PERCEPTIONS AND RISK FACTORS OF GANG ASSOCIATION IN A UK SAMPLE

by

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ABSTRACT

The thesis reviewed research around gang membership in adolescents, particularly difficulties defining gangs and the impact this has on quantifying the gang problem and gang crime. Moreover, risk factors associated with gang membership and violence was discussed. The thesis also attempted to explore individual and family risk factors in a UK sample in order to ascertain the consistency of such findings. The research aimed to compare different levels of gang membership based on criteria to define gangs, types of gang crime and motives for joining a gang. There was generally consistency between the groups in these areas. Moreover, the groups were compared on a number of psychological characteristics including violent cognitions, selfesteem and attachment to peers and parents. There were significant differences between the group acquainted with gangs and those with no affiliation on the Machismo subscale, and Father Alienation, Mother Trust and Communication, and the Personal and Parental Self-esteem subscales. All but the Machismo and Father Alienation subscales demonstrated lower scores for the acquainted group. However, the Machismo subscale scores and the Father Alienation scores were higher in the acquainted group compared to the not affiliated group. The psychometric properties of the Inventory of Parent and Peer Attachment (IPPA) were found to have adequate to excellent properties but also a number of limitations. Finally, the case study provided an example of successful interventions when working with gang-involved individuals. The utility of the findings are discussed in relation to future research and future intervention and prevention strategies.

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Chapter 1: Introduction

Although gangs have been around for many generations, they still create social and public concern. However, the concern around gangs mainly relates to gang behaviours that include criminal activity and violence. Predominantly, gang violence receives considerable attention in the media often perpetuating the stereotype. Moreover, it presents challenges to academics and practitioners. The main difficulties for professionals have been to understand the risk factors associated with gang membership and to provide the best prevention and intervention strategies in order to intervene and reduce recidivism.

Definition of Gangs

There is a longstanding debate on what constitutes a gang (Ball & Curry, 1995; Conly, 1993, Horowitz, 1990, Petersen, 2000, Thrasher, 1927). This is complicated by a number of factors including the differing methods used to define gangs, which subsequently impacts the ability to accurately determine the proportion of individuals identified as being a gang member or the prevalence of gangs (Ball & Curry, 1995; Jones, Roper, Stys & Wilson, 2004; Peterson, 2000. Moreover, gang membership has been found to be more complicated in that there are different levels of membership (Ball & Curry, 1995; Esbensen, Winfree, He & Taylor, 2001; Petersen, 2000; Winfree, Fuller, Vigil & Mays, 1992). These three factors (e.g., problems with the definition of a gang, the prevalence of gang involvement, and varying levels of involvement) will be discussed in the proceeding sections.

Methods Used to Define Gangs.

The method commonly used to define gangs is the stipulative definition. Two types of stipulative definitions will be discussed including definition by analysis and correlational synthetic definition (for a review see Ball & Curry, 1995).

Definition by analysis has predominantly been used when gangs are defined in terms of properties or characteristics. One key element used to define gangs includes criminal behaviour. In fact, there is considerable disagreement about the inclusion of criminal activity as a defining feature for gangs due to it being used as a tautology for delinquency (Ball & Curry, 1995; Bjerrgaard, 2002; Decker & VanWinkle, 1996). However, the term delinquency and gangs are not synonymous with each other. In fact, researchers have found that gang involvement predicted delinquency but delinquency did not predict gang involvement (Curry & Spergel, 1992). On the other hand, if researchers are examining subtypes of gangs, such as a criminal gang in comparison to a gang of friends, then it seems logical that criminal activity would be a key element or criterion (Thrasher, 1927; Wood & Alleyne, 2009).

Correlational synthetic definition is a process use to define a term based on factors that correlate with this term. This is often used in research, but such methods confuse correlations for properties (Ball & Curry, 1995). Such errors actually lead to definitions that are more restrictive. For example, definitions commonly cite adolescents or youths as being a key property. For example, the Eurogang definition of street gangs is 'any durable street orientated youth group whose involvement in illegal activity is part of their group identity' (Decker & Weerman, 2005). However, while correlational evidence suggest that adolescents are more likely to be involved with gangs, intertwining this in a definition may result in older individuals not having access to treatment programmes. In fact, some researchers have suggested that the age range for gang involvement is between 9 and 30 plus years suggesting a much broader scope than solely an adolescent phenomenon (Goldstein, 1991; Klein & Maxson, 2006). Moreover, Knox (2000) suggests that specifying 'youth' does not correspond to gangs as many gangs that have been identified consist of both adults and young members. Correlational synthetic definitions of gangs have lead to judgments being made that gangs are male adolescent members from low socioeconomic and ethnic minority backgrounds (Ball &

Curry, 1995). While it has been acknowledged that gangs are likely to consist of a mixture of age groups the current research has selected youth gangs in the hope that prevention and intervention programmes can be implemented early in an individual's life span. Furthermore, research around gangs is further complicated when examining differences within and between gangs. This relates to the organisational structure and level of involvement (such as 'wannabe' member, high risk [i.e., family or friends in a gang], peripheral member, core member, ex member), suggesting the complex nature and heterogeneity of gangs (Ball & Curry, 1995; Petersen, 2000; Winfree et al., 1992; Esbensen et al., 2001b).

Prevalence of Gangs.

The prevalence of gangs is likely to vary depending on the method used to define them. Differing methods result in some definitions being too broad and therefore over inclusive. That is, they will encompass and label a number of individuals as being in a gang who might not necessary be full gang members. For example, Spergel (1990) suggested that the term refers to 'groups and behaviours that represent an important subset of delinquent and sometimes criminal groups'. However, definitions can also be too restrictive by perhaps excluding those who are peripheral members and therefore underestimate the number of individuals in a gang. In fact, researchers have used a number of different criteria including allowing participants to self identify as being in a gang using a simple yes/ no criteria or determining gang membership based on the number of gang characteristics that the individuals agree to as being applicable to them (Sharp, Aldridge & Medina, 2006). This resulted in fewer participants meeting criteria for being in a gang when definitions that are more restrictive were used. That is to say, when participants identified with all of the characteristics (i.e., group of people spending time together in public, considers it OK to do illegal things, committed an illegal activity together in last 12 months, has some type of structure such as a leader or dress code and has existed for more than 3 months) then a lower prevalence rate of gang membership was found (Sharp et al., 2006). For example, when only two criteria were used than 414 youth identified as being in a gang compared to 96 youth when five criteria were used. Moreover, terms such as the 'gang problem', commonly used by the media, further exacerbate the issue of the prevalence of gangs because such terms create hysteria and magnify a problem that cannot actually be quantified due to definitional issues described above (Hitchcock, 2001; Jones et al., 2004; Petersen, 2000).

Towards Typologies of Groups.

