and ***Criterion E***, *trauma-related arousal*, such as aggressive behavior (see National Center for PTSD, 2019). A type of event outlined in Criterion A is required, along with one symptom from Criterions B and C, and two symptoms from Criterions D and E. In addition, symptoms should be experienced for a minimum of 4 weeks (*Criterion F*), cause the participant distress (*Criterion G*), and are unrelated to another illness or substance misuse (*Criterion H*). Criterion's B, C, D, and E are assessed with 5 items each. The total scores range from 0 to 80, with a higher score indicating the severity of posttraumatic stress symptoms (for the current study, *a* = .98).

Table 5

Summary table of alpha reliabilities for current study.

Measure	*a*
BAI	.92
BDI-II	.88
PCL- 5	.98
MACI	.80
ARS	.93
MoMD	.94
SDQ-ES	.90
TOSCA-A	.70
EYS-VV	.86

Conduct problems. The unruly scale component of the Millon Adolescent Clinical Inventory Second Edition (MACI; Millon, Millon, Davis, & Grossman, 2006), was used to assess conduct disorder. This scale includes 39-items measured on a 5-point Likert scale (1 = 'strongly disagree', 5 = 'strongly agree') across 3 facet scales (1) ***Expressively Impulsive*** behaviors (e.g., '*Punishment never stopped me from doing what I want*'); (2) an ***Acting-out mechanism*** (e.g., '*I've had a few run-ins with the law'*); and (3) an ***Interpersonally Irresponsible*** nature (e.g., '*I don't see anything wrong with using others to get what I want'*). Higher scores indicated higher levels of conduct problems. Cronbach's Alpha for the current study demonstrated that the MACI unruly scale had high internal consistency (a = .80).

Angry rumination. Symptoms of anger and rumination were identified using the 19 item Anger Rumination Scale (ARS) by (Sukhodolsky, Golub, & Cromwell, 2001). Items assess, (1) ***Angry Afterthoughts*** ('*I re-enact the anger episode in my mind after it has happened*'); (2) ***Thoughts of Revenge*** ('*when someone makes me angry, I can't stop thinking about how to get back at this person*'); (3) ***Angry Memories*** ('*I feel angry about certain things in my life*') and (4) ***Understanding of Causes*** ('*I think about the reasons people treat me badly')*. Items were rated on a 4-point Likert scale (1 = "almost never" to 4 = "almost always"). A higher total score indicated higher levels of anger rumination. The ARS has previously been used with gang-involved youth (Vazquez et al., 2012) and for the current study, Cronbach's Alpha confirmed its high internal consistency (a = .93).

Moral disengagement. The mechanisms of moral disengagement scale (MoMD; Bandura et al., 1996) was used to assess moral disengagement. This is a 32-item measure examining eight moral disengagement strategies; (1) ***moral justification*** (e.g., '*It is alright to fight to protect your friends*'); (2) ***euphemistic labeling*** (e.g., '*slapping and shoving someone is just a way of joking*'); (3) ***advantageous comparison*** (e.g., '*Stealing some money is not too serious compared to those who steal a lot of money*'); (4) ***displacement of responsibility***

(e.g., '*kids cannot be blamed for misbehaving if their friends pressured them to do it*'); (5) ***diffusion of responsibility*** (e.g., '*A kid in a gang should not be blamed for the trouble the gang causes*'); (6) ***distortion of consequences*** (e.g., '*It is okay to tell small lies because they don't really do any harm*'); (7) ***Attribution of blame*** (e.g., '*If kids fight and misbehave in school it is their teacher's fault*'); and (8) ***Dehumanization*** (e.g., '*Some people deserve to be treated like animals*'). One item ('*Children do not mind being teased because it shows interest in them'*) was removed because one school considered it to be inappropriate. Participants responded to items on a 5-point Likert scale (1 = 'strongly disagree', 5 = 'strongly agree'); higher scores indicated higher moral disengagements. For the current study, the scale had high internal consistency (a = .94).

Emotional distress and guilt. The Strengths and Difficulties Questionnaire (SDQ; Goodman, 2001) is a 25-item screening tool widely used with adolescents to identify behavioral, emotional, and social difficulties. The 5-item emotional distress-related component of the SDQ, (SDQ-ES), was used to identify emotional distress (e.g., '*I worry a lot*'; '*I have many fears, I am easily scared*'; '*I am often unhappy, downhearted, or tearful*') rated on a 3-point scale (0 = 'not true', 2 = 'certainly true'). The higher the total summed score for the SDQ-ES (range = 0 to 10), the more emotional distress is being experienced by the young person. Cronbach's Alpha for this study revealed high internal consistency for the SDQ-ES (a = .90).

Items from the Test of Self-Conscious Affect for Adolescents (TOSCA-A; Tangney et al., 1991) were used to identify an inclination to feel guilt (guilt-proneness) in a range of situations. Participants were presented with fifteen scenarios (e.g., '*You break something at a friend's house and then hide it*') and asked to how they would be likely to respond, from a choice of five responses which indicated, externalization, guilt-proneness, shame-proneness, and/or pride, (e.g., *'I would think "This is making me anxious, I need to either fix it or*

replace it"'). Guilt-proneness was assessed according to the number of responses indicating feelings of guilt and low scores were used to assess an inclination to callous-unemotional responses. Cronbach's Alpha revealed that for the current study this measure had adequate reliability (a = .70).

Exposure to violence via fear of victimization and violent victimization. Participants were asked to indicate whether they feared victimization (e.g., '*I often worry I will become a victim of violence'*) on a 5-point Likert scale (1 = 'strongly disagree', 5 = 'strongly agree'). Participants' exposure to violence was also assessed in the form of violent victimization via the Eurogang Youth Survey (EYS-VV; Weerman et al., 2009) items (1) '*Have you been hit by someone trying to hurt you in the past year?*' (2) '*Had someone use a threat, a weapon, or force to get money or things from you?*', and (3) *Been attached by someone with a weapon or by someone trying to seriously hurt you?*' (Cronbach's Alpha, a = .86). The three items were summed with higher scores indicating higher levels of exposure to violence.

Ethics and Procedure

Ethical approval for the study was sought from a university Ethics Committee, in line with the British Psychological Society code of conduct (2009). Once approved, three schools known to the researcher were approached via convenience sampling. Each school agreed to research access. Meetings between the researcher and leadership teams took place at each site to outline the study's aims and objectives, inclusion/exclusion criteria, and address any questions or concerns schools might have. Consent was sought from head teachers to act 'in loco parentis' for participants. In addition, and to ensure transparency, opt-out consent was sought from parents/carers via each school. Opt-out consent was considered appropriate to ensure inclusion of youth for whom gaining parental consent may be problematic (i.e. those from troubled backgrounds). The research was also conducted in line with 'Gillick

competence', which follows a legal ruling enabling young people (e.g., aged 13 years and older as per the age of the current sample) to provide consent if they are mature and competent to understand the information presented to them (see Pearce et al., 2016). Furthermore, in addition to Gillick competence, the Head Teacher was acting in 'in loco parentis' and so it was deemed that informing parents of the research via 'opt-out' rather than 'opt-in' consent was sufficient. Other research in the UK with youth gangs has also adopted opt-out consent as advised by school staff (see Densley et al., 2017). Letters explained that a study was taking place on group memberships and mental and emotional wellbeing. Reference to gangs was not made to avoid biased associations and responses (see Alleyne & Wood, 2013). Thus, parents and/or carers were only required to return the forms if they did not wish for the young person to participate. As a further check, potential participants (over age 13) were deemed able to participate, if they understood what the study involved and what it meant to consent to participation. This is in line with the principles of 'Gillick competence' (see Pearce et al., 2016).

Given the sensitive nature of some items, staff teams at each school were informed of inclusion/exclusion criteria prior to inviting participants to participate. Anyone deemed at risk of harm to self or others were excluded. Participants who met inclusion criteria were invited to attend a one-to-one interview with the researcher where they were told the aims of the study and could ask questions. Participants were also informed that some questions were sensitive and should they indicate any risk of harm to self or others, a member of the school team would be informed. Any participant indicating 1 or more on the BDI question; 1 = '*I have thoughts of killing myself, but I would not carry them out*', 3 = '*I would kill myself if I had the chance*', would also be referred to relevant school teams for support. Once happy to continue, each participant was asked to complete a consent form. All were told that their participation was voluntary, confidential, and that they could withdraw at any point and their

data would be removed from the sample. A unique participant identification code was created and stored separately from identifying information. As some participants had low literacy, the researcher read each question aloud and participants indicated their chosen responses. On completion of interview, participants were thanked, verbally debriefed, and given a debrief form which included the researchers' contact details. Participants were also provided with information on three helplines, two related to mental health and one specifically for gang-involved youth, that participants could contact confidentially. Participants were also referred to a named support staff member as an on-site response to managing distress.

Following data collection, data was securely stored at the university and once entered into data processing software, could only be accessed via a password on a secure server, in line with data protection regulations.

Results

Data analyses were carried out using SPSS Statistics, Version 25, at a significance level of $p < .01$.

Demographic Variables

Chi square analyses and an independent t-test were conducted to compare non-gang and gang-involved youth on demographic variables of age, ethnicity, gender, and school type. An independent t-test revealed no difference in age between gang-involved ($M = 15.34$, $SD = 1.26$) and non-gang youth ($M = 14.63$, $SD = 1.58$); $t(75) = -1.80$, $p = .76$ ($d = .50$). A chi square analysis found no differences between groups according to gender; x^2 (1, $N = 88$) = 3.34, $p = .068$, ($v = .20$). However, a difference in ethnicity between gang and non-gang youth was found. A chi square analysis revealed that more BAME youth were involved with gangs than were White British youth, x^2 (1, $N = 88$) = 6.08, $p = .014$. A medium effect size was found ($v = .26$). Furthermore, a chi square analysis revealed a significant association between gang involvement and school type with the majority of gang-involved youth being

excluded from mainstream education, and attending a PRU; x^2 (2, N = 88) = 26.17, p = <.001, (v = .55).

Mental and Emotional Health

A series of two-way mixed-design Analysis of Variance's (ANOVA's) were used to compare non-gang and gang youth over time (time one at baseline versus time two at three months) on all self-reported measures of mental and emotional health, behavioral problems, and use of socio-cognitive strategies. The significance level of $p < .01$ was used across analyses.

Anxiety

To test the hypothesis that gang-involved participants were expected to show higher levels of anxiety than non-gang participants, a mixed-design ANOVA was utilized. Summed scores on the BAI (range = 0 to 63) were calculated for participants in each group at time one and time two to compare non-gang and gang-involved youth on self-reported levels of anxiety over time. There was no statistically significant interaction between gang involvement and time on self-reported anxiety, $F(1, 48) = .10$, $p = .75$, partial $\eta 2 = .002$. There was also no significant main effect of time, $F(1, 48) = .17$, $p = .68$ partial $\eta^2 = .004$, and of gang involvement, $F(1, 84) = 1.35$, $p = .251$, partial $\eta^2 = .027$, on anxiety; gang-involved participants (M = 18.40, SD = 7.59) reported higher levels of anxiety at time one compared to non-gang participants (M = 13.20, SD = 12.98). Although anxiety levels for both groups had decreased by time two, gang-involved youth still reported greater levels of anxiety than non-gang counterparts (M = 16.80, SD = 11.72; M = 13.00, SD = 12.91 respectively).

Depression

To test the hypothesis that gang-involved youth were expected to show higher levels of depression compared to non-gang youth over three months, a mixed-design ANOVA was conducted. The results revealed a significant main effect of gang involvement, $F(1, 51) = 8.99$, $p = .004$, partial $\eta 2 = .15$, with gang-involved youth reporting higher levels of depression at time one and time two ($M = 18.50$ and $M = 17.33$ respectively) than non-gang youth (time one, $M = 10.71$ and time 2, $M = 9.93$). However, there was no statistically significant difference in self-reported depression at time one and time two, $F(1, 51) = .381$, $p = .54$, partial $\eta 2 = .01$. There was also no significant interaction between time and gang-involvement on levels of depression, $F(1, 51) = .015$, $p = .903$, partial $\eta 2 = .00$.

Posttraumatic stress symptoms and perpetration trauma

Compared to non-gang youth, gang-involved youth were expected to self-report higher levels of posttraumatic stress symptoms (PTSS) and perpetration trauma (PT). The mixed ANOVA revealed a main effect of time and showed a statistically significant difference in PTSS at time one and time two $F(1, 50) = 10.25$, $p = <.001$, partial $\eta 2 = .170$. The main effect of group showed that there was a statistically significant difference in mean PTSS between non-gang and gang-involved youth $F(1, 50) = 7.34$, $p = .009$, partial $\eta 2 = .13$, with gang-involved youth reporting higher levels of PTSS at time one and time two ($M = 20.42$, $SD = 22.55$; $M = 6.75$, $SD = 15.78$ respectively) compared to non-gang youth (time one, $M = 6.10$, $SD = 14.61$ versus time two $M = 2.18$, $SD = 6.28$). Post hoc Bonferroni comparisons revealed there was a decrease in the mean self-reported PTSS to three months across both groups (time one = 13.26 versus time two = 4.46), a statistically mean difference of -8.80, 99% CI (1.44 to 16.15), $p <.001$. Pairwise comparisons also showed gang-involved youth appeared to self-report greater PTSS (13.58) in comparison to non-gang youth (4.14), $p = .001$. Thus, gang-involved youth reported experiences of PTSS more than non-gang youth,

and whilst at three months there was a significant difference of time on levels of PTSS, it was an overall decrease in symptomology that was reported by both groups at time two. However, there was no statistically significant interaction between gang involvement and time on self-reported PTSS, $F(1, 50) = .3.14$, $p = .08$, partial $\eta 2 = .06$.

It was also expected that gang-involved youth would report trauma arising from perpetrating violent acts (i.e., perpetration trauma (PT)). As expected, there was a significant main effect of group, $F(1, 49) = 19.81$, $p < .001$, partial $\eta 2 = .28$, with gang-involved youth having a higher level of PT than non-gang youth (2.38 versus 1.60 respectively). There was no main effect of time on PT, $F(1, 49) = .25$, $p = .62$, partial $\eta 2 = .01$; and no statistically significant interaction between gang involvement and time on self-reported PT, $F(1, 49) = 1.40$, $p = .24$, partial $\eta 2 = .03$.

Emotional distress

Contrary to the expectation that gang-involved youth would experience lower levels of emotional distress over time than non-gang youth, no statistically significant interaction was found between group involvement and time on levels of emotional distress, $F(1, 50) = 1.04$, $p = .31$, partial $\eta 2 = .02$. The mixed-ANOVA also revealed no statistically significant main effects of group involvement, $F(1, 50) = .56$, $p = .46$, partial $\eta 2 = .01$, and of time, $F(1, 50) = .32$, $p = .57$, partial $\eta 2 = .01$.

Guilt proneness

Similarly, to emotional distress, it was hypothesized that compared to non-gang youth, gang-involved youth would be less likely to experience guilt, and that over time levels of guilt proneness would reduce further for gang-involved youth compared to non-gang. The results showed there was no significant main effects of group, $F(1, 49) = .84$, $p = .36$, partial $\eta 2 = .02$ or time, $F(1, 49) = 5.42$, $p = .02$, partial $\eta 2 = .10$ on levels of guilt proneness. That is there was no statistical difference between gang-involved and non-gang youth on inclinations

of experiencing guilt and no statistical difference at time point one and time point two on guilt proneness. There was no statistically significant interaction between group involvement and time on guilt proneness, $F(1, 49) = 3.98$, $p = .52$, partial $\eta 2 = .08$.

Exposure to violence

Fear of victimization

It was expected that gang-involved youth would experience greater fear of being victimized over time than non-gang youth. However, no statistically significant interaction was found between group involvement and time on levels of fear of victimization, $F(1, 50) = .75$, $p = .39$, partial $\eta 2 = .02$. The mixed-ANOVA also revealed no statistically significant main effects of group involvement, $F(1, 50) = 4.27$, $p = .04$, partial $\eta 2 = .08$, and time, $F(1, 50) = 1.56$, $p = .22$, partial $\eta 2 = .03$, on levels of fear of victimization.

Violent victimization

It was hypothesized that gang-involved youth would report greater experiences of violent victimization. Participants were asked whether they had experienced an assault, had a weapon used against them for attempted robbery or robbery, and whether participants experienced a serious assault. As expected, there was a significant main effect of group, $F(1, 49) = 20.13$, $p < .001$, partial $\eta 2 = .29$, with gang-involved youth reporting greater experiences of violent victimization than non-gang youth (5.77 versus 3.58 respectively). There was no main effect of time on PT, $F(1, 49) = .03$, $p = .85$, partial $\eta 2 = .001$; and no statistically significant interaction between gang involvement and time on self-reported PT, $F(1, 49) = .40$, $p = .53$, partial $\eta 2 = .01$.

Conduct problems

Gang-involved youth were expected to have greater conduct problems than non-gang youth. The mixed-ANOVA revealed a significant main effect of group $F(1, 77) = 29.90$, $p < .001$, partial $\eta 2 = .28$ with gang-involved youth overall self-reporting greater conduct

problems (93.48) than non-gang youth (76.06), p = <.001. There was also a main effect of time on conduct problems $F(1, 77) = 50.02$, p <.001, partial η2 = .39. A significant interaction was also found, $F(1, 77) = 10.59$, p <.01, partial η2 = .12. Post hoc Bonferroni comparisons revealed conduct problems were statistically significantly greater among gang-involved youth at time 1 and time 2 (time one, M = 99.03, SE = 2.66, p = <.001; time two, M = 88.17, SE = 2.60, p = <.001) compared to non-gang youth (time one, M = 79.32, SE = 2.03, p = .<.001; time two, M = 74.81, SE = 1.96, p = .<.001). Post hoc analyses also revealed that there was a decrease in the mean self-reported conduct problems to three months among both groups (time one = 88.29 versus time two = 81.25), a statistically mean difference of -7.04, p <.001. Gang-involved youth appeared to self-report less conduct problems between time one and time two from 98.62 to 88.34. For non-gang youth conduct problems also decreased from 77.96 at time one to 74.16. Thus, although gang-involved youth reported more conduct problems than non-gang youth, and whilst at three months there was a significant difference of time on conduct problems, it was an overall decrease in symptomology that was reported by both groups.

Socio-cognitive process

Moral disengagement

Gang-involved youth were expected to significantly report engaging in moral disengagement strategies in comparison to non-gang youth and use of moral disengagement would remain significant over time for the gang cohort. The results showed a significant main effect of group, $F(1, 49) = 15.18$, p <.001, partial η2 = .24, with gang-involved youth significantly self-reporting use of moral disengagement strategies than non-gang youth (93.04 versus 71.13 respectively). An independent sample t test revealed gang-involved youth were found to significantly engage in most moral disengagement strategies (p < .01; see Table 6). There was no main effect of time, $F(1, 49) = 1.76$, p = .19, partial η2 = .04; and no statistically

significant interaction between gang involvement and time on levels of moral disengagement, $F(1, 49) = .12$, $p = .73$, partial $\eta 2 = .002$.

Table 6

Comparison between gang and non-gang affiliated youth on all strategies of moral disengagement.

Variable	**Gang-involved**	**Non-gang**	***p***
	M (*SD*)	*M (SD)*	
Moral Justification	14.41 (3.38)	11.25 (3.68)	<.001
Euphemistic language	11.47 (2.92)	8.73 (3.15)	<.001
Advantageous comparison	10.56 (3.43)	8.29 (2.81)	.002
Displacement of responsibility	13.31 (3.02)	11.14 (2.86)	.002
Diffusion of responsibility	13.03 (2.95)	10.29 (2.65)	<.001
Distorting consequences	8.35 (1.72)	6.96 (2.40)	.003
Attribution of blame	11.45 (2.45)	10.27 (2.66)	.040
Dehumanization	10.29 (2.85)	7.82 (2.54)	<.001

Table 7

Comparisons between gang-involved and non-gang youth on all variables at time one.

Variable	***Gang-involved***	***99% CI***		***Non-gang***	***99% CI***	
	M (*SD*)	*LL*	*UL*	*M* (*SD*)	*LL*	*UL*
Anxiety	18.40 (7.59)	8.10	28.71	13.20 (12.98)	8.05	18.35
Conduct Problems	98.62 (11.95)	91.60	105.64	77.96 (15.50)	72.61	83.31
Depression	18.50 (10.82)	12.15	24.85	10.71 (7.36)	7.27	14.15
Emotional Distress	5.92 (1.78)	3.01	8.82	6.02 (4.15)	4.43	7.62
Fear of Victimization	2.58 (1.08)	1.71	3.46	2.10 (1.15)	1.62	2.58
Guilt Proneness	29.36 (24.59)	20.14	38.58	23.58 (2.94)	18.74	28.41
Moral Disengagement	94.83 (12.15)	82.19	107.48	72.18 (17.37)	65.17	79.19
Perpetration Trauma	2.25 (.754)	1.70	2.81	1.64 (.707)	1.33	1.95
Posttraumatic Stress Symptoms	20.42 (22.55)	7.52	33.32	6.10 (14.61)	-.965	13.17
Rumination	63.92 (10.83)	53.20	74.63	49.17 (14.60)	43.37	54.96

Variable	*Gang-involved*	*99% CI*		*Non-gang*	*99% CI*	
	M (*SD*)	*LL*	*UL*	*M* (*SD*)	*LL*	*UL*
Exposure to Violence	5.91 (3.53)	4.38	7.44	3.50 (1.13)	2.70	4.30

Rumination

To test the hypothesis that gang-involved youth were expected to engage in ruminative processes, a mixed-ANOVA was used to compare gang-involved youth to non-gang youth on self-reported rumination over time. There was a significant main effect of group $F(1, 51) = 7.61$, $p < .01$, partial $\eta 2 = .13$, with gang-involved youth significantly self-reporting engaging in ruminative thought than non-gang youth (61.33 versus 50.23 respectively). No significant main effect of time was revealed, $F(1, 51) = .64$, $p = .43$, partial $\eta 2 = .01$. No statistically significant interaction between gang involvement and time on ruminative thought was revealed, $F(1, 51) = 3.66$, $p = .06$, partial $\eta 2 = .07$.

Table 8

Comparisons between gang-involved and non-gang youth on all variables at time two.

Variable	*Gang-involved*	*99% CI*		*Non-gang*	*99% CI*	
	M (*SD*)	*LL*	*UL*	*M* (*SD*)	*LL*	*UL*
Anxiety	16.80 (11.72	5.82	27.78	13.00 (13.22)	7.51	18.49
Conduct Problems	88.34 (13.73)	81.34	95.35	74.16 (14.60)	68.82	79.50

Variable	*Gang-involved*	*95% CI*		*Non-gang*	*95% CI*	
	M (*SD*)	*LL*	*UL*	*M* (*SD*)	*LL*	*UL*
Depression	17.33 (10.62)	9.70	24.97	9.93 (9.68)	5.79	14.06
Emotional Distress	5.58 (2.02)	2.06	9.10	7.20 (1.78)	5.27	9.13
Fear of Victimization	3.00 (1.04)	2.13	3.87	2.18 (1.15)	1.70	2.65
Guilt Proneness	20.91 (3.18)	18.50	23.32	22.92 (2.93)	21.66	24.19
Moral Disengagement	91.25 (20.24)	75.82	106.68	70.08 (19.85)	61.52	78.63
Perpetration Trauma	2.50 (.798)	1.97	3.03	1.54 (.643)	1.25	1.83
Posttraumatic Stress Symptoms	6.75 (15.78)	-.397	13.90	2.18 (6.28)	-1.74	6.09
Rumination	58.75 (10.86)	48.51	68.99	51.29 (13.84)	45.75	56.83
Violence Exposure	5.64 (2.11)	4.36	6.91	3.65 (1.41)	2.98	4.32

Discussion

The aim of the present study was to compare gang-involved and non-gang youth over a period of three months on their levels of anxiety and depression, conduct problems,

emotional distress, fear of victimization, guilt proneness, moral disengagement, rumination, and exposure to violent victimization. Trauma symptoms, including PT and PTSS, were also examined. This was mostly supporting by the findings, which successfully demonstrated that compared to non-gang youth, gang-involved adolescents experience higher levels of mental health difficulties, specifically depression, posttraumatic stress symptoms (PTSS), and perpetration trauma (PT), but not anxiety; present more conduct problems, are more likely to engage moral disengagement strategies and ruminative thinking, and experience higher levels of violent victimization, but not fear of victimization. It was also hypothesized that, compared to non-gang youth, gang-involved youth would show lower levels of emotional distress and guilt-proneness, and this was not supported by the findings.