This lack of consensus between academics and professionals about what defines a gang invariably has an impact on the comparability of research outcomes. This has led to some researchers advocating a typology of groups, with the inclusion of gangs as one of these types. Gordon (2000) suggests five typologies of groups which lie along a continuum depending on the level of organisation. This includes youth groups on one polarity and adult criminal organisations on the other, with small cliques who commit crimes, criminal groups and street gangs, in middle in order of ascending severity. However, UK based researchers have explained gangs, or rather collectivist offenders, by identifying a three-tier typology of collectivists including peer group, gang and organised criminal group. Each typology provides a detailed description of the gang, the criteria needed and the types of offences committed (Hallsworth & Young, 2004, 2005, 2008). Moreover, Klein and Maxson (2006) detail five types of gangs including traditional, neotraditional, compressed, collective and speciality. The characteristics of these types of gangs vary depending on subgroups (i.e., based on level of involvement and association with gangs), size, age range, duration, territorial links and criminal activity (Klein & Maxson, 2006). Moreover, they suggest that their typologies resemble other typologies in the literature (Gordon, 2000; Hallsworth &Young, 2004, 2005, 2008). While such procedures pave the way to a universal definition, it is evident that such typologies have limitations in relation to methods used to define them as outlined above, such as correlates being described as properties. However, such typologies do provide benefits in comparing and contrasting of groups (Ball & Curry, 1995).

Defining Gang Activity.

As previously discussed, defining gangs is particularly problematic and this problem has an impact when discussing gang activity. Nevertheless, researchers have attempted to define and/or explain gang activity by comparing different levels of gang membership (e.g., gang member, ex- member and non-member). Thornberry and colleagues (1993) used three models to explain why differences in delinquent behaviour may exist between members and non-members. Firstly, the selection model suggests individuals who join gangs are already delinquent youths or have a high-risk propensity for delinquency. Secondly, the socialisation facilitation model posits that young people assimilate to group norms and model peer behaviour that may be delinquent behaviour in the case of gangs (Thornberry, Krohn, Lizotte & Wierschem, 1993). This suggests that young people learn more delinquent behaviours and hence rates of delinquency increase (Wood & Alleyne, 2009). Thirdly, the enhancement model is a combination of the two models suggesting that youths who join gangs are already delinquent and integrate to norms of the group.

In fact, Thornberry and colleagues (1993) found evidence supporting the socialisation facilitation model, as have a number of other studies, which suggest that gang members are involved in more delinquent activity than those not in gangs but participate in delinquency. That is to say, that individuals' level of criminal activity increases upon gang membership (Esbensen & Huizinga, 1993; Hill, Howell, Hawkins & Battin-Pearson, 1999; Hill, Lui & Hawkins, 2001; Thornberry et al., 1993). In fact, similar findings have been found in the UK with regard to gang members being involved in a higher rates of delinquency than non-members (Smith & Bradshaw, 2005; Sharp et al., 2006). Another factor supporting the social facilitation model is that the level of delinquency has been found to reduce after desisting in gangs (Gordon, Lahey, Kawai, Loeber, Stouthamer-Loeber & Farrington, 2004; Esbensen & Huizinga, 1993; Thornberry et al., 1993). However, Dukes and colleagues (1997) found

support for the enhancement model. Firstly, they found that wannabe members had more self-reported delinquency than non-members did, which supports the selection model. However, as with previous studies, they also found the level of delinquency dropped in exmembers compared to members of gangs supporting the social facilitation model (Dukes, Martinez & Stein, 1997). In fact, Harris (1995) suggests that group formation is particularly influential during adolescence and therefore the social facilitation model may be particularly relevant when examining youth gangs.

Various studies have attempted to identify different types of criminal offences that are often associated with gang members. Throughout the literature, gang members have been linked to a variety of types of delinquency including criminal damage, robbery, theft, drug offences, street offences and violent offences (Esbensen & Huizinga, 1993; Dukes et al., 1997; Howell, 1998b; Thornberry et al., 1993). Violence, in particular, has been frequently associated with gangs (Decker & VanWinkle, 1996; Hill et al., 1999; Hill et al., 2001; Esbensen & Huizinga, 1993). Some research suggests that most gang violence is directed at other gangs (Esbensen & Huizinga, 1993; Howell, 1998). In fact, the general socialisation theory has found that group conflicts strengthened both intra-group identity and inter group hostility, which could help to explain the increase of violence between rival gangs (Sherif & Sherif, 1961). In addition, gangs have also been associated with a number of homicide statistics in the USA and this association appears to be encroaching in the UK thanks to media reports (Hallsworth & Young, 2008; Howell, 1998). However, Hallsworth and Young (2008) found that many of the media report claims about gang related killings were unfounded. A closer examination of the USA statistics suggests that the accountability of gang homicides varies between states and that this variation depends on whether a broad or restrictive definition was used (Howell, 1998; Maxson & Klein, 1990). This brings us full circle back to the dilemma of the gang definition.

Another problematic issue when accounting for gang crime, which researchers have acknowledged, is that gang activity varies in frequency and severity over time (Winfree et al., 1992). As previously mentioned this change in criminal activity could be the result of ingroup favouritism and out-group hostility (Sherif & Sherif, 1961). Furthermore, non-gang members can commit 'gang crimes' and vice versa. This is further complicated by the motives for offending. In fact, those involved in gangs may also offend independent of their gang membership (Maxson & Klein, 1990; Winfree et al., 1992). Based on the research evidence, irrespective of the procedure used, the consensus to date is that those involved in gangs participate in a higher number of criminal activities and in a wider range of illegal activities than those not affiliated with gangs. However, some researcher would advocate caution when accounting for violent crime (Hallsworth & Young, 2008).

Limitations of the 'Gang' label.

One of the major limitations of the gang label is clearly associated with the debate surrounding its definition. In fact, some suggest the term 'gang' should be discarded completely because politicians and policy makers use the term predominantly as a label (Conly, 1993). In fact, Sarnecki (2001) suggests that the term 'networks' should be used instead. The consequences of labelling is evident in some states in the USA which allow for individuals convicted of a crime, and who have been labelled as a gang member, to receive an increased sentence in prison of up to 10 years and some States deny probation sentences to such individuals (Esbensen et al., 2001b; Winfree et al., 1992). Some of these States have used broad definitions, which as discussed previously are overestimating the number of individuals in a gang (Winfree et al., 1992). Moreover, Carlsson and Decker (2006) suggest that labelling gangs or denying the existence of gangs can influence perception of such groups, by either increasing their notoriety, by holding gangs unrealistically accountable for a so-called problem or by failing to recognise the risks posed by those involved in gangs.

Moreover, gang activity has been found to include a variety of criminal behaviour which is also committed by others not in a gang (Maxson & Klein, 1990; Winfree et al., 1992).

This highlights the dilemmas facing academics and professionals and suggests a need for rigorous research to be conducted. Such research needs to be underpinned by theory and should include detailed descriptions of the methodology to allow for replication and acknowledgement of the limitations. For the purpose of the thesis Sharp, Aldridge and Medina's (2006) definition was used in Chapter 3 which consisted of five criteria definition (i.e., group of people spending time together in public, considers it OK to do illegal things, committed an illegal activity together in last 12 months, has some type of structure such as a leader or dress code and has existed for more than 3 months). Researchers have commented that such a definition may lead to socially desirable responding due to youths having to selfreport being involved in collectivist criminal behaviour (Alleyne & Wood, 2010). However, self-reporting has been used in previous research (Bjerregaard, 2002; Bjerregaard & smith, 1993; Bradshaw & Smith 2005; Decker & VanWinkle, 1996; Dukes, Martinez & Stein, 1997; Esbensen & Huizinga, 1993; Winfree et al., 1992). Moreover, this definition is not dissimilar to other definitions such as the Eurogang definition which is 'any durable street orientated you group whose involvement in illegal activity is part of their group identity' (Decker & Weerman, 2005). In fact, Alleyne and Wood (2010) comment that these two definitions differ by two criteria including size of group and structure framework of group. All these limitations are considered and accounted for in more detail in Chapter 3.

Now that the foundations and the difficulties with gang research has been discussed and highlighted, the subsequent section aims to provide a detailed background analysis of the risk factors commonly cited for predicting both gang involvement and violence. Both outcome

measures (gangs and violence) are examined due to these variables commonly being associated with each other.

Risk factors for youth gang membership

A number of longitudinal studies have examined the risk factors associated with gang membership including the Rochester Youth Study (Thornberry, 1998; Thornberry, Krohn, Lizotte, Smith & Tobin, 2003); Denver Youth Study (Esbensen & Huizinga, 1993); Seattle Social Development Study (Battin et al., 1998; Hill et al., 1999, 2001); and the Pittsburgh Youth Study (Lahey, Gordon, Loeber, Stouthamer-Loeber & Farrington, 1999). The majority of these studies found a number of risk factors were present for joining gangs amongst several overarching domains including community, family, school, peers and individual. There have also been cross-sectional studies that have examined the risk factors related to the above domains (Bradshaw, 2005; Bradshaw & Smith 2005; Dukes et al., 1997; Etitle, Gunkel & VanGundy, 2004; Florian-Lacy, Jefferson & Fleming, 2002; Ryan, Miller-Loessi & Nieri, 2007). Each risk factor domain will be discussed individually, however it is likely that some risk factors will intertwine and can be both direct and indirect risk factors. The former suggest that a risk factor will increase the risk in a linear direction while indirect factors are moderated or mediated by other variables, which will subsequently alter risk level.

Family.

A number of family-related risk factors for gang involvement have been identified.

Researchers suggest that individuals who have no male role model present in the family home seek such role models in the gang providing a family substitute (Song, Dombrink & Geis, 1992). However, other researchers suggest adolescents were at an increased risk of joining a gang if a member of their family were part of a gang and /or there was presence of family criminality (Decker & Curry, 2000; Esbensen & Huizinga, 1993; Thornberry et al., 1993).

Due to the contradictory evidence of these findings, these factors are further explored in a

systematic review in Chapter 2. Furthermore, research has found that parental drug use significantly increased the risk of their children becoming involved in gangs (Sirpal, 2002). In addition, research has found that the absence of a biological parent is also a risk factor for gang membership (Thornberry, 1998), which is related to some research suggesting that living in a single parent home is a significant risk factor (Bradshaw, 2005; Hill et al., 1999, 2001). Moreover, research suggests that parental management problems, low parental supervision and a lack of parental attachment to the child predicted gang membership (Hill et al., 1999, 2001; Sule, 2005; Thornberry, 1998). In fact, other longitudinal research found that parental supervision had an indirect effect on gang membership when combined with age. They found that poor parental supervision did not directly predict gang membership. However, the effects of parental supervision and gang affiliation were found to vary with age. That is, youths exposed to poor parental supervision at age 15 were more likely to become affiliated with gangs, while youths who experienced poor supervision at age 17 years were less likely to become affiliated with gangs (Lahey et al., 1999).

School/Employment.

In addition to family factors, research has found a number of risk factors relevant in school and employment. Those involved in gangs were more likely than those not involved in gangs to have experienced exclusion from schools (Marshall, Webb, & Tilley, 2006). Moreover, research has indicated that other risk factors for joining gangs included low expectations of a student's success (as measured by self-report), low commitment to school and high level of antisocial behaviour (Hill et al., 1999; Thornberry, 1998). Other research examining older individuals in prison found that gang members had higher needs than non-gang members did in employment domains. Gang members were more likely to have no previous employment records than non-gang members (Sheldon, 1991).

Peers.

A number of studies have found that associating with delinquent peers increases the risk of becoming involved in gangs (Bjerregarrd & Smith, 1993; Esbensen & Huizinga, 1993; Hill et al., 1999, 2001). In addition, associating with friends who use drugs is also a risk factor for gang membership (Curry & Spergel, 1992).

Individual.

Research has indicated that individuals involved in gangs are more likely to have deviant or pro-criminal attitudes than are non-gang members (Hill et al., 1999, 2001). Furthermore, a number of studies have suggested that gang members are more likely to engage in drug and alcohol misuse than those not affiliated with a gang (Bjerregaard & Smith, 1993; Curry & Spergel, 1992; Hill et al., 1999). As mentioned previously, those involved in gangs have been found to demonstrate more problem behaviours and externalising behaviours both in school and in the home environment (Hill et al., 1999; 2001). More recently, research has found that carrying a weapon is a risk factor for gang membership and hence violent offences (Decker & VanWinkle, 1996). However, research in the UK found that weapon use was less prevalent among delinquent peer groups but more prevalent with delinquent youth groups (Sharp et al., 2006). Moreover, Dukes and colleagues (1997) found that self-reported wannabe gang members had lower self-esteem scores, when compared to non-members, and Florian-Lacy et al. (1999) found that gang members had lower self-esteem scores than those not involved in gangs, suggesting that low self-esteem may be a risk factor.

Risk factors for youth violence

There has been ample research examining the risk factors associated with youth violence; again, as with gang research these have been split into four domains including family, school, peer and individual.

Family.

Herrenkohl et al. (2000) conducted a longitudinal study using data from the Seattle Social Development study. They found that at age 10 years parental attitudes significantly predicted violence at age 18 years. Many studies have found that poor parental practices, such as poor supervision, authoritarian parenting style and harsh or inconsistent discipline were risk factors for future violence (Farrington, Jolliffe, Loeber, Stouthamer-Loeber & Kalb, 2001; Farrington & West 1993; Hawkins, Herrenkohl, Farrington, 1998; Herrenkohl, Maguin, Hill, Hawkins, Abott & Catalano, 2000). Moreover, having poor attachments with adults can increase the risk of future violence (Levy & Orlans, 2000). In addition, research has found that parental and sibling criminality was associated with an increased risk of future violence (Farrington, 1989; Farrington et al., 2001; Herrenkohl et al., 2000).

A number of reviews have found that individuals exposed to violence in the home resulted in childhood problems. These include behaviour, emotional, social, cognitive and physical problems (Edleson, 1999; Evans, Davies & Dilillo, 2008; Kitzmann, Gaylord, Holt & Kenny, 2003; Kolbo, Blakely, & Engleman, 2003). In particular, such experiences have also been found to increase the risk of violence in youths (Edleson, 1999; Elliott, 1994; Farrington, 1989; McCord, 1979). In fact, other forms of abuse, such as physical, emotional, and neglect were also predictors of future violence in adolescence (Smith & Thornberry, 1995).

School/employment.

A number of risk factors in the school domain have been found to predict future violence in adolescence. These are similar to those mentioned for gang membership. Herrenkohl et al. (2000) found that low academic performance was predictive of violence at age 18 years. This finding was consistent across all three times points (age 10, 14 and 16 years). Moreover, poor attachment to school has also been found to predict future violence in adolescence (Elliott, 1994). In fact, this has been supported by previous research, which found that educational

problems, poor achievement, truancy and lack of interest in school predicted future violence (Farrington, 1989, Farrington & West, 1993; West & Farrington, 1977).

Peer.