It was also hypothesized that levels of mental health difficulties, conduct problems, moral disengagement, and ruminative thinking would significantly increase after three months of prolonged gang involvement compared to non-gang youth, and that levels of emotional distress and guilt proneness would decrease over time between groups. However, the findings revealed no significant differences between groups over time for all variables with the exception of PTSS and conduct problems. Although levels of both decreased by time two, gang-involved youth reported higher levels of conduct problems and PTSS than non-gang youth. There was no significant difference between groups in anxiety, depression, emotional distress, fear of victimization, guilt proneness, PT, and rumination. Nonetheless, the findings presented here reiterate the important role that psychological research can take in examinations of gang involvement (Wood & Alleyne, 2010).

Consistent with previous studies examining the mental health of gang members (Watkins & Melde, 2016; Wood & Dennard, 2017), the findings show how higher levels of depression, and trauma symptoms differentiate gang-involved youth from non-gang members. The finding relating to depression contributes to a mixed evidence base of

internalizing symptoms. Whilst Coid et al. (2013) found that gang members suffered less depression than nonviolent men in their adult sample, Watkins and Melde (2016) found that adolescents had higher levels of depression than non-gang youth at the onset of gang membership, and this worsened following membership. Although the findings here support Watkins and Melde's (2016) work, that there was no significant change in depression after three months, suggests that for adolescent youth gang involvement may buffer a range of depressing experiences, such as disillusionment, low self-esteem, and a perceived lack of opportunities (see Wood & Alleyne, 2010 for review). However, gang involvement may not actually meet the expectations of youth (Venkatesh, 1999) and it may be that a longer time period (i.e. greater than 3 months) is needed to assess how prolonged gang involvement may influence levels of depression over time. Nonetheless, there remained significant differences in depression between gang-involved and non-gang youth at the group level. Thus, youths in gangs seem to be more vulnerable to mental health problems. Hence, an informed, responsive approach that focuses on mental health is required to support young people at-risk or involved with gangs.

The finding that gang-involved youth experienced more violent victimization compared to non-gang youth was also anticipated. Earlier studies show how youth living in disadvantaged communities, which in and of themselves are risk factors for gang involvement (see O'Brien et al., 2013), report experiencing direct (through stabbings or targeted shootings) or indirect (witnessing) violence in their communities (Taylor et al., 2007). However, although research examining the relationship between community violence and mental health has gained increasing attention, it has suffered from a lack of attention in terms of gang involvement. Gang members form a distinct offender group whose engagement in violence goes above and beyond other delinquent groups (see Gatti et al., 2005). Thus, it is unsurprising that gang-involved youth reported more violent victimization. Contrary to

previous findings (Coid et al., 2013), it was surprising that gang-involved youth did not report greater fear of victimization. It may be that the perceived protective nature of gang membership may have alleviated gang-involved youths' levels of fear, (Vigil, 1988), but that their involvement with gangs increased their risk of victimization. Hence, understanding the unique effects of gang membership on mental and emotional health requires a lot more attention if we are to counteract gang-related violence and *prevent* youth from joining gangs.

The significant finding of PT and PTSS between non-gang and gang-involved youth was also expected, especially as gang-involved youth reported higher levels of violent victimization and fear of victimization. Research shows that trauma may occur following victimization (Darves-Bornoz et al., 2008), and Ballard et al. (2015) suggests how different experiences of traumatic experiences in childhood, including violent victimization, relate to varying levels of mental health outcomes. The findings also support previous research by Harris et al. (2013) who reported how gang youth were more likely to be diagnosed with PTSD. Interestingly, at time two, there was no significant change in levels of PT for both groups. However, there was a significant effect of time on PTSS, and gang-involved youth still reported higher levels of PTSS than non-gang youth, though levels had decreased for both groups over time. This may be explained by data attrition at time two, and the small sample size of gang-involved youth taking part at time two. The finding of PT that gang-involved youth experience more trauma by perpetrating violent acts adds to existing literature examining gang members and their levels of trauma (Beresford & Wood, 2016) and supports emerging research that harming others, in addition to being victimized, may result in trauma symptoms (see Kerig et al., 2016).. The results also showed that having conduct problems was significantly associated with adolescent gang involvement and this supports recent findings that note how behavioral problems, including oppositional defiant disorder (ODD), CD, and ASPD mediate the gangs-criminality nexus (Delisi et al., 2019). Egan and Beadman

(2011) suggest that ASPD links to gang membership by consolidating existing antisocial attitudes and beliefs, which in turn foster a stronger attachment to the gang. Thus, the role of CD among gang-involved adolescents warrants further investigation.

These findings, together with previous work, highlight how antisocial and mental health factors need consideration in the response to gangs. Collectively, the findings also demonstrate the urgency of addressing gang membership via early intervention and prevention because this is when youth may be particularly responsive to treatment. Informed intervention and prevention strategies are vital given that interventions have positive effects on younger, compared to older age groups (Granpeesheh, Dixon, Tarbox, Kaplan, & Wilke, 2009), and that gang membership has been identified in children as young as 10 years of age and peaks at a crucial period of development (14 years; Children's Commissioner, 2018; Pyrooz & Sweeten, 2015).

Results also showed that moral disengagement and rumination significantly links to gang involvement. This suggests that gang-involved youth ruminate on anger-provoking events, and probably adopt moral disengagement strategies to justify their rumination-elicited violence. These findings further support previous work such as that of Vasquez et al. (2012), who also found that gang-involved youth were more likely to engage in rumination, and Niebieszczanski and colleagues (2015) who noted how street gang members, compared to non-gang youth, used moral disengagement strategies (e.g., attributing blame to others and employing reconstructive language, such as "it's just business"). It may well be that gang-involved youth adopt moral disengagement strategies to minimize feelings of emotional distress and guilt that might otherwise arise from engaging in antisocial behavior, as speculated above. On the other hand, individuals who are more likely to set aside their morality may also be most inclined to gang involvement. Only longitudinal work could decipher this.

Our finding that anxiety, emotional distress, and guilt proneness did not significantly differ between groups, but depression did, partially supports the work of Kennedy and Ceballo (2016). These authors provided evidence that urban youths' exposure to violence was associated with emotional desensitization and symptoms of anxiety and depression. Surprisingly, however, there was no significant difference between gang-involved youth and non-gang youth over time on anxiety, feelings of guilt, and emotional distress. It may be that gang-involved youths' use of moral disengagement strategies may reduce feelings of distress or guilt, and that the perceived perception of gangs as a social network may minimize anxious feelings. As feelings of guilt are associated with attempts to rectify wrongdoing, if they are absent, then prolonged engagement and escalation of gang-related delinquency and violence may result. Equally, in line with previous findings, indicating how chronic exposure to ACEs is associated with progressively worse outcomes (Chapman et al., 2004); it is possible that a lack of guilt, which is nurtured via adverse behavior over time, will effect successful engagement with interventions. If this is so, it may also deepen pre-existing conduct problems, aggravate mental health difficulties, nurture the development of ASPD, and promote further embeddedness in the gang (Egan & Beadman, 2011). Thus, future research could further explore the relationship between gang membership and guilt with a larger sample size and longer period of time. Early screening measures would also support practitioners to respond to the emotional needs of gang-involved youth and stunt the development of more serious internalizing and externalizing problems, such as depression, and trauma.

Implications of the Current Study

The findings reported here have important implications for a number of areas. Responses to gangs have largely focused on strategies and policies that aim to deter and suppress gangs with policy-based interventions, such as gang injunctions to separate known

or perceived gang members (Wood et al., 2016). This reactive approach to tackling gang violence, in comparison to the much-needed multi-agency and proactive approach that attests to targeting needs as well as the rehabilitation of criminal behavior, has several implications. First, it fails to address the underlying risk factors of gang membership, including low self-esteem (Dmitrieva et al., 2014) and mental health difficulties, such as depression and trauma (Watkins & Melde, 2016); and which the current findings support. Second, there has been a failure to respond to the mental and emotional health consequences of violence exposure in vulnerable adolescent gang members (Kelly et al., 2012), and the current findings support this. We know that interventions have positive effects on younger, compared to older age groups (Granpeesheh et al., 2009). We also know that children are becoming involved with gangs from a younger age (Children's Commissioner, 2018). Therefore, this body of work suggests that there is an urgent need to address gang membership via early intervention and prevention and at an age where youth are more responsive to treatment. However, early interventions need to be evidence-based and include behavioral, mental health, and psychological factors that this research, and others, have identified as related to gang involvement. Without such an informed approach, there is a risk that efforts to prevent and intervene with gang-involved youth will not be effective.

Chapter Five

Discussion: Implications, Limitations, and Future Research

"We argue that there is a role for psychology in this important body of work, and that its involvement will provide us with a deeper and more meaningful understanding of gangs and the youth who join them." (Wood & Alleyne, 2010, p. 100)

The overarching aim of this thesis was to conduct an examination into the role of psychological processes, specifically emotional needs, mental health outcomes, engagement in socio-cognitive processes, and problem behaviors in relation to youth gang involvement. The preceding chapters support the contentions of Wood and Alleyne (2010) by demonstrating how psychologists can make a valuable contribution to understanding and responding to the effects of youth gang membership. The systematic literature review produced in Chapter Two (Osman & Wood, 2018) revealed methodological shortcomings in current empirical research examining the emotions and mental health of gang members, but nonetheless showed how gang members are more likely to suffer from mental health difficulties, including anxiety, depression, trauma, behavioral disorders, and emotional maladjustment compared to their non-gang counterparts. Gang members are also most likely to engage in moral disengagement and rumination.

Furthermore, the narrative synthesis revealed that gang members' experiences with poor mental and emotional health (i.e. anxiety, fear, and perpetration-trauma) are associated with members' problematic exposure to violence by way of violent victimization and/or the perpetration of violent acts. However, the review also identified gaps in understanding the causal mechanisms that operate in the gang-mental health nexus. That is, the extent to which pre-existing mental health and emotional difficulties may have motivated joining a gang and whether gang membership may further aggravate these problems, remained unclear due to the limited number of studies engaging in longitudinal, multi-site research. Moreover, a lack of

detailed qualitative studies that may also provide meaningful insight into the pathways to gang involvement and guide future empirical investigations were notably missing from the literature. Consequently, what followed in Chapter Three was the case of HY, a 28-year-old, Black British male previously part of a well-known gang in the United Kingdom (study one).

The unified theory of gang involvement (Wood & Alleyne, 2010) was used to explore the case of HY and this enabled a holistic approach to considering the multiple and simultaneous and/or independent causal pathways, which may have led to HY's gang membership and criminality. Despite HY's case being a unique case, qualitative work can provide generalizable findings (Yin, 2014) and the analysis revealed the complexity of gang involvement. The case provided further support for the cumulative nature of numerous risk factors occurring simultaneously as precursors to gang membership. Importantly, however, HY's case also highlighted the significance of considering the mental and emotional health needs of gang members in the response to addressing gangs. The problematic effects of untreated emotional and mental health difficulties were evident from HY's case, especially concerning HY's exit from the gang. Although individual, social, and environmental factors interrelated, HYs case demonstrated how poor emotional and mental ill health, including depression, anxiety, guilt, and trauma require attention throughout the pathways identified in unified theory; and especially in the desistence process so as to facilitate members in their transition to lead healthy and successful law-abiding lives.

HY's case provided the rationale for the quantitative, longitudinal study that followed in Chapter Four (study 2). This chapter presented an examination of mental and emotional health variables associated with youth gang involvement, including anxiety, depression, trauma, guilt proneness, emotional distress, and fear of victimization. It also examined conduct problems and socio-cognitive variables, including rumination and moral disengagement. The findings showed how compared to non-gang youth, gang involvement

was associated with higher levels of mental ill health across all self-report measures, more conduct problems, ruminative thinking, and moral disengagement from negative behavior. However, and contrary to expectations that gang-involved youth would demonstrate lower levels of guilt and emotional distress, gang-involved youth did not differ from non-gang participants in terms of guilt proneness and emotional distress. In addition, the findings did not support the hypotheses that gang-involved youth, in comparison to non-gang youth, would self-report increased anxiety, depression, exposure to violence, perpetration-trauma (PT), rumination and moral disengagement, and lower levels of emotional distress and guilt over a period of three months. Gang-involved youth did however continue to report higher levels of conduct problems and PTSS compared to non-gang youth, though symptoms overall decreased for both groups to between time one and time two at three months.

This chapter aims to discuss these findings regarding the mental health of UK-based youth gang members and their behavioral, emotional and mental health, and socio-cognitive needs. The chapter will also highlight and discuss the clinical and policy implications of the research, before stating the limitations and directions for future research.

Youth Gang Members and Behavioral, Emotional, and Mental Health Needs

The results of the studies presented in this thesis support emerging research highlighting the significance of investigating the emotional and mental health of gang members (Coid et al., 2013; Mallion & Wood, 2018; Watkins & Melde, 2016; Wood & Dennard, 2017). HY's case (study one) was particularly significant as HY had received wide-ranging interventions to aid his exit from the gang, including mentorship and mental health support. Through such support, HY had also developed the language skills needed to articulate his experiences leading to, during, and following his gang membership and provided detailed insight into the causal pathways relating to his gang involvement, including psychological processes. In contrast, adolescent participants in study two still identified with

a gang; and in the interviews with the researcher some gang-involved youth seemed more excited by violence, their involvement in the gang, and subsequent activities (e.g., sharing detailed accounts of perpetrating violence via assault and robbery and selling drugs), whilst other gang-involved youth presented as more subdued, though still outlining anecdotal instances of exposure to violence by perpetrating violent acts and being violently victimized.

In line with unified theory and selection models of gang membership (Thornberry et al., 1993; Wood & Alleyne, 2010), gangs may attract youth with pre-existing antisocial and pro-violent attitudes and beliefs, which could account for the positive accounts of violence expressed to the researcher. However, in line with research noting the ephemeral benefits of gang membership (Moule, Decker, & Pyrooz, 2013; Venkatesh, 1999), gangs may also ostracize and violently victimize members who demonstrate a reluctance to engage in violence. In study one, HY described that reluctance to 'fight' to support fellow gang members would result in members being 'outcast' and viewed as the 'enemy' (see transcript, Appendix, p.183). Being forced/coerced into committing acts of violence may explain the finding of depression among the gang-involved sample in study two, which may then be exacerbated by their high levels of exposure to violence.

HY's experiences with poor mental health also support previous research examining the mental health of youths who experience violence in the home and in neighborhoods riddled with gang activity (see Koffman et al., 2009). Research notes how adverse events in adolescence, including exposure to violence, such as childhood abuse and in neighborhoods with high levels of gang activity is associated with internalizing and externalizing symptoms, including depression, anxiety, and conduct problems (see Ford, Chapman, Hawke, & Albert, 2007; Koffman et al., 2009), consistent with the findings reported in studies one and two. The findings from both studies also lend further support to the existing body of work on gangs and their mental health and emotions that gang members experience higher levels of

depression and trauma compared to non-gang members (Coid et al., 2013; Mallion & Wood, 2018; Watkins & Melde, 2016; Wood & Dennard, 2017).

The results also add to the evidence base, which demonstrates how perpetrating violent acts and violent victimization, which are common experiences for gang members, are also associated with the onset of mental illness, including depression and post-traumatic stress symptoms and disorder among gang-members (PTSS; Coid et al., 2013; Harris et al., 2013; Kerig et al., 2016). Similarly to Kerig et al.'s (2016) finding that gang involvement is significantly associated with posttraumatic symptoms, such as dissociation, emotional numbing, and PT, study two showed how gang-involved youth suffer trauma, including PT.

It is unsurprising that gang members experience increase exposure to violence via violent victimization (see Wood et al., 2017) and positive views on violent behavior as frequently noted in the literature (Coid et al., 2013; Decker, 2007). Indeed, this excitement by violence, in addition to their gang membership may foster pre-existing antisocial beliefs as per the unified theory outlined in Chapter Three (Wood & Alleyne, 2010). For instance, in study two positive attitudes regarding violence were freely expressed by gang-involved youth to the researcher in response to some of the self-report questions, specifically the MACI which examined conduct problems. A positive attitude towards violence was also expressed by HY who resorted to violence regularly prior to and during gang membership. Positive perceptions of violence may also determine the extent that members are exposed to violence through perpetration of violent acts and the subsequent experiences of violent victimization that may occur (Delisi, Barnes, Beaver, & Gibson, 2009; Katz et al., 2011; Kerig et al., 2016; Wood et al., 2017). Collectively, these findings suggest that antisocial beliefs and behavior, in addition to mental health difficulties, need to be addressed in future interventions with gangs.

Interestingly, our results provided mixed findings regarding emotional desensitization. On the one hand, gang-involved youth reported higher levels of violent victimization, but did not differ from non-gang youth on emotional distress, fear of victimization, and guilt, despite non-gang youth reporting lower levels of involvement in violence. Although this may partially support desensitization models in relation to violence exposure (see Kennedy & Ceballo, 2016), it may also be that youth resonated more so with the items of the BDI-II, such as on feelings of dissatisfaction and limited future opportunities, and somatic symptoms; and so this measure may have captured their emotional needs more accurately than the SDQ-ES. The SDQ-ES measured emotional distress by asking participants to answer five questions including feelings of worry and nervousness, but these this may not have fully reflected gang-involved youths' experiences. This may explain the high levels of depression and trauma symptoms that were reported by gang-involved youth on the other measures. Equally, however, the finding of depression among gang-involved youth in study two suggests that although youth may be tempted to join a gang for protection, psychological respite, and shared antisocial attitudes (Alleyne & Wood, 2012; Wood & Alleyne, 2010), when they discover that the gang fails to fulfill their needs, they may continue to experience feelings of dissatisfaction, low mood and isolation, which are synonymous with depression (Moule et al., 2013; Watkins & Medle, 2016; Wood & Alleyne, 2010).

In the case of HY, he had expressed developing close relationships to only a few members of the gang and following his experience of abuse, homelessness, and not having his basic needs met (e.g., food and shelter), the gang felt like 'family'. This is consistent with existing findings that gangs attract youth who feel marginalized, excluded, and have few, if any, meaningful relationships with others (Craig et al., 2002; Hirschi, 1969; Vigil, 1988). HY described adverse relationships with family, pro-social peers, authority figures, such as teachers, and lack of positive role models. In addition, over time HY reported feelings of

separation from other gang members as he progressed to higher ranks in the gang. This lack of meaningful attachment and social support with others has been linked to current and prospective depression (Cruwys, Dingle, Haslam, Haslam, & Jetten, 2013) and may also explain why gang-involved youth in study two reported depressive affect and symptoms. For instance, the majority of gang-involved youth were interviewed in a PRU following exclusion from mainstream education, largely due to their delinquent behavior. So, it is likely they experienced problematic relationships with parents and authority figures – and hence a lack of meaningful attachments. Furthermore, as stated by HY, members would be expected to engage in violence, especially against rival gangs. Gang-involved youth in the PRU, therefore, may have feared seeming 'weak' and continued to engage in violence, despite not wanting to; thus, fueling their depressive symptoms.

In study one, HY reported that he attended a PRU as an alternative form of provision following exclusion from school. HY recalled that the PRU further fostered his antisocial attitudes by placing him in close proximity to other delinquent peers who also had positive attitudes towards violence and this fostered his engagement in violence. This supports research documenting PRU pupils' experiences citing disruptive behavior by peers as a barrier to 'positive outcomes' (see Michael & Frederickson, 2013). In study two, most of the gang-involved youth in our sample attended the PRU and the results demonstrated how gang-involved youth were significantly more likely to suffer from conduct problems, mental health difficulties, and higher levels of exposure to violence. Research examining the outcomes of young people attending PRUs demonstrates they are at greater risk of experiencing poor mental health, and social, emotional, and behavioral difficulties (Michael & Frederickson, 2013; Pirrie, Macleod, Cullen, & McCluskey, 2011). In their qualitative study, Pirrie et al. (2011) reported that violence was the main reason young people were excluded from school, and some young people had histories of problem behaviors, including criminality and weapon

use, and adverse family experiences. Therefore, pre-existing conduct problems may have contributed to school exclusion.

Similarly, studies one and two revealed behavioral problems characterized by antisocial and impulsive behavior, as expressed by HY, and the conduct problems among gang-involved youth who also attended a PRU in study two. Furthermore, the reasons cited by PRU staff for participants that had missed their assessments with the researcher included truanting and police contact. These results support the emerging research on gang membership and behavioral disorders, such as CD and ASPD (Coid et al., 2013; DeLisi et al., 2019; Mallion & Wood, 2018). Moreover, as evidenced by HY's pathway to gang involvement, being out of education increased his vulnerability to joining a gang. Thus, individual characteristics, such as violent behavior may conceal underlying mental ill health, such as depression and trauma symptoms, which can include irritability and aggressive outbursts. Social factors, such as poor school performance may also increase vulnerabilities to gang membership, but also mean that youth fail to access on-site provisions, which could support their behavioral, emotional, and mental health needs.

Untreated mental health problems can impact on long-term outcomes (Kisely, Scott, Denney, & Simon, 2006), and in HY's case, untreated mental health problems even after exiting the gang, impacted on his ability to maintain pro-social opportunities, including a romantic relationship. Although HY did not state that he was formally diagnosed, HY did state he visited a psychiatrist regularly and self-reported symptoms of depression, including feelings of isolation, dissatisfaction, and somatic symptoms, such as slow body movement. In addition, HY also expressed engaging in suicidal thoughts and behavior, and PTSS, such as re-experiencing traumatic events by having flashbacks. Despite scant longitudinal research examining the mental health of gang members, Watkins and Melde (2016) reported significant differences in suicidal thoughts and behaviors between youth who went on to

become gang members, compared to those who did not join a gang. The authors revealed significant increases in suicidal thoughts (67% increase) and behaviors (104% increase) after having joined the gang. This suggests that mental ill health and emotional needs need to be identified and treated throughout the pathways to gang membership in unified theory. As discussed in Chapter Three, the unified model, although makes a positive contribution to the literature through its consideration of psychological processes, could be further strengthened by highlighting mental health vulnerability and emotional needs throughout the pathways with an explicit focus on mental health support as part of the desistence process.

Moral Disengagement and Guilt Proneness

Results indicate that gang-involved youth, compared to non-gang youth, engage in the mechanisms of moral disengagement, including displacement of responsibility, diffusion of blame, and reconstructing language at time one and time two. The case of HY also described how he adopted euphemistic labelling towards authority figures, which may have consolidated his pre-existing and negative anti-authority attitudes, further aggravating an already fractious relationship with the police via an “us against them” mentality. The current studies therefore contribute to the emerging literature on the socio-cognitive processes adopted by gang members (Alleyne, Fernances, & Pritchard, 2014; Niebieszczanski, et al., 2015).

It has been noted that moral disengagement may also be associated with lack of guilt (see Bandura et al., 1996) and the strategies taken by gang-involved youth to minimize the distress associated with harmful acts may explain how in time one and two, gang-involved youth did not differ from non-gang youth on guilt proneness, despite their disclosures of risky and problem behaviors. Thus, the findings attest to the importance of socio-cognitive processes as worthy of further attention to tackle gang-related behaviors, but also in addressing social factors, such as relationships with authority figures.