As with gang membership, associating with delinquent peers was found to be a risk factor for violence in adolescence (Blackburn, 1993; Herrenkohl et al., 2000; Keenan, Loeber, Zhang, Stouthamer-Loeber & Van Kammen, 1995). In fact, peer rejection prior to associating with delinquent youths has been found to be a risk factor for associating with delinquent peers (Loeber & Hay, 1994). Researchers also found that gang membership significantly predicted violence in youths (Battin et al., 1998; Herrenkohl et al., 2000).

Individual.

As with gang membership, a number of individual factors have been highlighted as risk factors for future violence. This includes early onset into delinquency, which increases the risk of future violence (Loeber & Farrington, 2000; Loeber & Stouthamer-Loeber, 1998; Moffitt, 1993). Moreover, in a longitudinal study researchers found that at 10, 14 and 16 years hyperactivity significantly predicted later violence (Herrenkohl et al., 2000). In fact, impulsivity and risk taking behaviour have both been found to predict future violence in adolescents (Farrington, 1989). In addition, research has found that a child's pro-violent attitudes and hostile attribution biases were significant risk factors for violence (Dodge, 1991; Herrenkohl et al., 2000). Relevant to these attitudes and biases is anger management difficulties. In fact, research has found that anger can also be a trigger for aggressive or violent reactions (Novaco, 1994). Other research has found that high self-esteem, or an inflated sense of self worth, was associated with higher levels of aggression (Hughes, Cavell, & Grossman, 1997; Sandstrom & Jordan, 2008). However, research in this area is contradictory (Ostrowsky, 2010). Moreover, research has consistently shown that the use of

both legal and illegal substances is a risk factor for future violence in adolescence (Loeber & Dishion, 1983; Loeber & Hay, 1997).

As can be seen from the literature, many of the risk factors overlap for both gang membership and violence. A number of commonalities exist in the different domains (i.e., family, school/employment, peer and individual). In particular, inconsistent parenting styles, low achievement at school, associating with deviant peers and negative, and hostile or violent attitudes are evident as risk factors for both gang involvement and violence. This suggests caution when attributing violence to a gang phenomenon, as the risk factors for violence are applicable for those who offend individually.

Justification of thesis

The aim of the current thesis is to explore the literature around gangs and gang violence, which have many risk factors in common. These commonalities have been discussed earlier in the introduction. However, research in this area needs to pay particular attention to definitional problems relating to gangs. As mentioned earlier, the definition used in Chapter 3 is Sharp, Aldridge and Medina's (2006) five criteria definition. The gang phenomenon poses particular difficulties in the public domain, which is further exacerbated by media reports. In fact, the thesis attempts to examine family and individual risk factors that have been associated with gang membership. While this is likely to aid professionals' understanding of gang membership, it is also likely to aid professionals' understanding of intervention programmes which have been designed using evidence based practice. The family and individual risk factors are discussed in a systematic review, case study and a research study followed by a discussion linking all the evidence together. A summary of each chapter are discussed in the subsequent section.

Overview

The introduction outlines the literature around gangs both abroad and in the UK. In particular, the prevalence and proliferation of gangs is discussed. Such prevalence and proliferation is discussed in connection with media attention and new legislation. Moreover, research examining risk factors associated with gang membership and general violence will be considered.

Chapter 2 is a systematic literature review, which examines the association between parental relationships and gang affiliation in youth samples. It is suggested that the findings from this review may aid understanding of family risk factors for gang membership in a UK sample.

Chapter 3 is an empirical research study which examines differences in the level of self reported gang membership in a UK inner city sample. The overall aim of the research is to compare those varying in level of gang affiliation in terms of their perspectives of what defines a gang, what types of crime are associated with gangs and strategies to stop gang crime.

Chapter 4 is a single case study, which details the background history of a client who was detained under the mental health act and resided in a medium secure unit. This client is examined because he self-reported being involved in gangs at a young age. A number of assessments were conducted and used to inform a formulation of his offending behaviour and mental health. Moreover, a discussion of the intervention is discussed with considerations of the risk, need and responsivity issues. Finally, the therapeutic relationship, supervisory relationship and systems that affected the therapeutic process were discussed.

Chapter 5 explores the psychometric properties of an attachment measure called the Inventory of Parent and Peer Attachment (IPPA), which are considered useful in assessing risk factors for gang involvement in the family domain. The reliability and validity of the assessment tool is discussed and the limitation of using this tool in practical settings and in research is discussed. Subsequently, it was found to have good psychometric properties and was used in the research described above in Chapter 3.

Chapter 6 links all the findings together along with previous literature. The overall findings are discussed in relation to future research. Moreover, the findings are discussed in relation to practical utility for professionals. In particular, these findings are discussed in connection with the development of future prevention and intervention programs.

Chapter 2: Systematic Review

Abstract

The systematic review aimed to determine the association between parental relationships and youth gang affiliation and to determine the direct or indirect association between parental relationships and youth gang affiliations in relation to other risk factors. The literature searches were conducted methodically in three electronic databases yielding a total 2,525 citations, which were examined for relevance based on the inclusion/exclusion criteria. Those selected were quality assured resulting in eleven good quality studies included in the review. The results found that of the eleven studies included in the review eight examined parental supervision, seven examined parental attachment and two examined parental communication. Six studies found a direct association between gang affiliation and parental supervision, three of which found that prohibiting or controlling styles actually increased gang affiliation while one study found the opposite association and two studies found poor monitoring or management was associated with gang membership. Three studies found a direct association between gang affiliation and parental attachment. One study found a direct relationship with parental communication and gang affiliation, suggesting that less communication with mothers increased gang involvement. Finally, three studies found an indirect association between gang affiliation and parental supervision and one study found an indirect relationship with parental communication and gang involvement. These studies demonstrated that parental supervision and communication could act as a protective factor. Due to the small sample of studies included in the review no clear conclusion could be established, however, trends are discussed.

Introduction

The current review will examine the literature around family risk factors and gang membership. In particular, the impact parental relationships may have on gang affiliation. This will be done using a systematic approach with inclusion and exclusions criteria as well as quality assuring the articles.

Definition of gangs

As has been previously discussed, the research around gangs has been particularly problematic due to the lack of consensus of what constitutes a gang (Esbensen & Huizinga, 1993; Petersen, 2000). For the purpose of this review, the focus has been limited to youth gangs. However, it has been previously acknowledged that gangs are not solely a youth phenomenon (Goldstein, 1991; Knox, 2000). The adolescent population has been a focus in this review in order to ascertain intervention and/or prevention strategies early in an individual's life span.

Reasons to join gangs

There are a number of explanations associated with youth gang membership and research suggests there is unlikely to be one fundamental factor for this phenomenon. Moreover, research has found that gang membership has many functions for the individual, which may motivate a young person to join. These include social acceptance, a sense of identity, emotional support, supervision, financial gain, enjoyment, protection and belonging (Curry, 2004; Friedman, Mann & Friedman, 1995; Wang, 2000). While some of these functions appear positive, as discussed earlier, research also implicates gangs with criminal activities (Esbensen & Huizinga, 1993; Hill, Howell, Hawkins & Battin-Pearson, 1999; Hill, Lui & Hawkins, 2001; Thornberry, Krohn, Lizotte & Wierschem, 1993).