Implications: Towards a Public Health Approach

The results presented in this thesis have implications of a clinical, policy, and empirical nature. Firstly, the systematic review identified that current research, whilst invaluable to furthering our understanding, must progress to include rigorous, longitudinal, multi-site research with robust measures. Whilst study two was an attempt to achieve this, longer time periods are needed to better understand cause and effect relationships. Furthermore, the both studies indicates that a role exists for academics, including psychologists across disciplines, to engage in systemic practice and promote the inclusion of vulnerable young people who are at risk of gang involvement or are already gang-involved by paying closer attention to their emotional and mental health needs and supporting their access to health care and service use. The findings in this thesis suggest that significant preventative and rehabilitative approaches to gang desistence and prevention can be gained through investing in further empirical examinations of the mental health and emotions of at-risk and gang populations.

With regards to clinical implications, findings from studies one and two suggest that gang members experience a range of clinical needs that require accurate screening and treatment. The results presented in this thesis provide an evidence base regarding the behavioral, emotional needs, and mental health problems experienced by gang members and suggest that gang members would benefit from clinically tailored treatment specific to their needs. Otherwise, as seen in the research by Bailey et al. (2014), inaccurate (or no) diagnosis may only aggravate pre-existing symptomology, such as PTSS further. However, whilst gang members' mental health needs are slowly gaining attention in current policy initiatives targeted at reducing gang-related violence and early prevention (HM Government, 2016), the extent to which these are based on evidence-based empirical research on gang members emotional and mental health needs is unclear. Thus, it is imperative that accurate diagnoses

are made and that at-risk or gang-involved youth are provided with treatment that has been evaluated using rigorous methodologies.

More recently, a coordinated approach between the criminal justice system and public health to address community violence, including gang membership and violence can be seen through programs, such as *Cure Violence and Communities that Care* (CTC; Gebo, 2016). However, Gebo (2016) suggests how current empirical knowledge on gangs alone (such as definitional inconsistencies and the multi-faceted risk factors that may precede gang membership) may not be sufficient to inform a public health approach. Especially so given the importance attached to 'risk and protective factor identification' under the Public Health framework outlined by the World Health Organization (see Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002). Gebo suggests that a public health approach towards gang's needs "to more closely align prevention of youth violence with gangs" (p. 379). Indeed, gang membership is synonymous with violence, and programs such as CTC tackle street violence through the use of youth workers who mitigate violence in their communities through nurturing positive relationships with at-risk youth. Programs, such as CTC have been reported to have significantly positive effects (Arthur, Hawkins, Brown, Briney, & Oesterle, 2010), and so empirical research on the mental health and emotional needs of gang-involved youth may further inform such programs and contribute to their success.

Furthermore, recent attempts in the UK by the CJS to address gang membership demonstrates a shift towards prevention in line with a public health approach. The Growing Against Gangs and Violence (GAGV) program was conducted in London, UK, in areas identified by the UK Government as vulnerable to high levels of gang activity (Densley et al., 2016). The program targets issues of concern to public health and which are associated to gangs, such as weapon use (e.g., use of knives and guns), experiences of violence, and exploitation (see Densley et al., 2016). The GAGV's objectives are three-fold and target: (1)

gang membership, (2) levels of delinquent and violent behavior, and (3) seeks to develop and promote positive relationships between young people and the police. In addition, the program targeted psychological constructs, including attitudes towards gangs, moral disengagement strategies that may promote adherence to 'street' norms and maintain negative attitudes towards authority figures, such as the police, and focused on emotional regulation in the form of conflict management and negative affect.

Despite the program demonstrating promising effect sizes through raising awareness of gangs among youth, it failed to yield significant program effects (see Densley et al., 2016). However, significant effects of the program on specific attitudes were reported for attitudes towards the police and adhering to a 'street code'. The findings reported in studies one and two highlight how further consideration of psychological factors, such as emotional and mental health needs, and specific focus on socio-cognitive processes, including all of the mechanisms of moral disengagement and rumination should also be considered in program delivery. In addition to prevention approaches, the findings of this thesis also demonstrate how mental and emotional health factors should be incorporated into secondary and tertiary public health pathways, which target all levels of gang involvement.

Limitations and Directions for Future Research

As with any research, the theoretical and empirical work presented as part of this thesis is not without its limitations. Chapter Two involved a systematic review of the literature on the mental and emotional health of gangs. Any review may miss significant papers that have recently been published and this review is no exception. However, the two-part search strategy adopted until very near the write-up process hopefully minimized this effect. The magnitude of gang literature required that comprehensive inclusion criteria was used to ensure relevant papers were not excluded. These ample criteria resulted in difficulties extracting relevant information from studies to assess suitability. For instance, the screening

process included an initial screening of the title, abstract, and study outcomes (listed within the method section). However, gang members form part of a delinquent population, and some studies may have included gang members in their delinquent samples, though this was not evident from the initial screening process. Gang members are also hard-to-reach participants, and therefore, to ensure the review was as informed as possible, sample sizes regardless of how small, were included in this study. Consequently, the conclusions reached may not be based on national or international representations of gang members. Understandably, this raises further questions about the quality and applicability of empirical work in this area. However, such issues suggest even more the need for additional and increasingly robust empirical research that seeks to address these methodological concerns.

The review also only included those studies published in the English language due to the researchers being English-speakers and so the data extracted may have dismissed important gang-related work published in other languages. Nonetheless, despite the above limitations, this systematic review, to our knowledge, is the first to synthesize the literature on the mental and emotional health of gang members and it identifies some important gaps in the current academic literature that may be addressed in future empirical work.

Moreover, despite the insight provided by the case study on HY, the findings are not without limitations. First, as per any empirical work consisting of interview data, the interviewer's role (e.g., due to perceived professional nature, demeanor, gender or age) may create unintentional bias and influence participant responses, especially when interviewers ask about personal and sensitive experiences. However, this was addressed via a reflexivity account detailing the research exchange to ensure transparency. Furthermore, in the absence of third-party corroboration, HY's childhood abuse, school exclusion, and his involvement with the criminal justice system, cannot be verified. Equally, given the vagaries of memory, the timeline HY used in describing his association with gangs and mental health symptoms

cannot be confirmed. However, there is no reason to suspect that HY was less than honest in his account and the value of a case study such as this, lies in the insight it offers into individual experiences, which can help generate further testable hypotheses, preferably via robust longitudinal research examining the mental and emotional well-being of gang-involved youth. Such empirical work will then help the development of responsive and tailored prevention and intervention programs that target vulnerable and gang-involved youth.

There are also limitations to the longitudinal study presented in Chapter Four. The longitudinal-nature of the design only reported on a period of up-to three months due to access constraints. Hence, this may have not been sufficient time to capture significant changes over time. Furthermore, due to data attrition between time one and time two, the results at time two are based on a smaller sample of gang-involved youth and so further research is required with a larger sample size over a longer time period to more accurately estimate change over time. At time two, many of the gang-involved youth at the PRU had stopped attending and some had been reallocated to mainstream education as reported to the researcher by school staff. Although purely speculative, it may be that some youth had developed deeper links to their gang and disengaged from education. The self-report nature of measures may also mean our data succumb to reporting bias. In addition, recent evidence suggests the importance of examining how mental ill health relates to *levels* of gang embeddedness (Wood et al., 2017). However, the current study while attempting to do this had insufficient numbers and so categorized all affiliates and gang members into one category of ‘gang-involved youth’. Hence, a limitation of the current study is it could not address how varying levels of emotional and mental health, behavior and socio-cognitive processes linked to different levels of gang membership. This limits the response of prevention and treatment initiatives in addressing the variability of gang involvement. Hence,

future research could include national data samples, including case studies such as that in Chapter Three, to capture gang involvement at all levels of involvement as well as its individual predictors and outcomes, including mental health and emotional maladjustment. Furthermore, as stated in Chapter One, it must be noted that it was not the intention of the researcher to stigmatize BAME communities and rather this was due to convenience sampling whereby gang membership reflected the ethnic composition of communities in the relevant areas. Future research should sample a wide range of geographic areas and engage in multi-sited research, including community, education, and forensic populations to develop further understanding of gang members health needs.

Nonetheless, the study possessed numerous strengths, including an examination of a range of psychological and socio-cognitive predictors of gang involvement that can inform our response to gangs and an attempt to examine these variables longitudinally. Moreover, the current study provides a longitudinal empirical examination of emotional distress and guilt proneness specific to gang-involved adolescents and the results point to the importance of considering emotional adjustment and callous-unemotional traits among gang samples (Mallion & Wood, 2018).

Concluding remarks

The research included in this thesis provides insight into the behavioral, emotional needs, mental health, and socio-cognitive predictors of adolescent gang involvement. The findings show how mental health difficulties such as depression, and trauma, conduct problems, and emotional maladjustment may be relevant to youth who become involved with gangs. Furthermore, the findings presented demonstrate how exposure to violence, such as by being violently victimized, and socio-cognitive processes, such as angry rumination and moral disengagement are also associated with gang involvement. The results attest to the importance that youth gang involvement be responded to through a lens, which considers the

extent and nature of a range of vulnerabilities, including young people's mental health, their emotional development, and problem behaviors. The findings have significant implications for the need to increase focus of affective and psychological factors in gang interventions, such as GAGV; and there is consequently a need to rethink how we view and respond to gangs.

References

Aldridge, J., Medina-Ariza, J., & Ralphs, R. (2008). Dangers and problems of doing 'gang' research in the UK. In Gemert, F. V. (Ed.), Peterson, D. (Ed.), & Lein, I. (Ed.), In *Street Gangs, Migration and Ethnicity* (pp. 31-46). Cullompton, Devon: Willan.

Alleyne, E., Fernandes I., & Pritchard, E. (2014). Denying humanness to victims: How gang members justify violent behavior? *Group Processes and Intergroup Relations*, *17*(6), 750-762. doi: 10.1177/1368430214536064

Alleyne, E., & Wood, J. L. (2010). Gang involvement: Psychological and behavioral characteristics of gang member, affiliate youth, and non-gang youth. *Aggressive Behavior, 36*(6), 423-436. doi: 10.1002/ab.20360

Almutairi, A., Gardner, Glenn E., & McCarthy, Alexandra L. (2014). Practical guidance for the use of a pattern-matching technique in case study research: A case presentation. *Nursing and Health Sciences, 16*(2), pp. 239-244.

American Psychiatric Association. (2012). *DSM-IV and DSM-5 Criteria for the Personality Disorders.* Retrieved from: http://www.psi.uba.ar/academica/carrerasdegrado/psicologia/sitios_catedras/practicas_profesionales/820_clinica_tr_personalidad_psicosis/material/dsm.pdf

American Psychiatric Association (2013). *Diagnostic and Statistical Manual of Mental Disorders* (Fifth ed.). Arlington, VA: American Psychiatric Publishing. ISBN: 978-0-89042-555-

Andrews, D. A., & Bonta, J. (2003). *The psychology of criminal conduct* (3rd edition). New York: Routledge. ISBN-13: 9781583605448.

Arthur, M. W., Hawkins, D., Brown, E. C., Briney, J. S., Oesterle, S. (2010). Implementation of the communities that care prevention system by coalitions in the community youth

development study. *American Journal of Community Psychology, 38*(2), 245-258. doi: 10.1002/jcop.20362

Augustyn, M. B., Ward, J. T., & Krohn, M. D. (2017). Exploring intergenerational continuity in gang membership. *Journal of Crime and Justice, 40*(3), 252-274. doi: 10.1080/0735648X.2017.1337556

Bailey, C. E., Smith, C., Huey, S. R., McDaniel, D. D., & Babeva, K. (2014). Unrecognized posttraumatic stress disorder as a treatment barrier for a gang-involved juvenile offender. *Journal of Aggression, Maltreatment & Trauma, 23*(2), 199-214. doi: 10.1080/10926771.2014.872748

Ball, R. A., & Curry, G. D. (1995). The logic of definition in criminology: Purposes and methods for defining gangs. *Criminology, 33*(2), 225-245. doi: 10.1111/j.1745-9125.1995.tb01177.x

Ballard, E. D., Van Eck, K., Musci, R. J., & Hart, S. R., Sotrr C. L., Breslau, N., & Wilcox, H. (2015). Latent classes of childhood trauma exposure predict the development of behavioral health outcomes in adolescence and young adulthood. *Psychological Medicine*, *45*(15), 3305-3316. doi: 10.1017/S0033291715001300

Bandura, A. (1991). Social cognitive theory of moral thought and action. In W.M. Kurtines & 6 J.L. Gewirtz (Eds.), *Handbook of moral behavior and development: Theory, research, and* 7 *applications* (Vol. 1, pp. 71-129). Hillsdale, NJ: Lawrence Erlbaum Associates.

Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (1996). Mechanisms of moral disengagement in the exercise if moral agency. *Journal of Personality and Social Psychology, 71*(2), 364-374. Doi: 10.1037/0022-3514.71.2.364

Battin, S. R., Hill, K. G. Abbott, R. D., Catalano, R. F., & Hawkins. J. D. (1998). The Contribution of Gang Membership to Delinquency Beyond Delinquent Friends. *Criminology, 36*(1), 93-115. doi: 10.1111/j.1745-9125.1998.tb01241.x

Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F. (1994). Guilt: An interpersonal approach. *Psychological Bulletin*, *115*(2), 243-267. doi: 10.1037/0033-2909.115.2.243

Baxtor, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report, 13*(4), 544-559. Retrieved from, http://www.nova.edu/ssss/QR/QR13-4/baxter.pdf

Beck, A. T., & Steer, R. A. (1991). Relationship between the Beck Anxiety Inventory and the Hamilton Anxiety Rating Scale with anxious outpatients. *Journal of Anxiety Disorder* 5(3), 213-223. doi: 10.1016/0887-6185(91)90002-B.

Bennett, T., & Holloway, K. (2004). Gang membership, drugs, and crime in the UK. *The British Journal of Criminology, 44*(3), 305-323. doi: 10.1093/bjc/azh025

Beresford, H., & Wood, J. L. (2016). Patients or perpetrators? The effects of trauma exposure on gang members' mental health: A review of the literature. *Journal of Criminological Research, Policy and Practice, 2*(2), 148-159. Doi: 10.1108/JCRPP-05-2015-0015

Bjelland, I., Dahl, A.A., Haug, T.T. and Neckelmann, D. (2002). The validity of the hospital anxiety and depression scale: An updated literature review. *Journal of Psychosomatic Research, 52*(2), 69-77. doi:10.1016/S0022-3999(01)00296-3

Bjerregaard, B., & Smith, C. (1993). Gender differences in gang participation, delinquency, and substance use. *Journal of Quantitative Criminology, 9*(4), 329-355. doi: 10.1007/BF01064108

Boruda, D. J. (1961). Delinquent subcultures: Sociological interpretations of gang delinquency. *The ANNALS of the American Academy of Political and Social Science, 383*(1), 119-136. doi: 10.1177/000271626133800113

Boullier, M., & Mitch, B. (2018). Adverse childhood experiences. *Pediatrics and Child Health, 28*(3): 132-137. doi: 10.1016/j.paed.2017.12.008.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101. Retrieved from http://eprints.uwe.ac.uk/11735/2/thematic_analysis_revised...

Butler-Kisber, L. (2010). *Qualitative Inquiry: Thematic, narrative, and arts-informed perspectives.* London: Sage Publications. ISBN: 9781412948203

Caldwell, L., & Altschuler, D. M. (2001). Adolescents leaving gangs: An analysis of risk and protective factors, resiliency, and desistence in a developmental context. *Journal of Gang Research, 8*(2), 21-34. Retrieved from: https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=187403

Cecil, C. A. M., Viding, E., Barker, E. D., Guiney, J., & McCrory, E. J. (2014). Double disadvantage: The influence of childhood maltreatment and community violence exposure on adolescent mental health. *Journal of Child Psychology and Psychiatry, 55*(7), 839-848. doi: 10.1111/jcpp.12213

Centre for Social Justice. (2009). *Dying to Belong: An in-depth review of street gangs in Britain.* Centre for Social Justice: London. Retrieved from: https://www.centreforsocialjustice.org.uk/core/wp-content/uploads/2016/08/DyingtoBelongFullReport.pdf

Cepeda, A., Valdez, A., Nowotny, K. M. (2016). Childhood trauma among Mexican American gang members and delinquent youth: A comparative and exploratory study. *Child Abuse Review, 25*(3), 205-217. doi: 10.1002/car.2340

Chapman, D.P., Whitfield, C. L., Felitti, V. J., Dube, S. R., Edwards, V. J., & Anda, R. F. (2004). Adverse childhood experiences and the risk of depressive disorders in adulthood. *Journal of Affective Disorders, 82*(2): 217-225. doi: 10.1016/j.jad.2003.12.013.

Children's Commissioner. (2017). *Children's voices: A review of evidence on the subjective wellbeing of children involved in gangs in England*. United Kingdom. Retrieved from: https://www.childrenscommissioner.gov.uk/wp-content/uploads/2017/11/Childrens-Voices-A-review-of-evidence-on-the-subjective-wellbeing-of-children-involved-ingangs-in-England-2.pdf

Children's Commissioner. (2018). *Vulnerability Report 2018.* London: Children's Commissioner for Englang. Retrieved from: https://www.childrenscommissioner.gov.uk/wp-content/uploads/2018/07/Childrens-Commissioner-Vulnerability-Report-2018-Overview-Document-1.pdf

Chu, C. M., Daffern, M., Thomas, S., & Lim, J. Y. (2012). Violence risk and gang affiliation in youth offenders: A revidivism study. *Psychology, Crime, & Law*, *18*(3), 299-315. doi: 10.1080/1068316X.2010.481626

Cockbain, E. (2013). Grooming and the 'Asian sex gang predator': The construction of a racial crime threat. *Race and Class, 54*(4), 22–32. doi: 10.1177/0306396813475983

Cohen, A. K. (1955). *Delinquent boys: The culture of the gang*. Glencoe, Illinois: The Free Press. ISBN-13: 978-0029057704.

Coid, J. W., Ullrich, S., Keers, R., Bebbington, P., Destavola, B. L., Kallis, C., Yang, M., et al. (2013). Gang membership, violence, and psychiatric morbidity. *American Journal of Psychiatry, 170*(9), 985-993. doi: 10.1176/appi.ajp.2013.12091188

Corcoran, K., Washington, A., & Myers, N. (2005). The impact of gang membership on mental health symptoms, behavior problems, and antisocial criminality of incarcerated young men. *Journal of Gang Research, 12*(4), 25-35. Retrieved from: http://www.ngcrc.com/journalofgangresearch/jour.v12n4.corcoran.fin.pdf

Craig, W. M., Vitaro, F., Gagnon, L., Tremblay, R. E. (2002). The road to gang membership: Characteristics of male gang and non-gang members from ages 10 to 14. *Social Development, 11(*1), 53-68. doi: 10.1111/1467-9507.00186

Crisp, B. R. (2011). If a holistic approach to social work requires acknowledgement of religion, what does this mean for social work education? *Social Work Education, 30*(6), 663-674. doi: 10.1080/02615479.2011.586564

Cruwys, T., Dingle, G. A., Haslam, C., Haslam, A., & Jetten, J. (2013). Social group memberships, protect againt future depression, alleviate depression symtpoms and prevent depression relapse. *Social Science & Medicine, 98,* 179-186. doi: 10.1016/j.socscimed.2013.09.013

Curry, G. D. (2000). Self-reported gang involvement and officially recorded delinquency. *Criminology, 38*(4), 1253-1274. doi: 10.1111/j.1745-9125.2000.tb01422.x

Dahlberg, L., & Krug, E.G. (2002) Violence: A global public health problem. In: Krug E G, Dahlberg L, Mercy JA, Zwi AB, and Lozano R (Eds), *The world report on violence and health* (pp.1-21). Geneva: WHO.

Darves-Bornoz, J. M., Alonso, J., de Girolamo, G., de Graaf, R., Haro, J. M., Kovess-Masfety, V.,…Gasquet, I. (2008). Main traumatic events in Europe: PTSD in the European study of the epidemiology of mental disorders survey. *Journal of Traumatic Stress, 21*(5), 455-462. doi: 10.1002/jts.20357.

Davison, J. (1997). *Gangsta: The Sinister Spread of Yardie Gun Culture*. London: Vision Paperbacks.

Decker, S. H. (2007). *Youth gangs and violent behavior.* In Falnnery, D., Vazsonyi, A., & Waldman, I (Eds), *The Cambridge Handbook of Violent Behavior and Aggression* (pp. 388-402). New York: Cambridge University Press.

Decker, S. H., Melde, C., & Pyrooz, D.C. (2013). What do we know about gangs and gang members and where do we go from here? *Justice Quarterly*, *30*(3), 369-402. doi: 10.1080/07418825.2012.732101

Decker, S. H., & Van Winkle, B. (1996). *Life in the gang: Family, friends, and violence.* UK: Cambridge University Press.

De La Rue, L., & Espelage, D. L. (2014). Family and abuse characteristics of gang-involved, pressured-to-join, and non-gang-involved girls. *Psychology of Violence, 4*(3), 253–265. doi: 10.1037/a0035492

DeLisi, M., Barnes, J. C., & Beaver, K. M. (2009). Delinquent gangs and adolescent victimization revisited: A propensity score matching approach. *Criminal Justice and Behavior*, *36*(8), 808-823. doi: 10.1177/0093854809337703

DeLisi, M., Drury, A. J., & Elbert, M.J. (2019). Do behavioral disorders render gang status spurious? New insights. *International Journal of Law and Psychiatry, 62,* 117-124. doi: 10.1016/j.ijlp.2018.12.007

Densley, J. (2011), "Ganging up on gangs": Why the gang intervention industry needs an intervention? *The British Journal of Forensic Practice, 13*(1), 12-23. doi: 10.5042/bjfp.2011.0046

Densley, J. A., Adler, J. R., Zhu, L., & Lambine, M. (2016). Growing Against Gangs and Violence: Findings from a Process and Outcome Evaluation. *Psychology of Violence.* Retrieved from https://growingagainstviolence.org.uk/wp/wp-content/uploads/2018/06/Densley-et-al-Psychology-of-Violence-2016.pdf

Deuchar, R., & Ellis, J. (2013) 'It's helped me with my anger and I'm realizing where I go in life': The impact of a Scottish youth work/schools intervention on young people's responses to social strain and engagement with anti-social behavior and gang culture. *Research in Post Compulsory Education, 18,* 98-114.

doi: 10.1080/13596748.2013.755841

Di Placido, C., Simon, T. L., Witte, T. D., Gu, D., & Wong, S. C. P. (2006). Treatment of gang members can reduce recidivism and institutional misconduct. *Law and Human Behavior, 30*(1), 93-114. doi: 10.1007/s10979-006-9003-6

Dmitrieva, J., Gibson, L., Steinberg, L., Piquero, A., & Fagan, J. (2014). Predictors and consequences of gang membership: Comparing gang members, gang leaders, and non-gang affiliated adjudicated youth. *Journal of Research on Adolescence, 24*(2), 220-234. doi: 10.1111/jora.12111

Docherty, M., Kubik, J., Herrera, C. M., & Boxer, P. (2018). Early maltreatment is associated with greater risk of conduct problems and lack of guilt in adolescence. C*hild Abuse and Neglect, 79*, 173-182. doi: 10.1016/j.chiabu.2018.01.032.

Dudley, R. G. (2015). *Childhood Trauma and Its Effects: Implications for Police*. Washington DC: New Perspectives in Policing Bulletin, Department of Justice, National Institute of Justice. Retrieved from, https://www.ncjrs.gov/pdffiles1/nij/248686.pdf

Dukes, R. L., Martinez, R. O., & Stein, J. A. (1997). Precursors and consequences of membership in youth gangs. *Youth and Society, 29*(2), 139-165. doi: 10.1177/0044118X97029002001

Dupere, V., Lacourse, E., Willms, D. J., Vitaro, F., & Tremblay, R. E. (2007). Affiliation to youth gangs during adolescence: The interaction between childhood psychopathic tendencies and neighborhood disadvantage. *Journal of Abnormal Child Psychology, 35*(6), 1035-1045. doi: 10.1007/s10802-007-9153-0

Edens, J. F., Kelley, S. E., Skeem, J. L., Lilienfeld, S. O., & Douglas, K. S. (2015). DSM-5 Antisocial personality disorder: Predictive validity in a prison sample. *Law and Human Behavior, 39*(2), 123-129. doi: 10.1037/lhb0000105

Egan, V., & Beadman, M. (2011). Personality and gang embeddedness. *Personality and Individual Differences 51*(6): 748-753. doi: 10.1016/j.paid.2011.06.021.