In order to establish an understanding of gang membership, research studies have attempted to identify a number of risk factors associated with gang membership. These risk factors are commonly cited under four domains, including family (Bradshaw, 2005; Decker & Curry, 2000; Sirpal, 2002; Song, Dombrink & Geis, 1992; Thornberry et al., 1993), school (Bjerrgaard & Smith, 1993; Hill et al., 1999; Thornberry, 1998; Marshall, Webb, & Tilley, 2006), peer (Bjerregaard & Smith, 1993; Esbensen & Huisinga, 1993; Hill et al., 1999, 2001) and individual factors (Bjerregaard & Smith, 1993; Curry & Spergel, 1992; Decker & VanWinkle, 1996; Esbensen & Huizinga, 1993; Hill et al., 2001; Sharp, Aldridge & Medina, 2006). A detailed account of these research finding has been provided in the Introduction to this thesis. However, of particular interest in this review is the family domain. Some researches have indicated that individuals are drawn to gangs because of deficits elsewhere, such as the parental relationship (Song et al., 1992). The parental relationship affects and influences the child's development in social and emotional domains. The term parental relationship is broad and encompasses a number of areas including attachment, parenting behaviours and child rearing methods (O'Connor, 2002).

Early research on parental relationships focused on the attachment between parent and child. Bartholomew defined an attachment as "an enduring affective bond between particular individuals" (Bartholomew, 1990 p. 149). Such attachments begin during the early stages of infancy and childhood towards the primary caregiver. The different attachment styles (e.g., secure or insecure) provide the individual with differing frameworks and cognitive representations about others and the self. These are described as either positive or negative and lead to four prototypical styles: secure (positive view of self and others), dismissive (positive view of self, negative view of others), preoccupied (negative view of self, positive view of others) and fearful (negative view of self and others) (Bartholomew & Horowitz, 1991). Moreover, researchers found that young people who are not emotionally attached to a

parent or primary care giver were more likely to become involved in delinquent and illegal activity. This notion links both attachment theory (Bowbly, 1969) and social control theory, which specifies that individuals with strong bonds with family, friends, school and/ or clubs are less likely to become involved in delinquent behaviour (Hirschi, 1969).

These theories associated with family bonds have led to some researchers hypothesising that youths become involved with gangs in order for gangs to function as a surrogate family (Song et al., 1992). However, other researchers suggest young people do not become involved in gangs as a substitute for their own family deficiencies but are more likely to get involved in gangs if their family is linked to criminality and/ or gangs (Decker & Curry, 2000; Spiral, 1992; Thornberry et al., 1993). In fact, the proliferation of research focusing on the parent-child relationships and criminal behaviour is not new. In a longitudinal study, known as the Cambridge study, West and Farrington (1977) found that poor supervision, poor discipline, coldness and rejection, low parental involvement and poor communication were associated with criminal behaviour later in life (Farrington, 2002; West & Farrington, 1977). Moreover, McCord (1979) found negligent parental discipline predicted convictions in later 20's and poor parental supervision and aggressive parental discipline predicted convictions into late 40's (McCord, 1979).

The Current Review

The current review attempts to synthesise and evaluate the research surrounding the association between parental relationships and gang membership. As explained earlier, the term parental relationship is broad and can include a number of areas such as level and type of supervision, and management, quality of the attachment, involvement and communication between the child and parent. Understanding the association between the parental relationship and gang membership is important. While there may be similarities between risk factors for

general criminality or violence as outlined in the Introduction, there may also be important

differences. Such similarities or differences could provide a useful framework for future

interventions and prevention strategies.

Aims & Objectives

The purpose of this systematic review is to examine the links between parental relationships

and youth gang affiliation.

There are two main objectives of this review:

1. To determine the association between parental relationships and youth gang affiliation.

2. To determine the direct or indirect association between parental relationships and youth

gang affiliations in relation to other risk factors.

Inclusion Criteria

Population:

Youths aged between 10 yrs and 21 yrs

Intervention: Parental relationships including:

Attachment, affiliation and bonds;

Supervision, management and monitoring;

Communication and involvement

Comparator: None

Non-delinquents

Youths not involved in a gang

Youths less involved in a gang

21

Outcome:

Gang affiliation or membership.

Study Type:

Cross-sectional

Cohort

Exclusion: articles not in the English language, unpublished articles, editorials or reviews,

familial criminality and child maltreatment not included unless aspects of parental

relationships assessed.

Methods

Sources of Literature

A search of gateway Cochrane Central Library, DARE (database of abstract reviews of

effectiveness) and Campbell collaboration database was employed in order to ascertain

whether any reviews had been conducted in the area (August 2010). No such reviews were

found suggesting a need for a recent review in the area.

Search Strategy

Three electronic databases were searched including: PsychINFO (1986-2010), EMBASE

(1987-2010) and Science Direct (1987-2010). These databases allowed specific limits to be

placed on search criteria. All databases were accessed on the same day (15/5/10) and all

search criteria were the same. All searches were restricted to articles in the English language.

This exclusion criterion was employed due to time constraints of translating full articles and

may have limited the search results. All results were restricted to journal articles only,

thereby excluding editorials and book reviews. All relevant searches were saved. The search

terms used were broad in order to maximise the chance of collating all relevant literature. The

search terms used for each database are detailed in Appendix A.

22

Study Selection

A two-part search strategy was carried out in order to capture all relevant literature. This included an electronic search and a hand search strategy.

Electronic Search

The search strategy generated 2,525 citations. The researcher excluded all non-English articles and included only journal articles resulting in 890 citations being removed and 1,635 citations remaining. All abstract and titles were checked for relevance and 1,610 citations were removed. Of the remaining citations, 25 were potentially relevant. However, six were eliminated, as these were duplicate citations. Subsequently, the researcher checked the remaining 19 citations based on inclusion/exclusion criteria. This resulted in a further five citations being removed as they did not meet the inclusion criteria. Out of the 14 citations left three were unobtainable although attempts were made to retrieve these from the British Library and the authors but this was unsuccessful.

Hand Search

Of the remaining 11 citations, all reference lists were searched ensuring that all relevant articles had been included in the review resulting in a further citation being added in the review. Unfortunately, hand searches of specific journals such as *Journal of Gang Research* could not be employed due to time constraints as this journal is not available through the University of Birmingham. The final 12 citations were checked for relevance and quality assured by one researcher resulting in the removal of one citation.

Quality Assessments

The methodological quality of included studies was assessed using quality assessment scoring sheets (Appendices B & C). The quality assessment scoring sheets were adapted from Critical Appraisal Skills Programme (CASP, 2004). The main areas assessed included: screening, study design, selection bias, performance and detection bias, attrition bias, outcome bias, statistics, results and applicability of findings. All included studies were scored using the scoring sheet. A response of yes received a score of one while a response of no received a score of zero, while an 'unknown' response was not included in the scoring. The total quality score was obtained by adding the scores of each item, giving a total score ranging from 0-24 for cross sectional and cohort studies (Appendices B and C). These scores were converted into a percentage giving an overall quality assessment score. The studies considered to be of good quality obtained a score of 60 % or above and were included in the results. One researcher conducted this process of quality checking the articles.

Data Extraction

One research conducted the data extraction for all remaining articles using the pro forma, which included a variety of information (Appendix F). However, a brief summary of the information extracted is listed below.