Eitle, D., Gunkel, S., & Van Gundy, K. (2004). Cumulative exposure to stressful life events and male gang membership. *Journal of Criminal Justice, 32*(2), 95-111. doi: 10.1016/j.jcrimjus.2003.12.001

Esbensen, F-A., Brick, B. T., Melde, C., Tusinski, K., & Taylor, T. J. (2008). The role of race and ethnicity in gang membership. In F. van Gemert, D. Peterson, & I. L. Lien (Eds.), *Street Gangs, Migration, and Ethnicity.* (pp. 117-139). Devon, UK: Willan Publishing.

Esbensen, F-A., & Deschenes, E. P. (1998). A multisite examination of youth gang membership: Does gender matter? *Criminology, 36*(4), 779-828. doi: 10.1111/j.1745-9125.1998.tb01266.x

Esbensen, F. A., & Huizinga, D. (1993). Gangs, drugs, and delinquency in a survey of urban youth. *Criminology, 31*(4), 565–589. doi: 10.1111/j.1745-9125.1993.tb01142.x

Esbensen, F-A., & Weerman, F. M. (2005). Youth gangs and troublesome youth groups in the United States and the Netherlands: A cross-national comparison. *European Journal of Criminology, 2*(1), 5-37. doi: 101177/1477370805048626

Esbensen, F-A., Winfree Jr, L. T., He, N., & Taylor, T. J. (2001). Youth gangs and definitional issues: When is a gang a gang, and why does it matter? *Crime & Delinquency, 47*(1), 105-130. doi:10.1177/0011128701047001005

Everard, S. (2006). *Streetwise teens gang together to avoid trouble and stay safe.* Retrieved March 30, 2006, from the Joseph Rowntree Foundation press room website: http:// www.jrf.org.uk/pressroom/releases/200206.asp

Fagan, J. E. (1989). The social organization of drug use and drug dealing among urban gangs. *Criminology, 27(*4), 633–669. doi: 10.1111/j.1745-9125.1989.tb01049

Fagan, J.A. (1996). Gangs, drugs, and neighborhood change. In C. R. Huff, *Gangs in America* (2nd ed., pp. 39-74). Thousand Oaks, California: Sage.

Farah, D. (2012). Central American gangs: Changing nature and new partners. *Journal of International Affairs, 66*(1), 53-67. Retrieved from: http://connection.ebscohost.com/c/articles/84319351/central-american-gangs-changing-nature-new-partners

Fink, A. (2005). *Conducting Research Literature Reviews: From the Internet to Paper.* Thousand Oaks, California: Sage Publications. ISBN: 141290904X

Finlay, L. (2002). Negotiating the swamp: The opportunity and challenge of reflexivity in research practice. *Qualitative Research, 2*(2), 209-230. doi: 10.1177/146879410200200205

Fontana, A., Rosenheck, R., & Brett, E. (1992). War zone traumas and posttraumatic stress disorder symptomatology. *Journal of Nervous and Mental Disease, 180*(12), 748-755. doi: http://dx.doi.org/10.1097/00005053- 199212000-00002.

Foster, J.D., Kupermine, G. P., & Price. A. W. (2004). Gender differences in posttraumatic stress and related symptoms among inner-city minority youth exposed to community violence. *Journal of Youth and Adolescence, 33*(1),59–69. doi: 10.1023/A:1027386430859.

Friedman, J. H. (1989). Regularized discriminant analysis. *Journal of the American Statistical Association*, *84*(405), 165-175. Retrieved from: https://www.jstor.org/stable/pdf/2289860.pdf

Friedman, M. J., Resick, P. A., Bryant, R. A., & Brewin, C. R. (2011). Considering PTSD for DSM-5. *Depression and Anxiety, 28*(9), 750-769. doi: 10.1002/da.20767

Gatti, U., Tremblay, R. E., Vitaro, F., & McDuff, P. (2005). Youth gangs, delinquency and drug use: A test of the selection, facilitation, and enhancement hypotheses. *The Journal of Child Psychology and Psychiatry, 46*(11): 1178-1190. doi: /10.1111/j.1469-7610.2005.00423.x.

Gebo, E. (2016). An integrated public health and criminal justice approach to gangs: What can research tell us? *Preventive Medicine Reports, 4*, 376-380. doi: 10.1016/j.pmedr.2016.07.007

Gilbertson, D. L. & Malinski, S. J. (2005). Gangs in the law: A content analysis of statutory definitions for the term "gang". *Journal of Gang Research, 13*(1), 1-16. Retrieved from: https://ngcrc.com/journalofgangresearch/jgr.v13n1.gilbertson.pdf

Goodman, R. (2001). Psychometric properties of the strengths and difficulties questionnaire. *Journal of the American Academy of Child and Adolescent Psychiatry, 40,* (11), 1337-1345. doi: 10.1097/00004583-200111000-00015

Goodwin, R. D., & Hamilton, S. P. (2003). Lifetime comorbidity of antisocial personality disorder and anxiety disorders among adults in the community. *Psychiatry Research, 117*, 159-166. Retrieved from: https://pdfs.semanticscholar.org/7c42/6d179a059e06303c7e32cda35881b1be9eb2.pdf

Gordon, R. A., Lahey, B. B., Kawai, E., Loeber, R., Stouthamer-Loeber, M., & Farrington, D. P. (2004). Antisocial behavior and youth gang membership: Selection and Socialization. *Criminology, 42*(1), 55-88. doi: 10.1111/j.1745-9125.2004.tb00513.x

Gorman-Smith, D., & Tolan, P. (1998). The role of exposure to community violence and developmental problems among inner-city youth. *Development and Psychopathology, 10*(1), 101-116. Available at: https://pdfs.semanticscholar.org/6923/120a6e8069ecb0adb170130a1a1c3fea90d0.pdf

Granpeesheh, D., Dixon, D.R., Tarbox, J., Kaplan, A. M., & Wilke, A. E. (2009). The effects of age and treatment intensity on behavioral intervention outcomes for children with autism spectrum disorders. *Research in Autism Spectrum Disorders, 3*, 1014-1022. doi: 10.1016/j.rasd.2009.06.007

Hennigan, K., & Spanovic., M. (2012). Gang Dynamics Through the Lens of Social Identity Theory. In F-A. Esbensen & C. L. Maxson (Ed.), *Youth Gangs in International Perspective* (pp.127-149). New York: Springer.

Harper, G. W., Davidson, J., & Hosek, S. G. (2008). Impact of gang membership on negative affect substance abuse, and antisocial behavior among homeless African American Male Youth. *American Journal of Men's Health, 2*(3), 229-243. doi: 10.1177/1557988307312555

Harris, T. B., Elkins, S., Butler, A., Shelton, M., Robles, B., Kwok, S., Simpson, S., Young, D. W., Mayhew, A., Brown, A., & Sargent, A. J. (2013). Youth gang members: Psychiatric Disorders and Substance Abuse. *Laws, 2*(4), 392-400. doi: 10.3390/laws2040392

Henning, K. R., & Frueh, B. C. (1997). Combat guilt and its relationship to PTSD symptoms. *Journal of Clinical Psychology, 53*(8), 801-808. doi: 10.1002/(SICI)1097-4679(199712)53:8<801::AID-JCLP3>3.0.CO;2-I.

Hill, K. G., Howell, J. C., Hawkins, D. J., Battin-Pearson, S. R. (1999). Risk factors for adolescent gang membership: Results from the Seattle Social Development Project. *Journal of Research in Crime and Delinquency, 36*(3), 300-322. Retrieved from: http://www.streetgangs.com/academic/hill_childrisk.pdf

Hirschi, T. (1969). *Causes of delinquency*. Berkeley, CA: University of California Press.

HM Government. (2016). *Ending gang violence and exploitation*. London, United Kingdom. Retrieved from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/491699/Ending_gang_violence_and_Exploitation_FINAL.pdf

Hogg, M. A. (2000). Subjective uncertainty reduction through self-categorization: A motivational theory of social identity processes. *European Review of Social Psychology*, *11*(1), 223–255. doi:10.1080/14792772043000040

Home Office. (2015). *Preventing gang and youth violence: Spotting signals of risk and supporting children and young people.* United Kingdom: Home Office. Retrieved from: https://www.eif.org.uk/files/pdf/preventing-gang-and-youth-violence-overview.pdf

Homicide in Scotland. (2018). *Homicide in Scotland 2017-18*. Scottish Government: National Statistics. Retrieved from: http://actiononviolence.org/sites/default/files/Homicide%20in%20Scotland%2017-18.pdf

Howard, R. (2015). Personality disorders and violence: What is the link? *Borderline Personality Disorder and Emotion Dysregulation*, 2(12), 1-11. doi: 10.1186/s40479-015-0033-x.

Howell, J. C. (2012). *Gangs in America's communities*. Thousand Oaks: Sage Publications. ISBN: 9781483379722

Howell, J. C., & Egley, A. (2005). Moving risk factors into developmental theories of gang membership. *Youth Violence and Juvenile Justice, 3*(4), 334-354. doi: 10.1177/1541204005278679

International Classification of Diseases. (2016). Retrieved from http://apps.who.int/classifications/icd10/browse/2016/en

Katz, C. M., Maguire, E. R., & Choate, D. (2011). A cross-national comparison of gangs in the United States and Trinidad and Tobago. *International Criminal Justice Review, 21*(3), 243-262. doi: 10.1177/1057567711417179

Katz, C. M., Webb, V. J., Fox, K., & Shaffer, J. N. (2011). Understanding the relationship between violent victimization and gang membership. *Journal of Criminal Justice, 39*(1), 48-59. doi: 10.1016/j.jcrimjus.2010.10.004

Kelly, S. (2010). The psychological consequences to adolescents of exposure to gang violence in the community: An integrated review of the literature. *Journal of Child and Adolescent Psychiatric Nursing, 23*(2), 61-73. doi: 10.1111/j.1744-6171.2010.00225.x

Kelly, S., Anderson, D., Hall, L., Peden, A., & Cerel, J. (2012). The effects of exposure to gang violence on adolescent boys' mental health. *Issues in mental health nursing, 33*(2), 80-88. doi: 10.3109/01612840.2011.623217

Kennedy, T. M., & Ceballo, R. (2016). Emotionally numb: Desensitization to community violence exposure among urban youth. *Developmental Psychology, 52*(5), 778-789. doi: 10.1037/dev0000112

Kerig, P. K., Chaplo, S. D., Bennett, D. C., & Modrowski, C. A. (2016). "Harm as Harm": Gang membership, perpetration trauma, and posttraumatic stress symptoms among youth in the juvenile justice system. *Criminal Justice and Behavior, 43*(5), 635-652. doi: 10.1177/0093854815607307

Kerig, P. K., Wainryb, C., Twali, M. S., & Chaplo, S. D. (2013). America's child soldiers: Toward a research agenda for studying gang-involved youth in the United States. *Journal of Aggression, Maltreatment and Trauma, 22*(7), 773-796. doi: 10.1080/10926771.2013.813883

Kisely, S., Scott, A., Denney, J., & Simon, G. (2006). Duration of untreated symptoms in common mental disorders: Association with outcomes: International study. *The British Journal of Psychiatry, 189*(1), 79-80. doi: 10.1192/bjp.bp.105.019869

Klein, M. W. (1995). *The American Street Gang: It's nature, prevalence, and control.* New York: Oxford University Press.

Klein, M. W., & Maxson, C. L. (2006). *Street gang patterns and policies.* New York: Oxford University Press Inc. ISBN: 9780195163445

Klein, M. W., Weerman, F. M., & Thornberry, T. P. (2006). Street gang violence in Europe. European *Journal of Criminology, 3*(4), 413-437. doi: 10.1177/1477370806067911

Kmet, L. M., Lee, R. C., & Cook, L. S. (2004). *Standard Quality Assessment Criteria for Evaluating Primary Research Papers from a variety of fields.* Alberta Heritage Foundation for Medical Research, Canada. Retrieved from: file:///C:/Users/Sarah%20Osman/AppData/Local/Packages/Microsoft.MicrosoftEdge_8wekyb3d8bbwe/TempState/Downloads/standard_quality_assessment_criteria_for_evaluating_primary_research_papers_from_a_variety_of_fields%20(1).pdf

Koffman, S., Ray, A., Berg, S., Covington, L., Albarran, N. M., & Vasquez, M. (2009). Impact of a comprehensive whole child intervention and prevention program among youths at risk of gang involvement and other forms of delinquency. *Children and Schools, 31*(4), 239-245. doi: 10.1093/cs/31.4.239

Krohn, M. D., Ward, J. T., Thornberry, T. P., Lizotte, A. J., & Chu, R. (2011). The cascading effects of adolescent gang involvement across the life course. *Criminology, 49*(4), 991-1028. doi: 10.1111/j.1745-9125.2011.00250.x

Krug. E. G., Dahlberg. L., Mercy, J.A., Zwi, A.B., & Lozano, R. (2002). *The world report on violence and health*. Geneva: WHO.

Lacourse, E., Nagin, D. S., Vitaro, F., Côté, S., Arseneault, L., & Tremblay, R. E. (2006). Prediction of early-onset deviant peer group affiliation: A 12-year longitudinal study. Archives of General Psychiatry, *63*(5), 562–568. doi: 10.1007/s10802-007-9153-0

Levitt, S. D., & Venkatesh, S. A. (2001). Growing up in the projects: The economic lives of a cohort of men who came of age in Chicago public housing. *American Economic Review, 91*(2), 79-85. doi: 10.1257/aer.91.2.79.

Lewis, H. B. (1971). *Shame and guilt in neurosis.* New York: International Universities Press. ISBN: 978-0823626076

Lincoln, Y., & Guba, E. (1985). *Naturalistic Inquiry.* Beverly Hills: Sage

Loeber, R., Bruke, J. D., & Lahey, B. (2006). What are adolescent antecedents to antisocial personality disorder? *Criminal Behavior and Mental Health, 12*(1), 24-36. doi: 10.1002/cbm.484.

Loeber, R., & Farrington, D. P. (2000). Young children who commit crime: Epidemiology, developmental origins, risk factors, early interventions, and policy implications. *Development and Psychopathology*, *12*(4), 737-762. doi: 10.1017/S0954579400004107

Low, N., Dugas, E., O'Loughlin, E., Rodriguez, D., Contreras, G., Chaiton, M., & O'Loughlin, J. (2012). Common stressful life events and difficulties are associated with mental health symtpoms and substance use in young adolescents. *BMC Psychiatry, 12*(1), 116-125. doi: 10.1186/1471-244X-12-116

Lynch. M. (2003). Consequences of children's exposure to community violence. *Clinical Child and Family Psychology Review, 6*(4):265-274. doi: 10.1023/B:CCFP.0000006293.77143.e1.

Lynch. M., & Cicchetti. D. (1998). An ecological-transactional analysis of children and contexts: The longitudinal interplay among child maltreatment, community violence,

and children's symptomatology. *Development and Psychopathology, 10*(2), 235-257. doi: 10.1017/S095457949800159X.

Madan, A., Mrug, S., & Windle, M. (2011). Brief report: Do delinquency and community violence exposure explain internalizing problems in early adolescent gang members? *Journal of Adolescence, 34*(5), 1093-1096. doi:10.1016/j.adolescence.2010.06.003

Mallion, J. S., & Wood, J. L. (2018). Comparison of Emotional Dispositions between Street Gang and Non-Gang Prisoners. *Journal of Interpersonal Violence*, *00*(0), 1-21. doi: 10.1177/0886260518789147

Marks, J. S., & Turner, N. (2014). The critical link between health care and jails. *Health Affairs*, *33*(3), 443-447. Retrieved from, http://www.healthaffairs.org/doi/pdf/10.1377/hlthaff.2013.1350

Marshall, M. N. (1996). Sampling for qualitative research. *Family Practice, 13(*6), 522-525. Retrieved from http://spa.hust.edu.cn/2008/uploadfile/2009-9/20090916221539453.pdf

Matz, A. K., Stevens-Martin, K. D., & DeMichele, M. T. (2014). Barriers to Effective Gang-Member Reentry: An examination of street gang-affiliated probationer revocation in a Southwestern State. *Journal of Gang Research, 21*(2), 32-51. Retrieved from https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=268080

Maxson, C. L. (1998). *Gang members on the move.* OJJDP Juvenile Justice Bulletin. Washington, DC: Department of Justice. Retrieved from http://journals.sagepub.com/doi/pdf/10.1177/0011128701047001005

Maxson, C. L., Whitlock, M. L., & Klein, M. W. (1998). Vulnerability to street gang membership: Implications for practice. *The Social Service Review*, *72*(1), 70–91. doi: 10.1086/515746

Mayor Office for Policing and Crime. (2014). *Strategic Ambition for London: Gangs and Serious Youth Violence.* London: MOPAC. Retrieved from: https://www.london.gov.uk/sites/default/files/gla_migrate_files_destination/Strategic%20Ambitions%20for%20London_%20Gangs%20and%20SYV%202014.pdf

Mayor Office for Policing and Crime. (2018). Review of the Metropolitan Police Service Gangs Matrix. London: MOPAC. Retrieved from: https://www.met.police.uk/SysSiteAssets/media/downloads/met/about-us/gangs-violence-matrix/mopac-gang-matrix-review.pdf

Mayor's Office for Policing and Crime. (2019). What is the violence reduction unit? London, MOPAC. Retrieved from: https://www.london.gov.uk/what-we-do/mayors-office-policing-and-crime-mopac/violence-reduction-unit-vru/what-violence-reduction-unit

Mazza, J. J., & Reynolds, W. M. (1999). Exposure to violence in young inner-city adolescents: Relationship with suicidal ideation. *Journal of Abnormal Child Psychology, 27*(3), 203-213. doi: 10.1023/A:1021900423004

McDaniel, D. (2012) Risk and protective factors associated with gang affiliation among high-risk youth: a public health approach. *Injury Prevention, 18*(4), 253-258. doi: 10.1136/injuryprev-2011-040083.

Medina, J., Cebulla, A., Ross, A., Shute, J., & Aldrdige, J. (2013). *Children and young people in gangs: A longitudinal analysis.* London: Nuffield Foundation. Retrieved from https://www.nuffieldfoundation.org/sites/default/files/files/Children_young_people_gangs.pdf

Melde, C., & Esbensen, F. A. (2013). Gangs and violence: Disentangling the impact of gang membership on the level and nature of offending. *Journal of Quantitative Criminology, 29*(2), 143-166. doi: 10.1007/s10940-012-9164-z

Melde, C., Taylor, T. J., & Esbensen, F. A. (2009). "I got your back": An examination of the protective function of gang membership in adolescence. *Criminology, 47*(2), 565-594. doi: 10.1111/j.1745-9125.2009.00148.x

Merrin, G. J., Sung-Hong, J., & Espelage, D. L. (2015). Are the risk and protective factors similar for gang-involved, pressured-to-join, and non-gang-involved youth? A social-ecological analysis. *American Journal of Orthopsychiatry, 85*(6). doi: 10.1037/ort0000095

Millon, T., Millon, C., Davis, R., & Grossman, S. (2006). *The Millon Adolescent Clinical Inventory.* Bloomington: Pearson Executive Office.

Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. Pubic Library of Science, 21(6). doi: 10.1371/journal.pmed.1000097. Retrieved from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2707599/

Moran, K. (2014). Social Structure and Bonhomie: Emotions in the youth street gang. *The British Journal of Criminology, 55*(3), 556-577. doi: 10.1093/bjc/azu085

Moule, R., Decker, S., Pyrooz, D. (2013). Social capital, the life-course, and gangs. In Gibson, C., & Krohn, M. (Eds.). *Handbook of life-course criminology: Emerging trends and directions for future research (*pp 143-158). Springer: New York.

Moustakas, C. (1994). *Phenomenological research methods.* Thousand Oaks, CA: Sage.

Mrug, S., Loosier, P. S., & Windle, M. (2008). Violence exposure across multiple contexts: Individual and joint effects on adjustment. *American Journal of Orthopsychiatry, 78*(1), 70-84. doi: 10.1037/0002-9432.78.1.70.

National Center for PTSD. (2019). *PTSD Checklist for DSM-5 (PCL-5*). Retrieved from: https://www.ptsd.va.gov/professional/assessment/adult-sr/ptsd-checklist.asp

National Gang Intelligence Center. (2015). *National gang report*. United States. Retrieved from: https://www.fbi.gov/file-repository/national-gang-report-2015.pdf/view

Neville, F.G., Goodall, C.A., Gavine, A.J., Williams, D.J., & Donnelly, P.D. (2015). Public health, youth violence and perpetrator well-being. Peace and Conflict: *Journal of Peace Psychology, 21*(3), 322-333. doi: 10.1037/pac0000081.

Niebieszczanski, R., Harkins. L., Judson, S., Smith, K., & Dixon, L. (2015). The role of moral disengagement in street gang offending. *Psychology, Crime and Law*, 21(6), 589-605. doi: 10.1080/1068316X.2015.1008476.

Nolen-Hoeksema, S., Wisco, B. E., & Lyubomirsky, S. (2008). Rethinking Rumination. *Association for Psychological Science, 3*(5), 400-424. Retrieved from http://drsonja.net/wp-content/themes/drsonja/papers/NWL2008.pdf

O'Brien, K., Daffern, M., Chu, C. M., & Thomas, S. D. M. (2013). Youth gang affiliation, violence, and criminal activities: A review of motivational, risk, and protective factors. *Aggression and Violent Behavior, 18*(4), 417-425. doi: 10.1016/j.avb.2013.05.001

Osman, A., Hoffman, J., Barrios, F.X., Kopper, B. A., Breitenstein, J. L., & Hahn, S. K. (2002). Factor structure, reliability, and validity of the Beck Anxiety Inventory in adolescent psychiatric inpatients. *Journal of Clinical Psychology, 58*,(4), 443-456. doi: 10.1002/jclp.1154.

Osman, A., Kopper, B. A., Barrios, F., Gutierrez, P.M., & Bagge, C.L., (2004). Reliability and validity of the Beck Depression Inventory-II with adolescent psychiatric inpatients. *Psychological Assessment, 16*(2), 120-132. doi: 10.1037/1040-3590.16.2.12.

Osman, S., & Wood, J.L. (2018). Gang membership, mental illness, and negative emotionality: A systematic review of the literature. *International Journal of Forensic Mental Health, 17*(3), 223-246. Doi: 10.1080/14999013.2018.1468366

Owen, M., & Greeff, A. P. (2015). Factors attracting and discouraging adolescent boys in high-prevalence communities from becoming involved in gangs. *Journal of Forensic Psychology Practice, 15*(1), 1-32. doi: 10.1080/15228932.2015.977137

Pearce. P., Sewell, R., Cooper, M., Osman, S., Fugard, A., & Pybis, J. (2017). Effectiveness of school-based humanistic counselling for psychological distress in young people: Pilot randomized controlled trial with follow-up in an ethnically diverse sample. *Psychology and Psychotherapy, 90*(2), 138-155. doi: 10.1111/papt.12102.