Eligibility of study

Population Exposure Comparator Outcome

Methodological Quality

Study design Recruitment procedures Quality assessment Blind procedures

Exposure Method

Assessments or questionnaires

Outcome Measurement

Validity of measurement Drop out rates **Statistical Analysis**

Attrition bias

Confounding variable

Results

Description of studies

The study selection processes resulted in eleven studies that met the inclusion/exclusion criteria and were of good quality, above 60% (Appendix D). They consisted of eight cross sectional studies and three cohort studies. Only one study was excluded due to poor quality (Appendix E). Figure 1 provides an overview of the processes and stages. This flowchart illustrates the process that led to the removal of articles and resulted in the final 11 studies being used in the current systematic review. Table 1 details the characteristics of the included studies, followed by Table 2, which details the data extraction information and the quality score of the included studies.

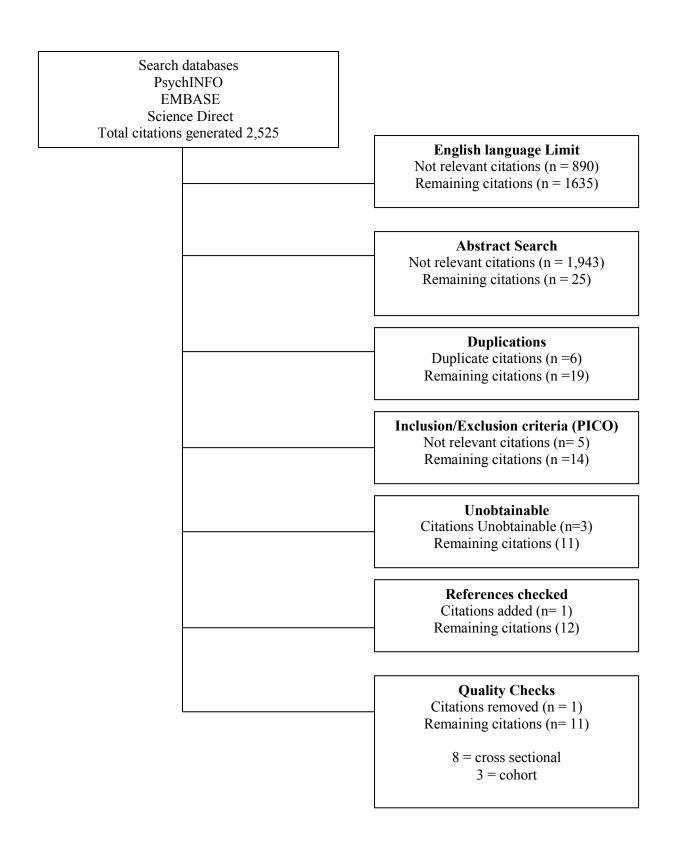


Figure 1.. Flowchart of search results

Table 1

Characteristic of included studies

Authors/Year	Title	Study Type	Hypotheses/	Sample Size	Comparison	Parent- Child	Results
Baba, Y. (2001)	Vietnamese gang, cliques and delinquents	Cross sectional	Research Question Lack of bond with parents more likely to be involved in gang delinquency	8 gang members	24 clique members 11 associated with gangs 31 not associated with gangs	Relationship Attachment	No significant difference in attachment with parents between gangs, cliques and not those not associated with gangs
Bell, K.E. (2009)	Gender and gangs: A quantitative comparison	Cross sectional	Parent-child relationship associated with gang involvement	186 male gang members 96 female gang members	3,211 male non gang members 3,719 female non gang members	Supervision & Attachment	Significant differences = Female gangs less social control and more parental involvement than male gangs members Significant differences = female gang members less parental attachment and involvement than female non gang members Significant differences = Male gang members less parental attachment and involvement than female gang members

							non gang members
Etitle, D., Gunkel, S. & VanGundy, K. (2004)	Cumulative exposure to stressful life events and male gang membership	Cohort	Does exposure to stressful life events predict gang membership and are family factors inhibitors or generators	45 gang members aged 13-18 yrs old	788 non gang members	Attachment	No significant difference with family attachment
Florian-Lacy, D.J., Jefferson, J.L. & Fleming, J. (2002)	The relationship of gang membership to self-esteem, family relations and learning disabilities	Cross- sectional	Youths with high levels of gang membership would exhibit lower family relations scores than youths with low levels of gang membership	205 High school students aged between 14 - 19 yrs old (108 male, 95 female)	High, medium and low gang affiliation	Attachment	High levels of gang membership had lower levels of family relations scores than the low levels of gang affiliated youths (F= 5.023, p< 0.01)

Hill, K.G., Howell, J.C., Hawkins, J.D. Battin-Pearson, S.R. (1999)	Childhood risk factors for adolescent gang membership: Results from the Seattle social development project	Cohort		124 gang members aged 10-18	684 non gang members	Supervision & Attachment	Poor family management practices when 10 -12 yrs predicted gang membership (OR = 1.7). Poor attachment to parent/mother/father at age 10- 12 yrs was not significant predictor of gang membership
Kee, C., Sim, K, Teoh, J., Tian, C.S. & Ng, K.H. (2003)	Individual and familial characteristics of youth involved in street corner gang in Singapore	Cross- sectional	Dysfunctional parental patterns increase the risk of gang involvement	36 gang members aged 15- 18 yrs	91 age- matched and academic streams	Supervision and communication	Gang member experienced less communication with mothers and high levels of control from mothers.
Lahey, B.B., Gordon, R.A., Loeber, R., Stouthamer-Loeber, M. & Farrington, D.P. (1999)	Boys who join gangs: a prospective study of predictors of first gang entry	Cohort		25 gang members aged 12 -21 yrs African American Male	158 not gang members aged 12 -21yrs African American Male	Supervision	Poor parental supervision was not significant related to gang entry. Parental supervision varied with age (less supervision at age 15 greater chance of gang involvement but less chance of gang involvement at aged 17 yrs)
Ryan, L.G., Miller- Loessi, K. & Nieri, T. (2007)	Relationships with adults as predictors of	Cross sectional	1. Self disclosure to parents, parental warmth &	342 aged between 14- 18 yrs old	1. None 2. Gang involvement or	Communication & supervision	Race & ethnicity predicted gang involvement, parental

	substance use, gang involvement, and threats to safety among disadvantaged urban high school adolescents		supportiveness, parent initiated monitoring decrease risk of gang involvement. 2. Self disclosure related to gang involvement more in high risk youths		not involved with gangs 3. Less than average gang affiliation or more than average gang affiliation		relationships not significant. However, self-disclosure with mixed race students reduced gang involvement. High levels of gang involvement, parental support and self-disclosure was inversely related with substance abuse. Parental support acts as a protective factor even when youths are in gangs.
Soenens, B., Vansteenkiste, M.,	The role of intrusive	Cross sectional	Prohibiting strategies increase	690 aged between 15-	Best friend deviant behaviour	Supervision (prohibiting,	Prohibiting positively predicted best friend
Smits, I., Lowet, K. & Gossens, L.	parenting in the		delinquent peer affiliation	21 yrs old (348 boys/	or peer group deviant behaviour	guiding & supporting)	and peer group deviant behaviour.
(2007)	relationship		ammanom	342 girls)	group	supporting)	Psychological control
	between peer						moderated effect on
	management strategies and						prohibiting with deviant friends.
	peer affiliation						goviant monas.
Sule, D.D. (2005)	Correlates of	Cross	Inconsistent	114 gang	416 non gang	Attachment &	Parental attachment
	Hispanic female gang	Sectional	parental supervision & low	members aged 12-15	members aged 12 -15 yrs	Supervision	positively related to gang affiliation. High
	membership		parental attachment	yrs	,		level of parental
			is positively				attachment more likely
			correlated with gang affiliation for				to be in a gang. Parental supervision
			Hispanic females				negative predictor of
			1				gang affiliation. The
							more intense the