Petering, R. (2016). Sexual risk, substance use, mental health, and trauma experiences of gang-involved homeless youth. *Journal of Adolescence, 48*(0), 73-81. doi: 10.1016/j.adolescence.2016.01.009

Peterson, D., Taylor, T. J., & Esbensen, F. A. (2004). Gang membership and violent victimization. *Justice Quarterly, 21*(4), 793-815. Doi: 10.1080/07418820400095991

Petticrew, M., & Roberts, H. (2008). Systematic reviews–do they 'work' in informing decision-making around health inequalities? *Health Economics, Policy, and Law, 3* (2), 197-211. Retrieved from https://core.ac.uk/download/pdf/13100428.pdf

Pirrie, A., Macleod, G., Cullen, M., & McCluskey, G. (2011). What happens to pupils permanently excluded from special schools and pupil referral units in England? *British Educational Research Journal, 37*(3), 519-538. doi: 10.1080/01411926.2010.481724

Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2016). Recommendations for creating better concept definitions in the organizational, behavioral, and social sciences. *Organizational Research Methods, 19*(2), 159-203. doi: 10.1177/1094428115624965

Polit, D. F., & Beck, C.T. (2010). Generalization in quantitative and qualitative research: Myths and strategies. *International Journal of Nursing Studies, 47*(11), 1451-1458. doi: 10.1016/j.ijnurstu.2010.06.004

Poynting, S., Noble, G., & Tabar, P. (2001). Middle eastern appearances: "Ethnic Gangs", Moral Panic, and Media Framing. *Australian and New Zealand Journal of Criminology, 34*(1), 67–90. doi: 10.1177/ 000486580103400105

Public Health England. (2015). *The mental health needs of gang-affiliated young people: A briefing produced as part of the ending gang and youth violence program.* London, United Kingdom: Hughes, Hardcastle, & Perkins. Retrieved from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/398674/The_mental_health_needs_of_gang-affiliated_young_people_v3_23_01_1.pdf

Pullmann, M. D., Kerbs, J., Koroloff, N., Veach-White, E., Gaylor, R., & Sieler, D. (2006). Juvenile offenders with mental health needs: Reducing recidivism using wraparound. *Crime & Delinquency, 52*(3), 375-397. doi: 10.1177/0011128705278632

Pyrooz, D. C., & Decker, S. H. (2011). Motives and methods for leaving the gang: Understanding the process of gang desistence. *Journal of Criminal Justice, 39*(5), 417-425. doi: 10.1016/j.jcrimjus.2011.07.001

Pyrooz, D. C., & Decker, S. H. (2013). Delinquent behavior, violence, and gang involvement in China. *Journal of Quantitative Criminology, 29*(2), 251-272. doi: 10.1007/s10940-012-9178-6

Pyrooz, D. C., & Sweeten, G. (2015). Gang membership between ages 5 and 17 years in the United States. *Journal of Adolescent Health, 56*(4), 414-419. doi: 10.1016/j.jadohealth.2014.11.018

Raby, C., & Jones, F. (2016). Identifying risks for male street gang affiliation: a systematic review and narrative synthesis. *The Journal of Forensic Psychiatry and Psychology, 27*(5): 601-644. doi: 10.1080/14789949.2016.1195005.

Radloff, L. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied psychological measurement, 1*(50), 385-401. doi: 10.13072/midss.120

Ring, C., & Kavussanu, M. (2017). The role of self-regulatory efficacy, moral disengagement and guilt on doping likelihood: A social cognitive theory perspective. *Journal of Sports Sciences, 36*(5), 1-7. doi: 10.1080/02640414.2017.1324206.

Roos, S., Hodges, E., & Salmivalli, C. (2014). Do guilt- and shame-proneness differentially predict prosocial, aggressive, and withdrawn behaviors during early adolescence? *Developmental Psychology, 50*(3), 941-946. doi: 10.1037/a0033904.

Rytila-Manninen, M., Lindberg, N., Haravuori, H., Kettunen, K., Marttunen, M., Joukamaa, M., Frojd, S. (2014). Adverse childhood experiences as risk factors for serious mental disorders and inpatient hospitalization among adolescents. *Child Abuse and Neglect, 38*(12), 2021-2032. doi: http://dx.doi.org/10.1016/j.chiabu.2014.10.008

Sala, J. P. (2009). "Tired of the gang life", but he had no other choices: A case study of the Jorge Dimitrov (Managua, Nicaragua). *Undercurrent, 6*(1), 28-34.

Schalkwijk, F., Stams, J. G., Stegge, H., Dekker, J., & Peen, J. (2016). The conscience as a regulatory function: Empathy, shame, pride, guilt, and moral orientation in delinquent adolescents. *International Journal of Offender Therapy and Comparative Criminology, 60*(6), 675-693. doi: 10.1177/0306624X14561830

Schardt, C., Adams, M. B., Owens, T., Keitz, S., & Fontelo, P. (2007). Utilization of the PICO framework to improve searching PubMed for clinical questions. *BMC Medical Informatics and Decision Making, 7*(16), 1-6. doi: 10.1186/1472-6947-7-16

Schilling, E. A., Aseltine, R. H., & Gore, S. (2007). Adverse childhood experiences and mental health in young adults: A longitudinal survey. *BioMed Central Public Health 7*(30), 1-10. doi: 10.1186/1471-2458-7-30.

Short, J. F. (1974). Youth, gangs, and society: Micro- and macro-sociological processes. *The Sociological Quarterly, 15*(1), 3-19. doi: 10.1111/j.1533-8525.1974.tb02122.x

Snethen, G. (2010). Preventing female gang involvement: Development of the joint-interstate care and balance model of mother/daughter leisure functioning. *Aggression and Violent Behavior, 15*(1), 42-48. doi: 10.1016/j.avb.2009.07.015

Steer, R.A., Kumar, G., Ranieri, W. F., & Beck, A. T. (1995) Use of the Beck Anxiety Inventory with Adolescent Psychiatric Outpatients. *Psychological Reports, 76*(2), 459-465. doi: 10.2466/pr0.1995.76.2.459

Stuewig, J., Tangney, J. P., Kendall, S., Folk, J. B., Meyer, C. R., & Dearing, R. L. (2015). Children's proneness to shame and illegal behaviors in young adulthood. *Child Psychiatry and Human Development, 46*(2), 217-227. doi:10.1007/s10578-014-0467-1

Sukhodolsky, D. G., Golub, A., & Cromwell, E. N. (2001). Development and validation of the anger rumination scale. *Personality and Individual Differences, 31*(5), 689-700. doi: 10.1016/S0191-8869(00)00171-9.

Sullivan, M. L. (2006). Are "gang" studies dangerous? Youth violence, local context, and the problem of reification. In J. F. Short, & L. A. Hughes (Eds.), *Studying youth gangs* (pp. 15–35). Oxford, UK: Altamira Press.

Sutherland, E. H. (1937). *The professional thief*. US: University of Chicago Press.

Sutherland, E. H., & Cressey, D. R. (1960). *A theory of differential association*. Principles of criminology, 6th Edition Chicago: Lippincott.

Sutherland, E. H., & Cressey, D. R. (1974). *Criminology*. New York: Lippincott.

Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics (6th ed.).* Boston, MA: Pearson Education.

Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), *Psychology of intergroup relations* (pp. 7–24). Chicago, IL: Nelson-Hall.

Tangney, J.P., Stuewig, J., & Martinez, A.G. (2014). Two faces of shame: The roles of shame and guilt in predicting recidivism. *Psychological Science, 25*(3), 799-805. doi: 10.1177/0956797613508790.

Tangney, J. P., Wagner, P. E., Gavlas, J., & Gramzow, R. (1991). *The test of self-conscious affect for adolescents (TOSCA-A)*. Fairfax: George Mason University.

Tapia, M. (2011). U.S. Juvenile arrests: Gang membership, social class, and labelling effects. *Youth and Society, 43*(4), 1407-1432. doi: 10.1177/0044118X10386083

Taylor, T. J., Freng, A., Esbensen, F-A, & Peterson, D. (2008). Youth gang membership and serious violent victimization: The importance of lifestyles and routine activities. *Journal of Interpersonal Violence, 23*(10), 1441-1464. doi: 10.1177/0886260508314306

Thornberry, T. P. (1987). Toward an international theory of delinquency. *Criminology*, *25*(4), 863-892. doi: 10.1111/j.1745-9125.1987.tb00823.x

Thornberry, T. P. (1998). Membership in youth gangs and involvement in serious and violent offending. In R. Loeber & D. P. Farrington (Ed). *Serious and violent juvenile offenders: Risk factors and successful interventions* (pp. 147-166). California: Sage Thousand Oaks.

Thornberry, T. P. (2001). Risk factors for gang membership. In J. Miller, C. L. Maxson, & M. W. Klein (Eds.), *The modern gang reader* (pp. 32–42) (2nd Ed.). Los Angeles: Roxbury.

Thornberry, T. P., & Krohn, M. D. (2001). The development of delinquency: An interactional perspective. In S. O. White (Ed.), *Handbook of youth and justice* (pp.289-305). New York: Plenum.

Thornberry, T. P., Krohn, M. D., Lizotte, A. J., & Chard-Wierschem, D. (1993). The role of juvenile gangs in facilitating delinquent behavior. *Journal of Research and Crime Delinquency, 30*(1), 55-87. Doi: 10.1007/978-0-387-71165-2_4

Thornberry, T. P., Krohn, M. D., Lizotte, A. J., Smith, C., & Tobin, K. (2003). *Gangs and delinquency in developmental perspective.* Cambridge: Cambridge University Press. ISBN: 0521814391

Thrasher, F. (1927). *The gang: A study of 1,313 gangs in Chicago.* Chicago: University of Chicago Press.

Tibbetts, S. G. (2003). Self-conscious emotions and criminal offending. *Psychological Reports, 93*(1), 101-126. doi: 10.2466/pr0.2003.93.1.101

Tolle, H. (2017). Gang affiliation as a measure of social structure in social structure social learning theory. *Deviant Behavior, 38*(8), 870-878. doi: 0.1080/01639625.2016.1206712

Tracy, J. L., & Robins, R. W. (2004). Putting the self into self-conscious emotions: A theoretical model. *Psychological Inquiry, 15*(2), 103-125. Retrieved from http://ubc-emotionlab.ca/wp-content/files_mf/publishedtargetarticle.pdf

Turner, J. R., Wheaton, B., & Lloyd, D. A. (1995). The Epidemiology of Social Stress. *American Sociological Review, 60.* 104-125. doi: 10.2307/2096348.

Tyrer, P. (2014). A comparison of DSM and ICD classifications of mental disorder. *Advances in Psychiatric Treatment, 20*(4), 280-285. doi: 10.1192/apt.bp.113.011296

Vasquez, E. A., Osman, S., & Wood, J. L. (2012). Rumination and the displacement of aggression in United Kingdom gang-affiliated youth. *Aggressive Behavior, 38*(1), 89-97. doi: 10.1002/ab.20419

Venkatesh, S. A. (1999). Community-based interventions into street gang activity. *Journal of Community Psychology, 27*(5), 551-567. doi: 10.1002/(SICI)1520-6629(199909)27:5<551::AID-JCOP4>3.0.CO;2-K

Vigil, J.D. (1988). *Barrio gangs: Street life and identity in southern California*. Austin: University of Texas Press.

Vinokur, A., & Selzer, M. L. (1975). Desirable versus undesirable life events: their relationship to stress and mental distress. Journal of Personality and Social Psychology, 32(2), 329-337. doi: 10.1037/0022-3514.32.2.329

Violence Reduction Unit. (2009). *Community Initiative to Reduce Violence: Second Year Report.* Scotland: Violence Reduction Unit. Retrieved from: http://actiononviolence.org/sites/default/files/CIRV_2nd_year_report.pdf

Warr, M. (2016). Crime and regret. *Emotion Review, 8*(3), 231-239. doi: 10.1177/1754073915586818

Watkins, A. M., & Melde, C. (2016). Bad medicine: The relationship between gang membership, depression, self-esteem, and suicidal behavior. *Criminal Justice and Behavior, 43*(8), 1107-1126. Doi: 10.1177/0093854816631797

Watkins, A. M., & Taylor, T. J. (2016). The prevalence, predictors, and criminogenic effect of joining a gang among urban, suburban, and rural youth. *Journal of Criminal Justice, 47,* 133-142. doi: 10.1016/j.jcrimjus.2016.09.001

Weathers, F.W., Litz, B.T., Keane, T.M., Palmieri, P.A., Marx, B.P., & Schnurr, P.P. (2013). *The PTSD Checklist for* DSM-5 *(PCL-5).* Retrieved from: www.ptsd.va.gov.

Weerman, F. M., Lovegrove, P. J., & Thornberry, T. (2015). Gang membership transitions and its consequences: Exploring changes related to joining and leaving a gang in two countries. *European Journal of Criminology*, *12*(1), 70-91. doi: 10.1177/1477370814539070

Weerman, F. M., Maxson, C. L., Esbensen, F., Aldridge, J., Medina, J., & van Gemert, F. (2009). Eurogang program manual background, development and use of the Eurogang instruments in multi-site, multi-method comparative research. Retrieved from http://www.umsl.edu/ccj/Eurogang/EurogangManual.pdf

Wiebe, E., Durepos G., & Mills, A. J. (2009). *Encyclopedia of Case Study Research* (Vol. 1). CA: Sage Publications.

Williams, P., & Clarke, B. (2016). *Dangerous associations: Joint enterprise, gangs, and racism. An analysis of the processes of criminalization of Black, Asian, and minority ethnic individuals.* Centre for Crime and Justice Studies. Retrieved from https://www.crimeandjustice.org.uk/sites/crimeandjustice.org.uk/files/Dangerous%20assocations%20Joint%20Enterprise%20gangs%20and%20racism.pdf

Wood, J. L. (2014). Understanding gang membership: The significance of group processes. *Group Processes and Intergroup Relations*, *17*(6), 710-729. doi: 10.1177/1368430214550344

Wood, J., & Alleyne, E. (2010). Street gang theory and research: Where are we now and where do we go from here? *Aggression and Violent Behavior, 15*(2), 100-111. doi:10.1016/j.avb.2009.08.005

Wood, J. L., & Dennard, S. (2017) Gang membership: links to violence exposure, paranoia, PTSD, anxiety and forced control of behavior in prison. *Psychiatry: Interpersonal and Biological Processes, 80*(1), 30-41. doi.org/10.1080/00332747.2016.1199185

Wood, J. L., Kallis, C., & Coid, J.W. (2017) Differentiating gang members, gang affiliates and violent men on their psychiatric morbidity and traumatic experiences. *Psychiatry: Interpersonal and Biological Processes, 80*(1), 221-235. doi: 10.1080/00332747.2016.1256144

Yin, R. K. (2014). *Case Study Research: Design and Methods.* Thousand Oaks: Sage Publications. ISBN: 978148330200-3

Zigmond, A. S., & Snaith, R. P. (1983). The hospital anxiety and depression scale. *Acta Psychiatrica Scandinavica, 67*(6), 361-370. doi: 10.1111/j.1600-0447.1983.tb09716.x

Zeelenberg, M., & Breugelmans, S. M. (2008). The role of interpersonal harm in distinguishing regret from guilt. *Emotion, 8*(5), 589-596. doi: 10.1037/a0012894

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Appendix A

Definition of Terms

Antisocial Personality Disorder:

"An enduring pattern of unlawful behavior, aggressiveness, deceitfulness, impulsivity, irresponsibility, reckless disregard for the welfare of others, and/or remorselessness manifest during adulthood, as well as evidence of conduct disorder in childhood or adolescence (see Edens, Kelley, Skeem, Lilienfeld, & Douglas, 2015. p. 123).

Anxiety:

Anxiety is characterized by feelings of unease and worry experienced consistently and effecting daily life. (APA, 2013).

Depression:

Depression is characterized by a state of consistent low mood. (APA, 2013).

Gang:

A durable, street-orientated youth group whose involvement in illegal activity forms part of its group identity (Weerman et al., 2009, p. 20).

Guilt:

Guilt can arise from wrongful conduct, but is related to regret over a particular act, rather than an attack on the self. Guilt has been found to be reparative and motivates the individual to correct his/her transgression (Lewis, 1971).

Mental Health:

A state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and can contribute to her or his community (World Health Organization, 2014).

Paranoia:

It is characterized by a sense of fear that others wish to cause you harm (see Bebbington et al., 2013). Paranoid thinking may characterize mental health, such as psychosis, if experienced consistently and regularly, but it is also present among the general population.

Perpetration Induced Trauma:

Individuals who commit acts of violence or inflict harm on others may suffer trauma symptoms as a consequence (see Kerig et al., 2016).

Posttraumatic Stress Disorder:

A form of anxiety disorder that develops following exposure to an extremely threatening or catastrophic event, such as sever violence. Symptoms include re-experiencing the traumatic event, avoidance of stimuli associated with the trauma, feeling emotionally flat, and increased arousal (Public Health England: Meeting the mental health needs of gang-affiliated young people, 2015).

Rumination:

"The process of thinking perseveratively about one's feelings and problems rather than in terms of the specific content of thoughts" (Nolen-Hoeksema, Wisco, & Lyubomirsky, 2008. p. 400).

Self-conscious emotions:

These types of emotions require self-awareness and mental representations of the self. These emotions include embarrassment, guilt, pride, or shame. (Tracy & Robins, 2004).

Shame:

Shame can occur due to committing a transgression or behavior, which causes the individual to attribute this to an inadequate self (e.g., "*I* am awful, *I* can't believe *I* did that"; Lewis, 1971).

Appendix B

Kmet et al. (2004) inclusion and quality criteria for quantitative studies included in systematic review.

Question No.	Questions for inclusion of quantitative studies
1.	Is the question or objective sufficiently described?
2.	Is the design evidence and appropriate to answer the study question?
3.	Is the method of subject selection (and comparison group selection, if applicable) or source of information input variables (e.g., for decision analysis) described and appropriate?
4.	Are the subject (and comparison group, if applicable) characteristics or input variables information (e.g., for decision analysis) sufficiently described?
5.	If random allocation to treatment group was possible, is it described?
6.	If interventional and blinding of investigators to intervention was possible is it reported?
7.	If interventional and blinding of subjects to intervention was possible, it is reported?
8.	Are outcome and (if applicable) exposure measure(s) well defined and robust to measurement/misclassification bias? And are means of assessment reported?
9.	Is the sample size appropriate?
10.	Is the analysis described and appropriate?
11.	Is some estimate of variance (e.g., confidence intervals, standard errors) reported for the main outcomes and results (e.g., those directly

	addressing the study question/objective upon which the conclusions are based)?
12.	Are confounding factors controlled for?
13.	Are results reported in sufficient detail?
14.	Do the results support the conclusions?
Summary Score:	**Total sum:** (number of "yes" * 2) + (number of "partials" * 1) **Total possible sum:** 28 – (number of "N/A" * 2) **Summary Score:** total sum / total possible sum

Appendix C

Kmet et al. (2004) inclusion and quality criteria for qualitative studies included in systematic review.

Question No.	Questions for inclusion of quantitative studies
1.	Is the question or objective sufficiently described?
2.	Is the design evidence and appropriate to answer the study question?
3.	Is the context for the study clear?
4.	Connection to a theoretical framework/wider body of knowledge?
5.	Sampling Strategy described and systematic?
6.	Data collection methods clearly described and systematic?
7.	Data analysis clearly described and systematic?
8.	Use of verification procedure to establish credibility?
9.	Conclusions supported by the results?
10.	Reflexivity of the account?
Summary Score:	**Total sum:** (number of "yes" * 2) + (number of "partials" * 1)
	Total possible sum: 20
	Summary Score: total sum / total possible sum

Appendix D

Quality assessment of quantitative studies (Kmet et al., 2004).

Author	**Q1**	**Q2**	**Q3**	**Q4**	**Q5**	**Q6**	**Q7**	**Q8**	**Q9**	**Q10**	**Q11**	**Q12**	**Q13**	**Q14**	**Sum Score**
Alleyne & Wood (2010)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	N/A	N/A	N/A	Yes (2)	Yes (2)	Yes (2)	Yes (2)	No (0)	Yes (2)	Partial (1)	**Total sum:** 19 **Total possible sum:** 22 **Summary score:** 0.86
Ang et al. (2015)	Yes (2)	Yes (2)	Partial (1)	Partial (1)	N/A	N/A	N/A	Yes (2)	Partial (1)	Yes (2)	Yes (2)	Partial (1)	Yes (2)	Partial (1)	**Total sum:** 17 **Total possible sum:** 22 **Summary score:** 0.77

Author	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Sum Score
Cepeda et al. (2016)	Yes (2)	Partial (1)	Yes (2)	Partial (1)	N/A	N/A	N/A	Partial (1)	No (0)	Partial (1)	Yes (2)	Yes (2)	Yes (2)	Partial (1)	**Total sum:** 15 **Total possible sum:** 22 **Summary Score:** 0.68
Coid et al. (2013)	Yes (2)	Yes (2)	Yes (2)	Partial (1)	N/A	N/A	N/A	Partial (1)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	**Total sum:** 20 **Total possible sum:** 22 **Summary Score:** 0.91

Author	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Sum Score
Corcoran et al. (2005)	Yes (2)	Partial (1)	Partial (1)	Partial (1)	N/A	N/A	N/A	Yes (2)	Partial (1)	Partial (1)	Partial (1)	Yes (2)	Partial (1)	Partial (1)	**Total sum:** 14 **Total possible sum:** 22 **Summary Score:** 0.66
DeLisi et al. (2019)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	N/A	N/A	N/A	Yes (2)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	**Total sum:** 22 **Total possible score:** 22 **Summary Score:** 1

Author	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Sum Score
Dmitrieva et al (2014)	Yes (2)	Yes (2)	Yes (2)	Partial (1)	N/A	N/A	N/A	Yes (2)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	**Total sum:** 21 **Total possible sum:** 22 **Summary Score:** 0.95
Dupere et al. (2007)	Yes (2)	Partial (1)	Yes (2)	Yes (2)	N/A	N/A	N/A	Yes (2)	Yes (2)	Yes (2)	Yes (2)	Partial (1)	Yes (2)	Yes (2)	**Total sum:** 20 **Total possible sum:** 22 **Summary Score:** 0.91

Author	**Q1**	**Q2**	**Q3**	**Q4**	**Q5**	**Q6**	**Q7**	**Q8**	**Q9**	**Q10**	**Q11**	**Q12**	**Q13**	**Q14**	**Sum Score**
Egan & Beadman (2011)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	N/A	N/A	N/A	Yes (2)	Yes (2)	Yes (2)	Yes (2)	Partial (1)	Yes (2)	Yes (2)	**Total sum: 20 Total possible sum: 22 Summary Score: 0.91**
Harper et al. (2008)	Yes (2)	Yes (2)	Partial (1)	Partial (1)	N/A	N/A	N/A	Yes (2)	Partial (1)	Yes (2)	Partial (1)	No (0)	Yes (2)	Yes (2)	**Total sum:** 16 **Total possible sum:** 22 **Summary Score:** 0.73

Author	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Sum Score
Kerig et al. (2016)	Yes (2)	Yes (2)	Partial (1)	Yes (2)	N/A	N/A	N/A	Yes (2)	Yes (2)	Yes (2)	Partial (1)	Partial (1)	Yes (2)	Partial (1)	**Total sum:** 18 **Total possible sum:** 22 **Summary Score:** 0.82
Li et al. (2002)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	N/A	N/A	N/A	Yes (2)	Partial (1)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	**Total sum:** 21 **Total possible sum:** 22 **Summary Score:** 0.95

Author	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Sum Score
Madan et al. (2011)	Yes (2)	Yes (2)	Partial (1)	Partial (1)	N/A	N/A	N/A	Yes (2)	Partial (1)	Partial (1)	Partial (1)	Partial (1)	Partial (1)	Partial (1)	**Total sum:** 14 **Total possible sum:** 22 **Summary Score:** 0.64
Mallion & Wood (2018)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	N/A	N/A	N/A	Yes (2)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	**Total sum:** 22 **Total possible sum:** 22 **Summary Score:** 1

Author	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Sum Score
Melde & Esbensen (2013)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	N/A	N/A	N/A	Yes (2)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	**Total sum:** 22 **Total possible sum:** 22 **Summary Score:** 1
Vasquez et al. (2012)	Yes (2)	Partial (1)	Partial (1)	Yes (2)	N/A	N/A	N/A	Partial (1)	Yes (2)	Yes (2)	Partial (1)	Yes (2)	Yes (2)	Partial (1)	**Total sum:** 17 **Total possible sum:** 22 **Summary Score:** 0.77

Author	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Sum Score
Watkins & Melde (2016)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	N/A	N/A	N/A	Yes (2)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	**Total sum:** 22 **Total possible sum:** 22 **Summary Score:** 1
Wood & Dennard (2017)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	N/A	N/A	N/A	Yes (2)	Partial (1)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	Partial (1)	**Total sum:** 20 **Total possible sum:** 22 **Summary Score:** 0.91

Author	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Sum Score
Wood et al. (2017)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	N/A	N/A	N/A	Yes (2)	Yes (2)	Yes (2)	Partial (1)	Yes (2)	Yes (2)	Partial (1)	**Total sum:** 20 **Total possible sum:** 22 **Summary Score:** 0.91

Quality assessment of qualitative studies (Kmet et al., 2004).