Yoder, K.A., Gang Whitbeck, L.B. involvement	Cross sectional	Weak family ties increase likelihood	Total sample 602	311 non gang involved youth	Attachment & Supervision	parental supervision the less likely Hispanic females will join gangs. Significantly less parental monitoring
Hoyt, D.R. (2003) and membership in Homeless and Runaway Youth		of delinquent behaviour or gang membership	194 involved in gangs (32.2%) 93 current gang members (15.4%)	(51.7%)		for current gang members compared to non gang members and involved gang members. No significant difference between monitoring for non members and involved gang members No significant difference between three groups on parental warmth and

Table 2

Data extraction and the quality of the included studies

Author/ Date	Recruitment procedures	Characteristics of participants	Exposure assessment & validity	Outcome measure & validity	Attrition rate, drop out rates & participant retention	Statistics used	Strengths & weaknesses	Quality score
Baba, Y. (2001)	Local detention centre	76 Vietnamese youths, family income reported, mean age between 15.03 and 16.38 yrs	Self report	Self Report	1 declined participation, 1 non English speaker	T-test	Weaknesses Small sample Conducted analysis on gang & cliques combined compared with non gang members Limited generalisability Correlation Strengths Low attrition rate	62%
Bell, K.E. (2009)	Adolescent Health – school data.	Male 3815 (53%) and female 3397 (47%)	Self report	Self-report	None noted. Participants	T-test Logistic	Weaknesses Gang involvement	77%
	Wave 1 and wave 2 data collection time	Ethnicity white (reference category) black,			with missing data excluded from analysis	regression	asked in wave 2, time order & risk factors are problems	

	periods	Hispanic, Asian, & Native American					Attrition rate not discussed.	
		Mean age between 14.21 and 14.94 yrs					School sample exclusion of gang youths	
							Correlation	
							Wave 3 data not included	
							Strengths Large sample size	
							Comparison between male and female gang members	
							Comparison between gang and non gang members	
							Representative sample	
							Data collected over long period 1994 -2002	
Etitle, D.,	Four wave	Male (50%	Self report (alpha	Self report	Wave 1 =	Logistic	Weaknesses	83%

Gunkel, S. & VanGundy, K. (2004)	stratified random sample of attendance at Miami Dade public school	Hispanic, 25% African American, 25% non Hispanic white) 45 gang members aged 13-18 yrs old 788 non gang members	coefficient .52)	(alpha coefficient .61)	70.8% consent rate Wave 2 = 10% attrition rate Wave 3 = 19.8% attrition rate	regression	Small sample in gang membership group Difficult to identify appropriate strata Strengths Retrospective and prospective measures Wave 3 still representative of original sample Sample - better coverage of the population than simple random sampling.	
Florian-Lacy, D.J., Jefferson, J.L. & Fleming, J. (2002)	Cluster sampling and random sampling	205 high school students aged 14- 19 yrs (108 male/ 95 female) (10.3% black, 2% white, 86.8 Hispanic	Multidimensional self report scale – family relation subscale (alpha coefficient .85 of higher)	Gang Membership Inventory questionnaire	2 drop out missing data	One way ANOVA	Weaknesses Sample largely Hispanic population Sample not representative Correlation Divided into high medium	66%

							and low gang membership Strengths Low attrition rate	
Hill, K.G., Howell, J.C., Hawkins, J.D. Battin-Pearson, S.R. (1999)	Data from Seattle Social Developmental Project	808 participants (396 female, 412 male) Aged 10 - 18yrs 46% European American, 24% African American, 21% Asian American, Native American, 3% other	Parental assessment & self report measure	Self report	51 participants drop out rate	Logistic regression	Weaknesses Attrition rate 6% Strengths Good follow up period Prospective longitudinal study Variety of sources e.g., school records, police and court records Assessors blind to exposure	87%
Kee, C., Sim, K, Teoh, J., Tian, C.S. & Ng, K.H. (2003)	From government funded programme for youth involved in street gangs	Total sample = 36 Chinese (32 boys, 4 females) aged 15 -18yrs	Measure of parental style (alpha coefficient above .78) Parental adolescent communication (alpha coefficient above .76)	Youth involved in gangs AND Control group as comparator		T-test	Weaknesses Sample all Chinese Small sample size Sample not representative	62%

							SES not accounted for	
							<u>Strengths</u> Control group	
							No drop out rate or attrition rate	
	Div. L. J. d.	T + 1	Div. 1	G ICP	000/	T.	Validated assessments	020/
Lahey, B.B., Gordon, R.A., Loeber, R., Stouthamer-	Pittsburgh youth study sample	Total sample = 347 boys aged 12-21yrs (204 African American,	Pittsburgh youth study supervision/ involvement scale	Self Report	80% retention rate in each wave	Event history analysis model	Weaknesses Attrition Rate 20%	83%
Loeber, M. & Farrington, D.P. (1999)		Total sample assessed				Multivariate analysis	African American sample	
		(predictors collected through out study) = 183					Sample not representative	
		all African American					Strengths Good follow up period	
							Prospective longitudinal study	
							Assessors blind to exposure	

Ryan, L.G., Miller-Loessi, K. & Nieri, T. (2007)	Summer school students enrolled in English classes	342 aged between 14-18 yrs old 1. None 2. Gang involvement or not involved with gangs 3. less than average gang affiliations or more than average gang	Self report questionnaire (alpha coefficient for parental monitoring .46)	Self report (alpha coefficient .64)	4 students did not participate	Multiple regression	Event history analysis Family factors as independent predictors of gang affiliation Limit analysis to first gang entry to avoid differences between past & present gang membership Weaknesses Correlation Sample not representative Strengths Distinguished level of gang membership Low attrition rate Validated assessments	77%
Soenens, B., Vansteenkiste,	Students in tenth grade	Sample = 690 white Belgium	Parental Management of	Self report (alpha	3% no consent to	Regression analysis	Weaknesses Correlation	66%
M., Smits, I.,	3	(348 boys/342	Peers Inventory	coefficient	participate			
Lowet, K. &		girls) aged 15-21	(alpha coefficient	.73)	_		Sample all white	

Gossens, L. (2007)		yrs	above .66 on all subscales) Psychological Control scale youth self report (alpha coefficient above .82)				Sample not representative Strengths Low attrition rate Validated assessments	
Sule, D.D. (2005)	National Evaluation of the gang resistance education and training programme (GREAT)	555 total sample, all females, all Hispanic, similar SES backgrounds, 49% complete GREAT, 80% complete DARE	Self report questionnaire	Self report questionnaire	25 drop out rate =missing data 116 not included due to past gang membership	Logistic regression	Large sample size – high power Weaknesses Sample Hispanic females only: Limited generalisability Participant recruitment form GREAT Complete programs in	62%
							Attrition and drop out rates not clearly accounted for	

							Correlation Conducted statistical analysis on both present & past Strengths Separate analysis on present affiliation	
Yoder, K.A., Whitbeck, L.B. Hoyt, D.R. (2003)	Midwest Homelss & Runaway Adolescent Project	Total sample 602 194 involved in gangs (32.2%) 93 current gang members (15.4%) 311 non gang involved youth (51.7%) Ethnicity: White (60.1%), African American (24.1%), Hispanic (3.3%), Native American (2.5%), Mixed race (10%) Range 12 -22yrs Mean age 16.27 yrs.	Self report Monitoring measure (4 items) Cronbach's alpha of internal consistency = 0.75 Warmth measure (10 items) Cronbach's alpha = 0.91 Rejection measure (5 items) Cronbach's alpha = 0.79	Self report	4 dropped out = missing data	Chi Squared analysis & Logistic regression	Weakness Correlation Non representative sample – only homeless youth Strengths Low drop out rate Representative sample for ethnicity Compared all three groups	66%

	60% female, 40% male			

Descriptive Data Synthesis.