Author	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Sum Score
Bailey et al. (2014)	Yes (2)	Partial (1)	Yes (2)	Yes (2)	No (0)	Partial (1)	Partial (1)	No (1)	Yes (2)	Yes (2)	**Total sum:** 13 **Total possible sum:** 20 **Summary Score:** 0.65

Appendix E

Studies included in Systematic Review.

Author(s)	Study Aims	Sample	Comparison Group	Design/Measures	Outcomes
Alleyne & Wood (2010) United Kingdom	The study explored the behavioral, psychological, and social characteristics specific to gang-related crime compared to group (non-gang) crime. Two objectives were proposed (1) identify the typology of crime committed by gang members and (2) examine what the specific characteristics linked to gang members compared to non-gang members.	**Total:** *n* = 798 (male: *n* = 566; female: *n* = 232). **Gang members:** *n* = 59 (male: *n* = 38; female: *n* = 21).	**Non-gang youth aged 12 – 18 years:** *n* = 739 (male: *n* = 528; female: *n* = 211).	**Design:** Quantitative, cross-sectional design. **Gang membership:** Eurogang Youth Survey.	The results revealed differences in the types of crime committed by gang vs. non-gang youth whereby gang members engaged in higher levels of group crime overall. In addition, specific types of criminal activity committed more so by gang members included: threatening people, robbery, theft and destroying property.

Author(s)	Study Aims	Sample	Comparison Group	Design/Measures	Outcomes
Ang et al. (2015) Singapore	The study examined whether delinquency, psychopathy, aggression and school engagement was significantly associated with gang membership.	**Total:** *n* = 1027 **Gang members:** *n* = 51 (based on 5% prevalence rate).	**Non-gang affiliated youth:** *n* = 976.	**Design:** Quantitative, cross-sectional study. **Gang membership:** Participants were asked to self-report whether they had ever been involved in gang fights or belonged to a gang. **Psychopathy (including callous-unemotional behavior):** Antisocial processes screening device.	A significant relationship between psychopathy and gang membership was not found.

Author(s)	Study Aims	Sample	Comparison Group	Design/Measures	Outcomes
Bailey et al. (2014) United States	The study aimed to provide a case study examination of a young, male, ex-gang member named GH engaging in an intervention program and assess outcomes including psychological well-being, delinquency, and employment.	Previous gang member aged 18 years, of Latin-American descent: *n* = 1.	N/A	**Design:** Qualitative, case study. **Gang membership:** Historical case notes documenting gang involvement at age 16. **Mental health:** Mini-International Neuropsychiatric Interview. **Anxiety:** Anxiety Disorders Interview Schedule (ADIS-IV). **PTSD:** PTSD section of ADIS-IV.	In his initial screening using M.I.N.I, GH was diagnosed with social anxiety disorder, but no other mental health difficulties.. A psychological assessment towards the end of his intervention program revealed that GH presented symptoms consistent with a diagnosis of PTSD. Consequently, unrecognized PTSD resulted in recidivism and lapsed success of the treatment program.

Author(s)	Study Aims	Sample	Comparison Group	Design/Measures	Outcomes
Beresford & Wood (2016) United Kingdom	A review of gang and other research examining the links between gang membership and mental health conditions.	N/A	N/A	**Design:** Theoretical paper/literature review.	Using a wide range of literature, such as referring to child soldiers and mental health, the authors concluded that gang membership exposes members to a range of difficulties, including psychological and social problems. The authors suggest directions for future research and the development of interventions.

Author(s)	Study Aims	Sample	Comparison Group	Design/Measures	Outcomes
Cepeda et al. (2016) United States	The authors examined childhood trauma by comparing traumatic events between Mexican American gang members and delinquents with normative samples of adolescent inpatients and an undergraduate sample.	**Total:** *n* = 75 males. **Gang members:** *n* = 50.	**Non-gang delinquent group:** *n* = 25.	**Design:** Quantitative, cross-sectional, pilot study. **Gang membership:** Defined by Valdez and Sifaneck (2004; as cited in Cepeda et al., 2016) "…a group of adolescents who engage in collective acts of delinquency and violence and are perceived by others and themselves as a distinct group" (p. 206). **Trauma:** Childhood Trauma Questionnaire.	Findings revealed gang members reported lower levels on all categories of abuse excluding neglect. There was no significant difference between groups. The emotional needs of gang members seem to have been met and in part characterized by familial gang joining due to economic deprivation and social exclusion, more so than emotional abuse.

Author(s)	Study Aims	Sample	Comparison Group	Design/Measures	Outcomes
Coid et al. (2013) United Kingdom	To examine associations between gang membership, psychiatric morbidity, violence and use of mental health services.	**Total:** *n* = 4,664 men only aged 18-34 years. **Gang members:** *n* = 108.	**Non-violent men:** *n* = 3,285. **Violent men:** *n* = 1,272.	**Design:** Quantitative, cross-sectional survey. **Gang membership:** Self-report: "Are you currently a member of a gang?" **Mental health**: Questions from Structured Clinical Interview for DSM-IV Personality Disorders for ASPD. The Hospital Anxiety and Depression Scale. Alcohol and Drug Use Identification Test.	Findings revealed increased levels of psychiatric morbidity (excluding depression), service use, positive attitudes towards violence and violent victimization among gang members compared to violent and non-violent men. Violent characteristics accounted for high levels of anxiety and psychosis in gang members, but not violent men.

Author(s)	Study Aims	Sample	Comparison Group	Design/Measures	Outcomes
Corcoran et al. (2005) United States	The study addressed whether incarcerated gang members report more mental health symptoms and behavioral difficulties, increased antisocial criminality, and whether the differences between gang and non-gang members were predicted by mental health symptomology.	**Total:** *n* = 73 male participants aged 13 – 19 years. **Gang members:** *n* = 24.	**Non-gang members:** *n* = 49.	**Design:** Quantitative, cross-sectional study. **Gang membership:** Not sufficiently described, but self-report membership briefly indicated. **Mental health**: Oregon Mental Health Referral Checklist (OMHRC). The Child Behavior Checklist (CBCL) was used to identify behaviors, such as anxiety and depression.	Analyses revealed that compared to non-gang members, gang members experienced greater mental health symptoms (e.g., hallucinations, suicide attempts, and anxiety), behavior problems (e.g., aggressiveness and delinquency), and reported increased levels of antisocial conduct 12 months prior to their incarceration. However, the association between mental health and levels of antisocial criminality was not supported.

Author(s)	Study Aims	Sample	Comparison Group	Design/Measures	Outcomes
DeLisi et al. (2019)	The study aimed to examine whether behavioral disorders mediated the relationship between gang membership and criminality.	**Total:** Data from retrospective records (*n* = 863). Gang activity across the life course (*n* = 41).	**Non-gang members:** *n* = 822.	**Gang membership:** Three measures were used to analyze retrospective data: (1) gang activity during childhood; (2) security threat group ((0) no evidence, (1) some evidence, (2) definite evidence); and (3) summed score of gang activity during childhood and in prison where a higher score in dicated continuous gang involvement.	Regression analyses revealed behavioral disorders mediated the relationship between gang membership and criminality.

Author(s)	Study Aims	Sample	Comparison Group	Design/Measures	Outcomes
Dmitrieva et al. (2014) United States	The study examined how self-esteem, psychopathy, and psychosocial maturity relate to youth gang status (low-level vs. gang leader), both as predictors and consequences of gang membership.	**Total (all male):** *n* = 1,170. **Gang Leaders:** *n* = 130. **Affiliate members:** *n* = 305.	**Delinquent non-gang youth:** *n* = 735.	**Design:** Quantitative, longitudinal study over 7-year period. **Gang membership:** Self-reported gang membership: "Have you ever or are you currently in a gang?" **Personality Disorder**: Youth Psychopathic Traits Inventory.	Both similarities and differences were found between low-level and high-level gang members. Over the period of 7 years, both gang members and gang leaders showed higher levels of psychopathy. Thus, both low-level members and gang leaders showed higher levels on dimensions of grandiose-manipulation, callousness-unemotionality, and impulsiveness-irresponsibility.

Author(s)	Study Aims	Sample	Comparison Group	Design/Measures	Outcomes
Dupere et al. (2007) Canada	The study investigated whether neighborhood characteristics, such as residential instability or economic deprivation when combined with individual's predisposition to psychopathic traits predicted youth gang joining.	**Total (all male):** *n* = 3,522. **Gang members:** *n* = 211.	**Non-gang youth:** *n* = 3,311.	**Design:** Longitudinal survey of adolescents using parental reports. **Gang membership:** Participants self-reported whether they were "part of a gang that broke the law by stealing, hurting people, damaging property, etc." **Mental health:** Anxiety levels were assessed by parental self-reports adapted from the Montreal Longitudinal Survey.	Findings revealed that youth with pre-existing psychopathic tendencies were more likely to join a gang, and this effect was heightened when youth resided in residentially unstable as opposed to economically disadvantaged areas.

Author(s)	Study Aims	Sample	Comparison Group	Design/Measures	Outcomes
Egan & Beadman (2011) United Kingdom	The study explored the Five-Factor Model of Personality (FFM) to examine personality constructs, including an antisocial personality and gang embeddedness.	**Total:** 162 adult male prisoners in a Category B prison. **Gang members:** Gang membership as youth or prior to custody (n = 58); current prison gang member (*n* = 13); future intention to join a gang (*n* = 15).	**Non-gang members:** (*n* = 76)	**Gang membership:** Four-question, self-report scale**. Social Variables:** Positive reinforcement, punishment, commitment to negative peers, commitment to positive peers, and social isolation. **Personality:** Self-control, impulsivity, self-esteem, neuroticism, agreeableness, conscientiousness and extraversion were all assessed.	A path analysis revealed how antisocial personality disorder account for half of the variance for gang embeddedness. Antisocial personality constructs also predicted previous convictions.

Author(s)	Study Aims	Sample	Comparison Group	Design/Measures	Outcomes
Harper et al. (2008) United States	The study investigated outcomes for negative affect, substance use, and antisocial behavior among homeless male youth aged 16 to 21 years.	**Total:** *n* = 69 **Gang members:** *n* = 31.	**Non-gang members:** *n* = 38.	**Design:** Quantitative, cross-sectional study. **Gang membership:** 1 self-report item: "Are you a member of a gang?" **Mental health:** **Anxiety:** State-Trait Anxiety Inventory. **Depression:** Center for Epidemiological Studies-Depression Scale.	Gang-involved homeless youth reported greater levels of antisocial behavior (e.g., gang fights and vandalism), negative affective states of anxiety and depression and violence compared to non-gang youth.

Author(s)	Study Aims	Sample	Comparison Group	Design/Measures	Outcomes
Harris et al. (2013) United States	The study aimed to investigate levels of psychiatric disorders (adjustment disorder, conduct disorder, PTSD, substance abuse, oppositional defiant disorder, and substance abuse) among adolescent delinquents. The author's reviewed data to compare outcomes on these mental health indicators for gang members, gang affiliates and non-gang members.	**Total (males and females):** *n* = 7,615. **Gang members:** *n* = 833. **Gang affiliates:** *n* = 2,911.	**Delinquent population of non-gang members:** *n* = 5,537.	**Design:** Quantitative, retrospective record review of mental health data obtained professionals at a detention center. Data was obtained through clinical interview and available medical records. **Gang membership:** Participants were asked to self-report gang membership. **Mental health**: Obtained through clinical interviews and medical records.	Findings supported the author's conclusions whereby gang members, compared to non-gang members, revealed greater odds of suffering from conduct disorder, oppositional defiant disorder, PTSD, and current (and not past) substance abuse. However, no differences between PTSD levels for gang affiliates and non-gang members were found.

Author(s)	Study Aims	Sample	Comparison Group	Design/Measures	Outcomes
Kelly (2010) United States	A review of the literature on the psychological effects of exposure to gang related violence among adolescents. The review focused on papers whereby community violence included gang violence and papers which solely focused on gang violence.	The report included an inclusion and exclusion criteria whereby comparable populations were included, with a consideration of gang vs non-gang and gender differences.	N/A	N/A	The report revealed methodological issues were present amongst research examining the psychological influence of exposure to gang violence in the community. It found that research is lacking in this area, but internalizing (e.g., depression and anxiety) and externalizing (e.g., antisocial behavior) were experienced by adolescents exposed to some form of community violence relating to gang activity.

Author(s)	Study Aims	Sample	Comparison Group	Design/Measures	Outcomes
Kerig et al. (2013)	A theoretical paper examining research on child soldiers and their experiences of PTSD, developmental, and perpetration induced trauma due to violence exposure. The authors applied research findings from work with child soldiers to inform a research which assesses trauma exposure among gang members, given their similar exposure to violence.	N/A	N/A	**Design:** Theoretical, literature review identifying similar themes from literature on child soldiers to the study of trauma among gang members.	The review suggests that future research on gang involvement and associated trauma can learn from previous research on child soldiers. They suggest that understanding the moral agency and varying experiences of trauma, interventions for gang desistence would be better informed.

Author(s)	Study Aims	Sample	Comparison Group	Design/Measures	Outcomes
Kerig et al. (2016) United States	The study explored the construct of perpetration-induced trauma (PT), symptoms of posttraumatic stress and gang membership among a youth sample aged 11 to 18 years from a detention center.	**Total:** *n* = 660 (males: *n* = 484; females: *n* = 176). **Gang members:** *n* = 239 (male: *n* =; 175 females: *n* = 64).	**Non-gang members:** *n* = 421 (male: *n* = 312; female: *n* = 109).	**Design:** Quantitative, cross-sectional study. **Gang membership:** Participants were asked three questions to self-report either current or previous gang membership. **Mental health: Trauma Exposure and PTSS:** UCLA Posttraumatic Stress Disorder Reaction Index – Adolescent Version.	Analyses revealed that females were more likely to report trauma based emotional abuse, whereas males were more likely to experience and witness community violence. A main effect for gang membership was found whereby gang members reported heightened trauma exposure. No gender effects were found, but gang members, compared to non-gang members, were more likely to experience perpetration-induced trauma.

Author(s)	Study Aims	Sample	Comparison Group	Design/Measures	Outcomes
Li et al. (2002) United States	Differences between male African-American, gang and non-gang members were explored on levels of violence exposure, resilience and distress (mainly symptoms like PTSD) to explore whether risk behaviors or gang membership itself was associated with the study outcomes.	**Total:** *n* = 349. **Current gang members:** *n* = 24 (male *n* = 16; female *n* = 8). **Former gang members:** *n* = 32 (male *n* = 19; female *n* = 13).	**Non-gang members:** *n* = 290 (male *n* = 158; female *n* = 132).	**Design:** Quantitative, cross-sectional study. **Gang membership:** Participants were asked whether they had been in a gang "never, more than a year ago, in the past year, in the past month, and in the past week". **Mental health:** Psychological distress was measured using the Checklist of Children Distress Symptoms.	Findings revealed no differences between current and former gang members. Compared to non-gang members, current, and former gang members suffered elevated levels of delinquency, psychological distress indicative of PTSD, and were victims of violence. Furthermore, when involvement with risk was controlled for, gang members experienced PTSD symptoms due to gang membership, rather than risk involvement.

Author(s)	Study Aims	Sample	Comparison Group	Design/Measures	Outcomes
Madan et al. (2011) United States	This study investigated whether the relationship between gang membership and internalizing problems, such as anxiety, depression and suicidal behavior was mediated by witnessing community violence and delinquency.	**Total:** *n* = 589 (female *n* = 290; male *n* = 299). **Gang members:** *n* = 31 (gender unspecified).	**Non-gang members:** *n* = 572.	**Design:** Quantitative, cross-sectional survey. **Gang membership:** Self-report: "I belong to a gang" – with participants responding ("True for me" vs. "Not true for me") from the 'Attitudes Towards Gangs' questionnaire. **Mental health**: Anxiety: Revised Children's Manifest Anxiety Scale 28-item scale. Depression: DISC Predictive Scale.	Gang membership was associated with higher levels of suicidal behavior, but not with anxiety or depression. Furthermore, the relationship between gang membership and suicidal behavior was mediated by witnessing community violence and delinquency.

Author(s)	Study Aims	Sample	Comparison Group	Design/Measures	Outcomes
Mallion & Wood (2018) United Kingdom	To examine gang members and non-gang members on emotional disposition, including trait emotional intelligence (TEI), ASPD, callous-unemotional (CU) traits, and angry rumination.	Street gang members (n = 44).	Non-gang offenders (n = 29).	**Design:** Quantitative, cross-sectional study. **Gang Membership:** Eurogang definition of street gangs. **TEI:** The TEI Questionnaire-Short Form. **ASPD:** Millon Clinical Multiaxial Inventory (Third Edition; MCMI-III) **CU Traits:** The Inventory of CU Traits (ICU) **Angry Thoughts:** The Anger Rumination Scale.	Gang members, compared to non-gang members, reported higher levels across all outcomes, but no significant differences were found between groups on self-reported CU traits.

Author(s)	Study Aims	Sample	Comparison Group	Design/Measures	Outcomes
Melde & Esbensen (2013) United States	This study examined how changes in gang status (e.g., current vs. former gang members) may impact on 'turning points' in an individual's life with an examination of delinquency levels and emotions.	Gang-involved youth (male and female): *n* = 512.	Gang membership was assessed at each wave of the study, with 6 time-points in total. Thus, comparison groups included former gang members at each time point who had desisted from gang involvement.	**Design:** Quantitative, longitudinal study. **Gang membership:** Participants were asked to self-report gang membership through the item "Are you currently a gang member?" **Guilt:** A 7-item scale was used to assess feelings of guilt on a scale ranging from "not very guilty; bad to very guilty/ bad).	Findings revealed that youth involved in gangs suffered from long-lasting effects and whilst delinquency levels decreased following involvement in a gang, these levels failed to correspond to pre-gang levels of delinquent behavior. Furthermore, gang-involved young people did not experience feelings of guilt for violating acceptable norms of behavior.

Author(s)	Study Aims	Sample	Comparison Group	Design/Measures	Outcomes
Petering (2016) United States	An examination of gang involvement, negative risk taking behaviors, substance abuse, mental health outcomes and traumatic experiences.	**Total*:*** *n* = 505 **Homeless youth gang members:** *n* = 86. (female *n* = 21; male *n* = 65). **Homeless gang-affiliated youth:** *n* = 232 (female *n* = 67; male *n* = 165).	**Non-gang youth:** *n* = 187 (female *n* = 52; male *n* = 135).	**Design:** Quantitative, cross-sectional study. **Gang membership:** Participants were asked whether they were or had ever been gang members and asked three questions to indicate affiliation. **Mental health:** Depression: Centre for Epidemiological Studies Depression (CES-D) Scale, 10-item measure. **PTSD:** Primary Care PTSD Screen.	Significant differences were found between gang, gang affiliate and non-gang homeless youth. Gang-involved youth were 6 times more likely to suffer from depression, suicide (only gang members and not affiliates), and symptoms of PTSD and trauma variables.

Author(s)	Study Aims	Sample	Comparison Group	Design/Measures	Outcomes
Vasquez et al. (2012) United Kingdom	This study examined the association between gang affiliation, rumination and aggression among youth aged 13 to 16 years affiliated to gangs.	**Total:** *n* = 323 (male: *n* = 185; female: *n* = 125). **Gang members:** *n* = unspecified.	**Non-gang youth:** *n* = unspecified.	**Design:** Quantitative, cross-sectional study. **Gang membership:** Participants self-reported gang membership using three items: (1) "I have friends that are members of a gang"; (2) I spend time with people who belong to a gang"; (3) "I consider myself as belonging to a gang". **Rumination:** The angry rumination scale, a 19-item measure.	The findings showed that male, gang affiliated youth engage in ruminative processes whereby they repetitively thought about their proactive experiences. Furthermore, it was found through regression analyses that rumination, after controlling for confounding variables, such as anger, hostility, and irritability, independently predicted aggression displaced towards innocent individuals.

Author(s)	Study Aims	Sample	Comparison Group	Design/Measures	Outcomes
Watkins & Melde (2016) United States	To examine the relationship between mental health indicators, such as depression, self-esteem, and suicidal behaviors and thoughts, the authors addressed two questions: (1) whether a relationship exists between mental health indicators and the decision to join a gang and (2) whether gang membership exacerbates these same mental health indictors.	**Gang membership (wave 2 only):** *n* = 704.	**Wave 1 total:** *n* = 21,000 participants **Wave 2 total:** *n* = 14,738 **Non-gang members at Wave 2:** 12,328.	**Design:** Quantitative, longitudinal study across two time-points (over 12 months). **Gang membership:** Self-reported gang membership using a single-item measure, participants were asked if they had been initiated into a named gang in the preceding 12 months. **Mental Health:** Modified version of the CES-D scale using a 19-item version.	Results showed that youth who became gang members presented internalizing symptoms (e.g., depression and suicidal thoughts), and externalizing behaviors (e.g., attempted suicide) at levels that exceeded that of the population. Findings also revealed that gang membership worsened these pre-existing difficulties leading to significantly higher levels of depression, suicidal thoughts and behaviors.

Author(s)	Study Aims	Sample	Comparison Group	Design/Measures	Outcomes
Wood & Alleyne (2010) United Kingdom	To synthesize the current theoretical and empirical state of gang research from a variety of disciplines, such as Criminology *and* Psychology.	N/A	N/A	A theoretical framework using theory knitting to combine elements of valuable models applicable to gang membership.	The role of psychology is significant to the study of gang membership with the proposition of a multi-disciplinary integrated model, which considers mental health problems as a factor in the study of gangs.

Author(s)	Study Aims	Sample	Comparison Group	Design/Measures	Outcomes
Wood & Dennard (2017) United Kingdom	The study investigated the differences between street gang and non-gang prisoners on outcomes of violence exposure, paranoia, anxiety, PTSD, forced behavior control and segregation.	**Total:** *n* = 65 (male only). **Gang members:** *n* = 32.	**Non-gang members:** *n* = 33.	**Design:** Quantitative, cross-sectional study. **Gang Membership: 21** Eurogang Youth Survey items. **Mental Health:** Millon Clinical Multiaxial Inventory – Third Edition (MCMI-III).	The study reported that street gang prisoners experienced higher levels of anxiety, paranoia, and PTSD compared to their non-gang counter-parts.

Author(s)	Study Aims	Sample	Comparison Group	Design/Measures	Outcomes
Wood et al. (2017) United Kingdom	To examine how and affiliate gang members compare to violent men on psychiatric morbidity, attitudes/involvement in violence, substance abuse, and traumatic events.	**Total (male only):** *n* = 1,539. **Gang members:** *n* = 108. **Affiliate gang members:** *n* = 119.	**Violent men:** *n* = 1,312.	**Design:** Quantitative, cross-sectional survey. **Gang membership:** Self-reported: "Are you currently a member of a gang?" Gang members agreed they were in a gang and committed one or more serious offences. Affiliate gang members reported involvement in violence and gang fights but did not identify as gang members.	Findings demonstrated a high-to-low gradient from to affiliate to violent men on psychiatric morbidity, with anxiety, ASPD, pathological gambling, stalking and substance dependence highest among members followed by affiliate and violent men. Levels of suicide and self-harm were similar for gang and affiliate members. Depression levels were stable across groups.

Appendix F

Research Informed Consent Form

Title of Project:		**Ethics Approval Number:**	
Investigator(s):		**Researcher Email:**	

Please read the following statements and, if you agree, initial the corresponding box to confirm agreement:

	Initials
I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	
I understand that my participation is voluntary, which means that I do not have to take part and that I am free to withdraw at any time without giving any reason.	
I understand that my data will be treated confidentially and any publication resulting from this work will report only data that does **not** identify me.	
I freely agree to participate in this study.	

Signatures:

Name of participant (block capitals)	**Date**	**Signature**
Researcher (block capitals)	**Date**	**Signature**

If you would like a copy of this consent form to keep, please ask the researcher. If you have any complaints or concerns about this research, you can direct these, in writing, to the Chair of the Psychology Research Ethics Committee by email at: psychethics@kent.ac.uk. Alternatively, you can contact us by post at: Ethics Committee Chair, School of Psychology, University of Kent, Canterbury, CT2 7NP.

Appendix G

Debrief Sheet

Research investigating group membership, mental well-being, emotions, and behavior

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Thank you for completing the interview as part of this case study research. Your responses will help us broaden our understanding about a range of issues, including the factors that may link to gang involvement, how gang membership influences development at various levels, and the processes linked to desistence.

ANONYMITY AND CONFIDENTIALITY: Your information and participation in this project will be kept strictly anonymous and confidential. The interview transcription will be stored securely and any data obtained will be stored in anonymized form.

INFORMATION: Should the interview have resulted in any distress, please inform the researcher(s) as they will be able to discuss alternative forms of external support services that may be helpful.

If you have further questions or concerns regarding your participation in this study, please contact Sarah Osman at so302@kent.ac.uk or the research supervisor, Dr. Jane Wood at J.L.Wood@kent.ac.uk. The materials used in this study have been reviewed and approved by the Research Ethics Committee at the University of Kent (Ethics Approval Number :).

If you have any complaints or concerns about this research, you can direct these, in writing, to the Chair of the Psychology Research Ethics Committee by email at: psychethics@kent.ac.uk. Alternatively, you can contact us by post at: Ethics Committee Chair, School of Psychology, University of Kent, Canterbury, CT2 7NP.

Appendix H

Code	Data Extract
Abusing substances/addiction	1. They would tell us to take drugs, like ecstasy tablets. 2. …17 tablets in one go and then I was taking them all the time. When I woke up, taking ecstasy tablets. When kids were going to school, I was at the bus stop high on pills. 3. Then they forced me to take crack cocaine and I got addicted to that. 4. So, yeah, they made me take it, but I liked it. It made me forget about everything. It made sense, as weird as that sounds. I got addicted to it. 5. After that, obviously now, I'm addicted to drugs. 6. I was smoking cannabis. 7. The shop would let us buy it (alcohol) at that age because we'd grown a reputation for ourselves.
Anger	1. All this time, she keeps sending me there, no one knows what's going on – no teachers, no one, but my anger is getting worse and worse. 2. Yeah, angry, becoming violent. 3. I turned mad, angry. I was very angry. 4. So, now I'm very angry. I'm a violent person, very violent person. 5. You see that anger, it can control you. It starts with someone attacking you or doing something to you, then you defend yourself. Anger's there and you're like 'What's going on?', but then you've actually changed into that person, but you didn't want to. Now that's what you've become. 6. Anger, negative thoughts.
Anti-authority attitudes	1. They could have said anything. It's more that control, (that) ruling, tried to rule over me, that authority bit. I would attack that because that's what my dad did, my uncle did. So, it was something that reminded me of them. It triggered me. 2. Nah, but that wouldn't work either. We don't like them (social services), so I wouldn't have engaged. 3. No one likes social services. 4. In the streets, it's like – say in society something happens, you call the police. Well, in the streets, YOU DO NOT CALL THE POLICE. 5. The police, all the government, they did a sneaky thing when they put Somalians in the midst of black and white boys that were actually getting along. 6. I always say, "the highest level of crime doesn't happen in the streets, it happens in the seats".

	7. That's why, the police, that's why we're not scared. Do you think they care about what the police are saying? No one really cares. 8. The enemy…they're not to be trusted, they're not there for you. That's what it felt like. 9. They barricaded roads, so the police wouldn't get in. I was the leader basically and I got so much respect for that. 10. The probation, the YOT, they're punishments. They're meant to be there to help you, but they don't help, they just waste my time.
Anxiety	1. The first panic attack was after the riots and I wanted to kill myself. 2. Yeah, I had panic attacks because I was going to kill myself. I was actually going to commit suicide.
Attempts/wanting to change	1. I said to myself 'I wasn't going to do it anymore'. So, I came away from them, stopped doing it. 2. I'm causing a bit of hype on the streets. People are beginning to respect me and so on. So, I just walked away from it. I thought 'I'm not doing it no more'. 3. I was 13. I walked away from it. Then they forced me to take crack cocaine and I got addicted to that. 4. That was the last time I went to jail and when I came out, I knew I needed education. I couldn't explain half of the things that were happening to me and what I had gone through because I had been groomed into a way of thinking, an ideology of life, a philosophy of my own, or a street culture. 5. So, I saw the place burning down. It killed me. I thought 'That's my life. My whole life has been a riot'. That's what it showed me. I was just looking around and that's when I was like, 'I need to change'. I had already been trying to change before that, that's the thing. 6. Even though all this fame was happening, I was like, 'I don't want to live this life'. It's like the fame was holding onto me and I didn't want it. 7. The riots happened, but before that time, there was a situation with her baby father. He was an older man, about 36 years of age. He come down and wanted to fight me. I'm saying "I don't want to do it". Obviously, me being 'the man', me saying "I don't want to do it." is unheard of, but I started to change. I'm changing. So, I'm like "I don't want to do it, I don't want to get involved". I know what I'm capable of. He kept going. Cut a long story short, he ended up going into hospital. 8. When I came out of prison, I knew I needed education. I started educating myself, speaking properly. 9. That's how I knew I was changing. It had changed into this thing and when I went out again, I wasn't used to

	that. When I went out now, I'd be like 'Aw, I don't know how to be out'.
Behavior escalating due to membership	1. My name was known and that's why they got connected with me. This is where it got bigger, it expanded, and it started to turn into something like proper. Before that, it was just childish. 2. Yeah, so, we're talking about Somali's from a third world country. For them to come into London, the level of violence they were showing was a higher level than usual. Not so much for me because the things I had seen as a young child was very high for someone in London, but they were coming from higher violence; in the sense that while I was robbing phones, they were robbing trainers off your feet. They were on the next level and it took me up to this next level. It made me more vicious. I was very vicious. 3. Yeah, it was on another level. I was more vicious than before. Like before I would be quick to react, but they made me more vicious, kind of evilness coming out of me. So, anyway, we went from area to area taking over territories, different areas, and beat everyone up. 4. Anyway, that's when it started to get really bad in the South-East area. What they were specializing in were stabbing people up. They were getting beat up all the time. We was specializing in robbing, smacking people up, but we weren't going around stabbing people because we didn't need to. We were feared, we were top. Because they wasn't, they were scared, and thought 'We need to make a name for ourselves'. They went around stabbing people, like they went on a rampage; stabbed one, stabbed another one, another one, and that got back to us. That's when the war started. That's when we grabbed our tools and people were being stabbed.
Benefits of being in a gang	1. Even the gang members, it's a job, it's a business - selling drugs and all of that. 2. The 'olders' saw that was happening. So, what they were seeing was vulnerability. They would come over to me and give me sweets and stuff like that, but they would ask me to sell. This is at the age of 8. They would give me drugs to sell and I would come back and they would give me sweets. As time went on they started to give me money. 3. They came back to me and asked me to sell drugs for them. 4. I was 13 when I started selling hard drugs. That was crack cocaine. I'd have £500 in one pocket, £600 in the other pocket. I'd have all the drugs in a Chinese tin and the 'bitties' would buy it from me.

	5. Yeah, they bought me trainers and stuff like that. In the streets, I've got what I need there, the respect, whatever, but it's not actually respect. It's fear. Respect is something different, but remember Maslow's hierarchy of needs. You're looking for your basic needs, so you're getting it, but it's not real, it's something fake. 6. Yep - family, money, protection, respect, girls. 7. …when I decided to join, I saw them as friends, family, protection, help when you're in need, you know? 8. It (gang membership) started for friendship, family, and so on.
Callous/unemotional traits	1. I remember that I became a very hard person to the kids around me. 2. I was seeing a lot of violence at a very, very young age. I was becoming immune to it, desensitized to it. 3. I mean, like my dog, I'd set him on people, anyone around me. 4. Become empty. You hold a lot back. You bottle things up and just do what you've got to do to get by to survive. 5. Anyone. So, public, anyone. 6. I was hurting everyone. 7. I was very vicious. 8. I was more vicious than before. Like before I would be quick to react, but they made me more vicious, kind of evilness coming out of me. 9. Yeah, but I didn't really care because I didn't care about anyone. 10. I was never one to beat them, but I would manipulate them. I would manipulate them to do things - hold drugs etc. Exactly what happened to me, I would do to everyone else. 11. Nah, no emotions, no emotions.
Child abuse and domestic violence	1. The things that stand out to me the most is my dad beating me. 2. He was beating me for anything. 3. That (the beatings) was going on until I was about 13 to 14 years old. 4. It wasn't just my dad. My uncle was beating my aunties, he was beating my mum, and he was beating us. 5. My dad was beating me all the time. 6. These times I was still in school, but my mum kept sending me to my dad's. My dad was still beating me. 7. Obviously, my uncle beating everyone, my dad…there was beating everywhere. 8. He'd (my dad) throw himself down the stairs and say it was my fault. It wasn't just my dad. My uncle was beating my aunties, he was beating my mum, and he was beating us.

Delinquent peers	1. Yeah and even in there I was around more bad kids and it escalated. We even started a riot in that school. 2. The older boys would test their punches out on people. After school, I would be around them. 3. Then, I got a name for myself and that's when I got into the gang because I went up in the ranks, the '(gang name). They (fellow gang members) were on the next level and it took me up to this next level. 4. So, anyway, we went from area to area taking over territories, different areas, and beat everyone up. 5. If you go to jail, I'll be nice in jail. I've got all my 'manz' in there. 6. Nah, I was just with them, like I fit in very nicely. It was very comfortable. I was a 'face'. I was someone and I got an older brother, and their older brothers were talking to me. The youngers would see me and we'd all talk.
Depression	1. Like, just feeling disgusted. I didn't know how to function. I couldn't function. 2. I was depressed. I was isolating myself. 3. It was like some dark cloud was over me and I'm just staying in one place. I'm down, low. My head would drop, like this (participant acts this out). It was taking control of me, my body, and that.
Descriptive features of gang	1. We were stamping our mark with spray – 'gang name' on every estate - and we'd let everyone know that we came and took over. 2. Nah, we had the…hats. So, 'gang name intitials' – 'gang name'. We had looney tunes and stuff like that on our clothes.
Differential levels of gang involvement	1. There was a time when I've gone up the ranks. 2. Obviously, from when I was young, I went up the ranks and I became a 'face'…then I became the 'boss'. When I became a 'boss', I became a 'madman'. I started doing like assassinations. I would hurt people, for people, if there was a situation or someone did something. 3. I went up the ranks again…I didn't need to sit with 5 'manz' around me. They can sit there (points to an area of the room) and I sit on my own now. 4. I got a name for myself and that's when I got into the gang because I went up in the ranks - the '(gang name)'. They would be there and they would see me, and they would say, "Ah, this guy is like that".
Displaced aggression	1. So, in school, I was fighting. Everyone. The teachers, the pupils – whoever got in my way really. 2. So, now I'm very angry. I'm a violent person, very violent person. I mean, like my dog, I'd set him on people - anyone around me. 3. I was just really lost. I don't think…with the public - it was occasionally. It wasn't something I did every single day.

	It was occasionally. Like, if I was walking down the road and I had a bad day. 4. I was taking it out on people. 5. They were like pain thresholds. Pain release.
Emotional Distress	1. I would have had more mental health workers. Someone who could deal with the emotional state that I was going through because they (the teachers) weren't trained in that area. They didn't ever talk about what was going on at home. There were things I didn't know about. I was just a kid and I needed that extra help. 2. I couldn't explain half of the things that were happening to me and what I had gone through. 3. Anger, negative thoughts. 4. Like, just feeling disgusted. I didn't know how to function. I couldn't function.
Employment	1. So, I started using my testimony to help other people at mental health events. I started speaking at lots of mental health events. I went to a few conferences. It started with mental health and youth gang summits. 2. I started doing conferences. I met a lady from International Human Rights and I got on a team with them for the common wealth secretariat. I was just like, "Wow, is this happening to me?" She didn't give me a paid job, but just that I was there. 3. I had a purpose. It was big. Then, she allowed me to speak and I got paid for it. Now, I get paid for that.
Engaging in criminality and violence	1. I was selling drugs, causing havoc, loads of stuff. 2. This is at the age of 8. They would give me drugs to sell and I would come back and they would give me sweets. 3. Robbing phones, stuff like that. 4. I was 13 when I started selling hard drugs. That was crack cocaine. I'd have £500 in one pocket, £600 in the other pocket. I'd have all the drugs in a Chinese tin and the 'bitties' would buy it from me. 5. When you lose the drugs or the money, you have to pay it back. So, you have to work for free after that. I had to work for free. 6. I'm causing a bit of hype on the streets. 7. I'm a violent person, very violent person. I mean, like my dog, I'd set him on people - anyone around me. 8. I was very lost. I'd vandalize things. 9. I'd get another one. I'd just buy one from the shop on the estate. The shop would let us buy it (alcohol) at that age because we'd grown a reputation for ourselves. They were scared as well. They'd know we would just come and smash the whole place up. They had to give it to us at that time. 10. So, anyway, we went from area to area taking over territories, different areas, and beat everyone up. 11. We was specializing in robbing, smacking people up.

	12. That's when the war started. That's when we grabbed our tools and people were being stabbed. 13. Before I went to jail, I got arrested many times, but no one would say anything. I'd just be like "No comment." knowing that I'm coming out, they're not going to press charges on me. 14. I think the riots were a big wake-up call to me. 15. Yeah, I went to prison for it. I was the 'General' there. 16. When I became a 'boss', I became a 'madman'. I started doing like assassinations. I would hurt people, for people if there was a situation or someone did something. 17. We were stamping our mark with spray – 'gang name' – on every estate. 18. So, to fight and so on because I had that toughness, I'd win. 19. …violence is what I used to solve a situation. So, in school, I was fighting. …violence is the way I handle anything. Any situation, the first thing I go to is violence. I've a violent person, very violent person. 20. I was the 'boss'. I became very violent. 21. I was hurting everyone. 22. If someone talks, just one second, wrong, and I would hit them already. 23. I started doing like assassinations. I would hurt people, for people. 24. Assassinations was, probably I was, 17/18 years. That's when I was 'that guy'. In jail – just a lot of violence. 25. …you just do what you've got to do to get by, to survive. For me, it was the violence. 26. I ended up having a fight with him. 27. I got fights. 28. So, we had different things. So, 'rival gang' boys were stabbing, everyone was stabbing, but they done it on a higher level. The Congo ones or the 'rival gang' ones were on a higher level. They was on fighting, mad fighting. 29. If I'm having a fight and you back away, you're going to get it when you come back. If he doesn't back you, you're going to get him – he's going to get it. No backing out. He'll get beaten up and outcast.

Experiences of victimization	1. The things that stand out to me the most is my dad beating me. 2. He was beating me for anything. 3. My uncle was beating my aunties, he was beating my mum, and he was beating us. 4. They would kick me in the head. I was sleeping on the kitchen floors and sofas. 5. They would come in the house, kick me in the head to wake me up, terrorize us, pick us up, and spin us around. 6. Because I was small, they would try and slap me to take it without paying. 7. I got fights. I remember it. 8. Different occasions – so many things. I got bottled, been bottled a good few times. I got rushed by six boys from another gang; hitting me, bottling me, and whatever. 9. Yeah, I went to hospital. They broke my finger. I got stabbed in the lip. I got stabbed in the ear. 10. Three times I think (stabbed), I think. They haven't really caught me properly because I'm fighting back. 11. Yeah, they shot at me. 12. There was one occasion when I got dragged out of the house. The guy was having an argument with the mother of his child. He was hitting her. He dragged me out of this house. They would do things like that, they were very weird. Like I don't know why they're dragging me like, "You're coming with me". I go with them - he starts hitting her, punching her, and he's like "If I can't have you, no one can." and then he cut her vagina. Obviously, I'm shouting and he's like, "You're staying here.", and I'm like, "No, I'm not.", and I run out of the house.
Exposure to delinquency and violence	1. Yeah, and even in there I was around more bad kids, and it escalated. We even started a riot in that school. 2. The older boys would test their punches out on people. After school, I would be around them. They would say "Watch this." And they would punch a guy and knock him out. 3. It wasn't just my dad. My uncle was beating my aunties, he was beating my mum, and he was beating us. 4. I was seeing a lot of violence at a very, very, young age. I was becoming immune to it, desensitized to it. Obviously, my uncle beating everyone, my dad, and the people on my estate, there was beating everywhere. 5. I see a guy get a samurai sword down his back. So, he was having a fight with the older boys. So, they got a sword and sliced him.

	6. I've seen all this violence, violence is the way I handle anything. 7. When you're out on the streets, you learn stuff, tricks of the trade. Everything is out there to learn. It's crazy and it's a whole different life. 8. What they were specializing in were stabbing people up. 9. They (fellow gang members) were on the next level and it took me up to this next level. 10. So, 'rival gang' boys were stabbing, everyone was stabbing, but they done it on a higher level. The Congo ones were on a higher level. They was on fighting, mad fighting. 11. I saw some guy getting hot watered on his face. Kettle on his face. They put sugar in it and they'll heat it up. So, it sticks to his face and it starts burning. Yep. When I saw them, I just saw it as 'those guys'. Just a certain type of guy that I didn't want to be around. 12. That's the way we live life and it's embedded in us. It's like to act the way that we did, that's the norm. 13. I watched my whole area burn down.
Family delinquency	1. Nah, I was just with them, like I fit in very nicely. It was very comfortable. I was a 'face'. I was someone, and I got an older brother, and their older brothers were talking to me. The youngers would see me and we'd all talk. 2. No, because I'm a younger and he's an older. He was part of his own. 3. Even he was a 'face'. When you're a 'face', people don't like you, they're there, but they can't really touch you.
Family mental ill health/substance abuse	1. My uncle was beating my aunties, he was beating my mum, and he was beating us. He was schizophrenic. 2. He'd (dad) drink alcohol and just act really crazy...
Female gang affiliates	1. I was never one to beat them, but I would manipulate them. I would manipulate them to do things, hold drugs etc. 2. So, society says have 'one girlfriend or have a wife', we say have 10 girlfriends'. 3. It would be like you need one girl for one thing, one girl for another (thing), one girl for another (thing because when you go to prison and they lock you up, you have to think about who you're going to go to (when you come out).
Found purpose	1. I started to use my testimony to help other people at mental health events. I started to speak at lots of mental health events. 2. I wanted something deeper and the justice I was looking for.

	3. I met a lady from International Human Rights and I got on a team with them for the common wealth secretariat. I was like, 'Wow, is this happening to me?'. 4. I had a purpose. It was big. Then, she allowed me to speak, and I got paid for it.
Gang/street culture **code of conduct**	1. Society has a life and the streets have a life. In the streets, its like…say in society something happens, you call the police. Well, in the streets, YOU DO NOT CALL THE POLICE. 2. Yeah, it has its own ideology or whatever. Its (the streets) got its own way of doing things. 3. When you're a 'face', people don't like you, they're there, but they can't really touch you. 4. Yeah, there's things you don't do like going to the police. You never go to the police, you don't snitch, you don't back out of a fight. 5. If I'm having a fight and you back away, you're going to get it when you come back. If he doesn't back you, you're going to get him – he's going to get it. No backing out. He'll get beaten up and outcast. 6. Yeah, so, there's a thing called 'violation' and there are certain codes that are embedded in the gang. Like I said, I don't know if I said it. Two worlds. In the world that people are living in, they are living in their world, and they're doing what they need to, but in our world, we do our own thing, and the way we want it to go, is the way it's going to. 7. So, society says have 'one girlfriend or have a wife', we say have '10 girlfriends'. If society says, 'act normal', we say 'speak with slang'. If society says 'have morals', we say 'we have our own morals' – and they're just as serious. 8. I couldn't explain half of the things that were happening to me and what I had gone through because I had been groomed into a way of thinking, an ideology of life, a philosophy of my own, or a street culture. That's the way we live life and it's embedded in us. It's like to act the way that we did, that's the norm. You can talk to anyone in that lifestyle, they'll say, "That's what we do". It's just like you, you wake up, and do your thing. It's exactly the same for us. Even the gang members, it's a job, it's a business - selling drugs and all of that. 9. He come down and wanted to fight me. I'm saying, "I don't want to do it". Obviously, me being 'the man', me saying "I don't want to do it." is unheard of.
Grooming/exploitation	1. To groom me and use me for different things. So, to fight and so on because I had that toughness. 2. Only when I started doing stuff with NS (gangs consultant), I realized they groomed me.

	3. I couldn't explain half of the things that were happening to me and what I had gone through because I had been groomed into a way of thinking, an ideology of life, a philosophy of my own, or a street culture. 4. The 'olders' saw that was happening. So, what they were seeing was vulnerability. They would come over to me and give me sweets and stuff like that, but they would ask me to sell. This is at the age of 8. They would give me drugs to sell and I would come back and they would give me sweets. As time went on they started to give me money. 5. I was on the streets from then. I was on the estate. On the streets, there are these women who let you into their houses if you do sexual acts with them. I had to do sexual acts with these women to stay in their houses. 6. Yeah, just sexually, but they manipulated me because I was hungry. They cussed me and called me a "ponce" and all of that because I was asking for food. They'd be like "Go to the shop and rob food." and they'd cook it for us. 7. Yeah, they bought me trainers and stuff like that.
Guilt and regret	1. I felt guilt about certain things, but as a whole, I feel that it's been put that way. 2. I saw a guy OD (overdose) on the floor. He had foam coming out of his mouth and I knew that the stuff I was giving to the men was that. I said to myself 'I didn't want to be involved with this'. 3. You're just doing it because of the situation that happened to you and that's when guilt comes in. 4. Yeah, loads of times, but then you snap back and say, "Wait a minute, but they're pushing us into this situation". 5. Yeah, I do. Everyone has their choices. I made my choices. I regret that some of the choices I made was bad. I can say that, but an actual situation, I can't tell you. 6. Yeah, I did feel good, until I saw the whole place burn down. Then I was like 'Nah, this is not what I wanted'. It was then. 7. I ended up having a fight with him. Then, it hit my conscience. I didn't want to do it. That's possibly the first time I felt regret. It wasn't right. 8. Yeah, so after the riots, I think that's probably something that I regretted.
Homelessness	1. I ran away from home. 2. I didn't go back home ever. 3. I was on the streets from then, I was on the estate.
Inter-gang violence	1. So, anyway, we went from area to area taking over territories, different areas, and beat everyone up.

	2. Turf war of the South East. They brought their gang now and they went around attacking, but when they went around attacking, 'location' was there. Don't come too close to…, but obviously they came too close to us. 3. As they were doing their thing, they fought off the travelers, but then they tried to spread and go further in, but as they tried to go in, the 'gang name' didn't have it, and they attacked. As they attacked, they must have thought some of the 'gang members' were 'rival gang members', and they ended up attacking the 'rival gang'. Then, the 'rival gang' went mad. So, then you had the 'rival gang 1' and the 'gang name' on the (other) 'rival gang'. 4. Yeah, so we had different things. So, 'rival gang 1' were stabbing, everyone was stabbing, but they done it on a higher level. The Congo ones ones were on a higher level. They was on fighting, mad fighting. 5. Africans that came from Congo in the middle of all that. Think about it. Now we have white guys who are majority racist, obviously very upset about them (Africans), so they're attacking them. Little do they know that guys from the Congo have seen their whole family mutilated, they're on a whole different level.
Joining and being in the gang	1. Then, I got a name for myself and that's when I got into the gang because I went up in the ranks - the 'gang name'. They would be there and they would see me, and they would say "Ah, this guy is like that". 2. Nah, I was just with them, like I fit in very nicely. It was very comfortable. I was a 'face'. I was someone and I got an older brother, and their older brothers were talking to me. The youngers would see me and we'd all talk. 3. My name was known and that's why they got connected with me. This is where it got bigger, it expanded, and it started to turn into something like proper. Before that, it was just childish. 4. Yeah, it was on another level. I was more vicious than before. Like before I would be quick to react, but they made me more vicious, kind of evilness coming out of me. So, anyway, we went from area to area taking over territories, different areas, and beat everyone up. 5. Whoever was there, other gangs, a group of boys - whoever was there. We were stamping our mark with spray – 'gang name' on every estate - and we'd let everyone know that we came and took over. 6. Nah, we had the Warner Brothers hats. So, 'WB' – 'gang name'. We had looney tunes and stuff like that on our clothes. Yeah, so we did that for some time and became a feared group…

	7. Obviously, from when I was young, I went up the ranks and I became a 'face'. I got a 'face', then I became the 'boss'. When I became a 'boss', I became a 'madman'. 8. Yeah, so, there's a thing called 'violation' and there are certain codes that are embedded in the gang. Like I said, I don't know if I said it - two worlds. In the world that people are living in, they are living in their world, and they're doing what they need to, but in our world, we do our own thing, and the way we want it to go, is the way it's going to go.
Lack of positive role model	1. That was going on until I was about 13 to 14 years old, but my dad came in and out of my life through those years. There was a period that I escaped and he came back. Mentor. A male role model that I could look up to, that I never really had. And also someone that I could trust as well. He was showing me that and that was really nice to have.
Lack of targeted intervention and support	1. I would have had more mental health workers. Someone who could deal with the emotional state that I was going through because they (the teachers) weren't trained in that area. They didn't ever talk about what was going on at home. There were things I didn't know about. I was just a kid and I needed that extra help. 2. Yeah, more help – help that actually helped. There's help, there's people around, but it's not the help that's needed. 3. Someone dealing with my parents and my family. 4. I was just looking around and that's when I was like, 'I need to change'. I had already been trying to change before that, that's the thing. 5. Yeah, but statutory is like, it's the same as, us as parents. I would say "I'm working all the time for my kids", but we're neglecting (them). It's neglect to the kids. 6. First of all, my housing. I was in shared accommodation. What wasn't in place was rehabilitation. 7. Yeah. I needed help. Not to do it for me, (but) help me do it. 8. I definitely needed that (mental health support). 9. Proper housing. Some of the things, (like) PIP (Personal Independence Payments), all that stuff wasn't coming to me. 10. Yeah, all that stuff, that's normal, but I didn't have (it) because no one was there for me. Banged up and left. When you go to jail and come out, you're just left. 11. I want to say this, this is what happens sometimes, a lot people in statutory, in these organizations, they have rules or something, but little do they know that's an

	institutionalized way of living. It's not real-life because life says 'it's a different person'.
Learning about criminality	1. When you're out on the streets, you learn stuff, tricks of the trade. Everything is out there to learn. It's crazy and it's a whole different life. 2. The older boys would see potential in me. To groom me and use me for different things. So, to fight and so on because I had that toughness. I'd win. 3. The olders saw that was happening. So, what they were seeing was vulnerability. They would come over to me and give me sweets and stuff like that, but they would ask me to sell. This is at the age of 8. 4. The older boys would test their punches out on people. After school, I would be around them. They would say "Watch this…" and they would punch a guy and knock him out. They would see who could knock these (different) guys out. I was seeing a lot of violence at a very, very, young age. I was becoming immune to it, desensitized to it. Obviously, my uncle beating everyone, my dad, and the people on my estate, there was beating everywhere. I ran away from home. 5. I've seen all this violence, violence is the way I handle anything. 6. They were (gang members) on the next level and it took me up to this next level. 7. What they were specializing in were stabbing people up. They were getting beat up all the time. We was specializing in robbing, smacking people up, but we weren't going around stabbing people because we didn't need to. We were feared, we were top. Because they wasn't, they were scared, and thought 'We need to make a name for ourselves'. They went around stabbing people, like they went on a rampage; stabbed one, stabbed another one, another one, and that got back to us. That's when the war started. That's when we grabbed our tools and people were being stabbed. 8. If you go to Leeds, you'll understand that families are criminal, the grandma, you know what I mean? It's been embedded in the children.
Loyalty to gang	1. There are guys – to this day- I call my olders. 2. Not at first obviously, but after a while I developed some strong relationships with a few of them. 3. Yeah, they were called what I would say a lot of 'outcasts', but they didn't want to contribute to anything – they wanted to start their own thing. They were outcasts. They went to start something, but we stayed. 4. If he (fellow gang member) back you, you're going to get him – he's going to get it. No backing out.

	5. Before I went to jail, I got arrested many times, but no one would say anything. I'd just be like "No comment." knowing that I'm coming out, they're not going to press charges on me. They'd be phone calls happening out on the streets to tell the person to stop because they don't know what they're going to get their family into and all of that. 6. I was willing to do that for some of my boys, but not everyone's down for that. 7. That was our clique – that's what we called it – clique.
Mental health support	1. Yeah, the mental health side and whatever, I knew something was wrong with me. So, I handed myself into hospital at the time. 2. Sometimes, I did (go to Accident & Emergency). 3. I got a psychiatrist. That was working, but then they changed the psychiatrist and I didn't turn up again. 4. Yeah, they told me, but that doesn't mean anything to me. I want to say this, this is what happens sometimes, a lot of people in statutory, in these organizations, they have rules or something, but little do they know that's an institutionalized way of living. It's not a real-life way because life says, 'it's a different person'. Do you know what I mean?
Moral disengagement	1. I was seeing a lot of violence at a very, very, young age. I was becoming immune to it, desensitized to it. 2. Yeah, it has its own ideology or whatever. Its (the streets) got its own way of doing things. 3. Yeah, they were called what I would say a lot of 'outcasts', but they didn't want to contribute to anything – they wanted to start their own thing. They were outcasts. 4. It's a thing where when someone pushes you into it and then you react, you're not seeing it as you've done something wrong. You're just doing it because of the situation that happened to you and that's when guilt comes in. 5. Yeah, loads of times, but then you snap back and say, "Wait a minute, but they're pushing us into this situation". Society didn't accept me then and society isn't accepting me now and the consequences are there. 6. They became snakes. 7. If I'm having a fight and you back away, you're going to get it when you come back. If he doesn't back you, you're going to get him – he's going to get it. No backing out. He'll get beaten up and outcast. When he's outcast, he's no longer allowed around us. Now, he's the enemy. 8. The enemy. Yep, they're not to be trusted, they're not there for you. That's what it felt like.

	9. Yeah, I think that's the underlying thing that most people wouldn't see, but on the outside, everyone loves James Bond, and James Bond is a contract killer. So, society praises someone like that. That's what they were doing, they were praising me. People from all walks of life. If you walk through with me now, I will not stop saying "Hello" to people. So, they glorify people like that. 10. I was like 'Robin Hood' on the estate. If anything was going on, they would tell me, and I would go and sort it out.
Negative self and world view	1. There were times when I felt like an outcast. 2. My view of the world is that I'm an outcast. 3. Yep. I'm an outcast. I'm not really wanted and I'm let down. I feel let down by my society, family. 4. Schools, institutions, the system. Everything fails. No more trust in anything. 5. No matter where you go, you manipulate the system because you've become it. 6. Society didn't accept me then and society isn't accepting me now and the consequences are there. 7. Two worlds. In the world that people are living in, they are living in their world, and they're doing what they need to, but in our world, we do our own thing, and the way we want it to go, is that way it's going to go. 8. So, society says have 'one girlfriend or have a wife', we say 'have 10 girlfriends'. If society says, 'act normal', we say 'speak with slang'. If society says 'have morals', we say 'we have our own morals' – and they're just as serious.
Neglect	1. My mum leaving me in the house with no food. 2. I remember, from the age of 8, I would go to my friend's houses hoping they would give me something to eat. 3. I kept telling my mum not to send me there, but she kept sending me anyway. 4. When I used to go to the shop with my friend James, my mum was leaving me in the house with no food and she was sending me to my dad who was beating me all the time. 5. When I was out on the street, I would go to my friend's houses and hope they would give me something to eat. 6. These times (at the age of 8), I already had knives under my bed. I would have long shot knives, all these things. 7. The older boys would test their punches out on people. After school, I would be around them.
Paid employment	1. I had purpose, it was big. Then, she allowed me to speak and I got paid for it. Now, I get paid for it.
Paranoia	1. Yeah, so that put the spanner in the works with the 'rival gang', but they also done another thing, I was going to say a, 'snakey' thing, I call it. The police, all the

	government, they did a sneaky thing when they put Somalians in the midst of black and white boys that were actually getting along. So, they knew. 2. Yes, to cause a riot because really you could have easily put people here and there, but they didn't do it that way. 3. There were too many eyes on me. Like, even now, you see me looking around, innit? I'm still paranoid because everyone knows me. Everyone was coming to me. It became too much.
Parental separation	1. So, from the age of 8, my mum and dad weren't together. 2. My mum and dad weren't together.
Poor parental supervision	1. My mum was leaving me in the house. 2. This is at the age of 8. They would give me sweets and stuff like that, but they would ask me to sell (drugs). 3. These times (at the age of 8), I already had knives under my bed. I would have long shot knives, all these things. 4. The older boys would test their punches out on people. After school, I would be around them. 5. When I was out on the streets, I would go to my friend's houses and they would give me something to eat.
Poor school performance	1. So, in school, I was fighting. Everyone – the teachers, the pupils – whoever got in my way really. 2. I was in a bad behavior class for a little while. I needed that extra attention because there were issues going on that I didn't know about. 3. I was in primary school all the way until Year 6. Then I popped into secondary school a couple of times. Year 7, I was in for a bit and then I left. 4. I chose not to go most of the time, then they kick me out. 5. I got kicked out to a center. 6. Yeah and even in there, I was around more bad kids and it escalated. We even started a riot in that school.
Positive role model(s)/mentoring	1. And then I got a mentor in my life and that really helped. 2. Yeah, the mentor was really helpful for me. He was blessed. 3. A male role model that I could look up to, that I never really had. And, someone that I could trust as well. He was showing me that and that was really nice to have. I had the church and that was like family to me. That was amazing to have. 4. He was a black guy. He was pretty young, not too old. He was a studio man, so he enticed me with something that I like. I'm a musician.
Protection	1. In the streets, I've got what I need there, the respect, whatever, but it's not actually respect. It's fear. Respect is something different, but remember Maslow's hierarchy of needs. You're looking for your basic needs, so you're getting it, but it's not real, it's something fake. 2. Yep - family, money, protection, respect, girls.

	3. …when I decided to join, I saw them as friends, family, protection, help when you're in need, you know?
Psychological distress	1. I would have had more mental health workers. Someone who could deal with the emotional state that I was going through. 2. So, yeah, they made me take it, but I liked it. It made me forget about everything. 3. I'd wear a bandanna around my face. I wouldn't take it off. I was mental at this point. I'd gone mad. I had literally gone mad. 4. I knew I was going mad because I had a personality disorder. I wasn't diagnosed, but I know my thinking wasn't right. I was thinking to kill everyone. I was thinking that I wanted to kill any and every person. 5. I had a friend that was a bottle. I would name bottle and wherever I would go, it would be there. If I didn't have a knife, I had the bottle. 6. (I would name the bottle) different names. One of them was Delores, one was called Vivian. 7. Yeah, just a weapon. It was something that protected me, it was my best friend and it wouldn't leave me. 8. I couldn't explain half the things that were happening to me. 9. It was all like psychology stuff, stuff like that. I was so interested, I wanted to know what's going on. 10. Yeah, it (mental health) was deteriorating. 11. My mind was just gone. I had all this stuff: home, woman, but I was down there. I kept weighing it up, that this doesn't make sense. It didn't make sense to me. I knew that something seriously was wrong. 12. I was depressed. I was isolating myself. 13. Yeah, the mental health side and whatever, I knew something was wrong with me. 14. When you're in it, it's great, but when you're coming out of it, it's a serious thing. That's what people don't realize. When you're in it, you're just focused (on) whatever happens. When you stop, you realize "Wow, is that what's wrong with me? It's really bad".
Recidivism	1. Before I went to jail, I got arrested many times, but no one would say anything. I'd just be like "No comment." knowing that I'm coming out, they're not going to press charges on me. 2. I got arrested again, but this time I got a longer sentence. I think this was when it was 10 months or something like that. 3. Yeah, I was on remand and then I did time. I was in Feltham and (???).

	4. Longest was about 2 months (gaps between number of times in prison). 5. Seven (times in prison).
Religion/religious community	1. Yes. I started going to church. That's what helped me, I believe. 2. And then I got a mentor in my life and that really helped. 3. Yeah, the mentor was really helpful for me. He was blessed. I'm not going to lie. He was a Christian. They're a Christian organization. 4. I had the church and that was like family to me. That was amazing to have.
Romantic Relationship	1. The relationship was not just fulfilling, it was rehabilitation. She was rehabilitating my mind. She was changing me. Like sitting at a table, I wasn't sitting or eating at a table. I would sit on the floor or on the stairs and eat my food. She'd be like "No, you're sitting at the table". 2. She played a big part in that. 3. I stopped going out as much. I found me a woman. 4. I was living with an older woman. She was helping me change from a roadman to a good guy. 5. When I came out of prison, I went back with her, the woman. She continued to show me a new life. I started to educate myself.
Scared of being victimized	1. Even the ones that are good, they have to be bad because they know they can't allow someone to run up on them. 2. Because I was small, they would try and slap me to take it (drugs) without paying. So, I got a dog and my dog eats people. It was a bit of protection. 3. If I didn't have knife, I had the bottle. 4. Yeah, just a weapon. It was something that protected me, it was my best friend, and it wouldn't leave me. 5. You don't know what's going to happen. I realized it's just normal because you actually think that some monster is going to come out of the wall. You have no clue what's going to happen.
Shared pro-violent attitudes	1. It's not good because you're around everyone that's mad and bad. Even the ones that are good, they have to be bad because they know they can't allow someone to run up on them. Society has a life and the streets have a life. 2. Its (the streets) got its own way of doing things. 3. So, anyway, we went from area to area taking over territories, different areas, and beat everyone up. 4. If I'm having a fight and you back away, you're going to get it when you come back. 5. Nah, not killed, but they got smacked up, kidnapped, things like that.

Status and fearful reputation	1. I'm causing a bit of hype on the streets. People are beginning to respect me and so on. 2. So, by that time, I was the 'boss'. 3. So, I'd wear a bandanna around my face, so when I was going on the estate, everyone would run away. 4. Everyone runs when they see me. They would put their hats down their trousers or take their chains off. 5. The shop would let us buy it (alcohol) at that age because we'd grown a reputation for ourselves. They were scared as well. They'd know we'd come and smash the whole shop. 6. So, when I came on the estate, everyone runs. It became tax. I was able to tax people, so I didn't hurt them anymore. 7. Then, I got a name for myself and that's when I got into the gang because I went up in the ranks. 8. They would be there and they would see me and they would say "Ah, this guy is like that". 9. When you're a 'face', people don't like you, they're there, but they can't really touch you. I was affiliated with a lot of people, but the reason they're affiliated with me, it's because they know they can't touch me. 10. My name was known and that's why they got connected with me. 11. We were feared, we were top. 12. You had control on the streets, you had your power there. 13. When I came out, everyone showed me respect. They were like "Ah, you were in jail". It lifted me up. 14. Obviously, from when I was young, I went up the ranks, and I became a 'face'. I got a 'face', then I became the 'boss'. When I became a 'boss', I became a 'madman'. I started doing like assassinations. 15. I was like 'Robin Hood' on the estate. If anything was going on, they would tell me, and I would go and sort it out. 16. Yeah, so, I would say I run 'tings'. I had control. When I walk into a place, everyone knows me, everyone knows what I'm about. It made me respected. 17. Yeah, I think that's the underlying thing that most people wouldn't see, but on the outside, everyone loves James Bond, and James Bond is a contract killer. So, society praises someone like that. That's what they were doing, they were praising me. People from all walks of life. If you walk through with me now, I will not stop saying "Hello" to people. So, they glorify people like that. 18. I was out in the clubs, the middle-class girls, they love a bad boy. Some of them would glorify (me). They'd say my name and ask me to help them.

	19. Yeah, I went to prison for it. I was the 'General' there. I just helped everyone. So, they were calling me the 'General'. 20. I was the leader basically and I got so much respect for that, top, like I became – from every end, they were talking about me. 21. I was saying to myself, 'I was becoming the top guy'. People would give me stuff. They'd give me what I want, whenever I want. Even when I didn't want it, they'd give it to me. Like, they'd lick my bum, everywhere I'd go. People were giving me gold watches, just weird stuff. Why are people giving this to me? But they're just scared, innit? People would be like "Here, take this." and they would give me £20. I'm looking at him and I don't even know him, he'd say "So, I can hang around with you". Things like that.
Stopped drinking	1. I tried to change. I quit drinking. 2. I stopped drinking alcohol.
Suicidal thoughts and behaviors	1. Nah, I nearly died a few times taking them, that's what I wanted. 2. The first panic attack was after the riots and I wanted to kill myself. 3. Yeah, I had panic attacks because I was going to kill myself. I was actually going to commit suicide. 4. Yeah, I cut my wrists. 5. Nah, the cutting came before, but this time I was going to end it. It was going to be serious death.
Trauma symptoms	1. I would attack that because that's what my dad did, my uncle did. So, it was something that reminded me of them. It triggered me. 2. Headaches and I was making weird noises. Loads of things were happening. There were other things happening. Flashbacks - when I walk out of lifts, someone would stab me in the belly. When I wake up, I would see blood all over me. This is when I'm coming out of it (the gang). When you're in it, it's great, but when you're coming out of it, it's a serious thing. That's what people don't realize. When you're in it, you're just focused (on) whatever happens. When you stop, you realize "Wow, is that what's wrong with me? It's really bad".
Unmet needs	1. When I was 8, my mum and dad weren't together. The olders saw potential in me. When I used to go to the shop with my friend James, my mum was leaving me in the house with no food, and she was sending me to my dad who was beating me all the time. So, when I was out in the street, I would go to my friends' houses and hope they would give me something to eat. The olders saw that was happening. So, what they were seeing was

	vulnerability. They would come over to me and give me sweets and stuff like that, but they would ask me to sell. This is at the age of 8. They would give me drugs to sell and I would come back and they would give me sweets 2. Yeah, it's like, I don't know if you've heard of Maslow's hierarchy of needs. He talks about your basic needs not being met, you go elsewhere. That's what was happening. You go to these places and it was so crazy, but my basic needs were being met. It was like getting a bit of food here, getting shelter, feeling like a family, but it's not really, and all that sort of stuff I was getting. 3. I was on the streets from then. I was on the estate. On the streets, there are these women who let you into their houses if you do sexual acts with them. I had to do sexual acts with these women to stay in their houses. 4. Yeah, just sexually, but they manipulated me because I was hungry. They cussed me and called me a "ponce" and all of that because I was asking for food. They'd be like "Go to the shop and rob food." and they'd cook it for us. 5. They came back to me and they saw that I was vulnerable. They saw the situation. They would kick me in the head. I was sleeping on the kitchen floors and sofas. Obviously, in the houses, the olders would go in there as well, and they would do what they want with the women as well. 6. I've got what I need there, the respect, whatever, but it's not actually respect. It's fear. Respect is something different, but remember Maslow's hierarchy of needs. You're looking for your basic needs, so you're getting it, but it's not real, it's something fake. 7. Yep, family, money, protection, respect, girls. 8. Rejection. Family, society. 9. It wasn't going to get me what I needed. That's exactly what happened. That was my walk to freedom, but all these things happened. 10. I'm not really wanted and I'm let down. I feel let down by society, family. 11. Become empty. You hold a lot back. You bottle things up and you just do what you've got to do to get by, to survive. 12. Once I'd joined, I'd gone through certain things, which is why I said it's always vulnerable, but when I decided to join, I saw them as friends, family, protection, help when you're in need, you know? 13. Yeah, I think that's the underlying thing that most people wouldn't see, but on the outside, everyone loves James Bond, and James Bond is a contract killer. So, society praises someone like that. That's what they were doing, they were praising me.

	14. It moved away from that. It started for friendship, family, and so on. Then, I was getting what I wanted, but it started to move away, the fear factor was overriding, and people were more scared (of me) than I wanted. 15. Yeah, her place as home and I would never, ever say that. I would say the block is my home. That's how I knew I was changing, but when we had arguments and I had to go, I was hurt by that. I was lost again. It had changed into this thing and when I went out again, I wasn't used to that. When I went out now, I'd be like "Ah, I don't know how to be out". So, then that happened.
Weapons	1. These times, I already had knives under my bed. I would have long shot knives, all these things. Not necessarily using them, but they were there. 2. I would name the bottle, and wherever I would go, it would be there. If I didn't have a knife, I had the bottle. 3. Yeah, just a weapon. It was something that protected me, it was my best friend, and it wouldn't leave me. 4. That's when we grabbed our tools and people were being stabbed. 5. At that time, knives and that. Bottles. For me, I told you, I was collecting knives. 6. Yeah, so I would have a Rambo knife, it's like a curly thing. I would have a butterfly knife and they all looked pretty. At that age, I was like 'Wow, look at this'. The knives and whatever, now I'm in deep. That's my weapon, that's my tool, that's my best friend, my protection right now.

Appendix I

Reflexivity Statement

Prior to meeting HY, I was instantly curious about how his experiences came to shape his interest and commitment to supporting gang-involved youth, especially since HY's manager had briefly disclosed HY's interest in the mental well-being of gang-involved youth. On meeting HY, I was greeted by what seemed to be a mix between apprehension and caution, yet willingness to share. Furthermore, I could sense that HY was surprised by my own interest in the topic – that although we are from similar ethnic backgrounds, the class divide (working vs. middle class) was apparent from our general mannerisms, including use of language. Nonetheless, there also seemed to be a mutual respect and understanding given our cultural similarities and age. I began the meeting by introducing myself, my institutional affiliation, how I came about meeting HY's employer, and how my experiences to date had motivated my interest in developing our understanding of the varied experiences of gang-involved youth. HY seemed engaged and his initially reserved nature seemed to be dispersing towards a sense of openness and vulnerability. Yet, despite this, I wanted to remain consciously aware of the interview schedule to avoid deviating from the topic of interest, but I also wanted HY to feel comfortable enough to disclose. However, to HY, the schedule didn't provide an opportunity for him to express aspects of his experience and so he asked to "tell his story". I was really taken by HY and inspired by his eagerness to understand his own experiences and by his dedication to helping young people who had experienced similar hardships. As the interview progressed, and HY was disclosing more and more, I noticed myself asking so many questions. Yet, this didn't seem to faze HY and his responses remained detailed and transparent. I wondered if HY was using this research opportunity for me, as an emotional outlet for him to come to terms with his experiences. I couldn't be sure, but it did also seem that our own experiences, for HY firsthand, and for me vicariously through the numerous youth who have

shared their experiences with me, seemed to shape our research encounter into a positive exchange that enabled me to develop my understanding of aspects of gang membership that I had only ever read about. This included the importance of identity and how for youth who may have shared similar experiences to HY, making sense of their world included the need for acceptance and belonging regardless of how this may be achieved. Given our mutual interest in the topic, the sub-conscious role of gender and ethnicity, and the nature of my role, I was conscious of how this may affect the outcomes of the case study. However, that HY expressed wanting to tell 'his story' meant that his experiences and perceptions were used to develop our understanding more generally of gang membership, and through adhering to a rigorous qualitative case study design and process, would have hopefully limited the bias that may have occurred in the process of HY and I's encounter.