As mentioned previously the process of using systematic review principles such as the inclusion/exclusion criteria and quality assurance has resulted in eleven studies being included in this review. Of these eleven studies, eight were cross sectional and three were cohort studies, with quality scores ranging from 62% to 77% and 83% to 87%, respectively. Two of the cohort studies used prospective longitudinal designs and one used both a prospective and retrospective design. The majority of the studies in the systematic review examined the relationship between gang affiliation and parental supervision (Bell, 2009; Hill et al., 1999; Kee et al., 2003; Lahey et al., 1999; Ryan et al., 2007; Soenens et al., 2007; Sule, 2005; Yoder et al., 2003). However, seven studies also examined the relationship between gang affiliation and parental attachment (Baba, 2001; Bell, 2009; Etitle et al., 2004; Florian-Lacy et al., 2002; Hill et al., 1999; Sule, 2005, Yoder et al., 2003). Only two studies examined the relationship between gang affiliation and communication with parents (Kee et al., 2003; Ryan et al., 2007).

The majority of studies had been conducted in the U.S (Bell, 2009; Etitle et al., 2004; Florian-Lacy et al., 2002; Hill et al., 1999; Lahey et al., 1999; Ryan et al., 2007; Sule, 2005, Yoder et al., 2003). The remaining three studies had been conducted in Vietnam, Singapore and Belgium (Baba, 2001; Kee et al., 2002; Soenens et al., 2007). In descending order the proportion of participants included in the study were Hispanic, African American, white Belgian, Asian American, Vietnamese, Chinese and Native American. The cumulative sample in all nine studies was 11,747 of which 6,155 were male and 5,590 were female aged between 10-22 yrs old.

The results of each study will be examined under separate headings: supervision, attachment and communication. However, although they will be discussed separately, these factors may interlink.

Supervision.

Soenens et al. (2007) examined three types of supervision including prohibiting, guiding and supporting. They found that prohibiting styles of supervision predicted peer group deviant behaviour ($\beta = 0.22$, p < 0.05). However, they also found that psychological control, adolescents' perception of parental control, actually moderated the effect of prohibiting. That is to say, that the original main effect was substantially reduce, by 41%, after factoring psychological control as a variable (p < 0.001). Prohibiting or controlling styles were also found to be associated with gang affiliation in a study by Kee et al. (2003). Kee et al. (2003) found that gang members experienced higher levels of control from their mothers compared to non-gang members (F=7.58, p<0.01). Moreover, Bell (2009) found that female gang members had less social control and more parental involvement than male gang members (p < 0.05). In addition, social control scores were significantly higher in female and male gang members in comparison to female and male non-members respectively (p < 0.05) (Bell, 2009). In contrast, Yoder and colleagues (2003) found that less parental monitoring was more likely to be associated with gang members compared with involved gang members, individuals who had associated with gangs but did not consider themselves members, and non-gang members $(X^2 = 13.90, df = 2.59, p < 0.01)$. However, no differences were found between the latter two groups (Yoder et al., 2003).

In addition, Hill et al. (1999) suggested that children between 10-12 yrs old who experienced poor family management strategies were more likely to become involved in gangs at 13-18 yrs of age (OR = 1.7). However, Lahey et al. (1999) found that poor parental supervision did

not significantly predict gang membership (HR=1.14, p>0.05). However, the effects of parental supervision and gang affiliation were found to vary with age. That is, youths exposed to poor parental supervision aged 15yrs were more likely to become affiliated with gangs, while youths who experienced poor supervision aged 17 yrs were less likely to become affiliated with gangs (HR=1.58, p<0.005 and HR=0.71, p<0.02, respectively).

However, Sule (2005) conducted two different analyses, one examining present gang affiliation and one examining past and present gang affiliation. Parental supervision was not found to predict present gang affiliation. However, when examining present and past gang affiliation combined, there was a significant result for parental supervision (B=.71, SE=.28, Wald = 6.46, p < 0.05). They found that higher levels of parental supervision decreased the chance that female Hispanic youths became involved in gangs.

Ryan and colleagues (2007) also found that parental supervision did not predict gang affiliation ($\beta = -0.018$, p > 0.05). They found that race and ethnicity was the strongest predictor of gang affiliation ($\beta = 0.130$, $p \le 0.05$). However, they found that parental supervision actually protected youths who were affiliated with low to average levels of gang involvement. This relationship actually moderated the use of substances. That is that more supervision reduced substance use with individuals who were affiliated with low to average levels of gang involvement ($\beta = -0.141$, p > 0.05). In addition, youths affiliated in average to high levels of gang involvement were also protected by parental support, suggesting that increased parental support with these individuals resulted in reduced substance use ($\beta = -0.302$, p > 0.01) (Ryan et al., 2007).

Attachment.

Etitle and colleagues (2004) examined a number of family factors, in particular family attachment. They did not find any significant difference between gang member and non-gang members in family attachment scores (p > 0.05). This coincides with the results from Baba (2001) who did not find any differences in parental attachments between gangs, cliques and those not associated with gangs (t = -0.283, p > 0.05). It also corroborates research conducted by Hill et al. (1999) who did not find a significant relationship. Hill et al (1999) found that poor parental, mother or father attachments at age 10-12 yrs of age were not found to be a predictive risk factor for gang affiliation. Moreover, Yoder and colleagues (2003) found no relationship between attachment and gang membership. However, contradictory findings were found by Sule (2005), suggesting that parental attachment was positively associated with youth gang past & present affiliation among Hispanic females (B = -0.24, SE = .14, Wald = 2.87, p < 0.05). This suggests that high levels of parental attachment were a predictive factor for gang involvement.

However, Florian-Lacy et al. (2002) examined youth's perceptions of family attachments, based on the family relations score, and the link with gang affiliation. They found that youths with higher levels of gang affiliation had lower family relation scores than youths with low levels of gang affiliation (F= 5.023, p < 0.001). In fact, Bell, (2009) found that less parental attachment was significantly related to gang membership for both males and females.

Communication.

Kee et al. (2003) found that gang members experienced significantly less communication with their mothers than non-gang members did (F=8.27, p<0.01). This supports findings by Ryan et al. (2007), which suggest that less self-disclosure to parents with mixed race students significantly predicted gang involvement (β = -0.499, p ≤ 0.05). In addition, youths who

were affiliated with average to high levels of gang involvement were protected by self-disclosure to parents. This suggests that the more self-disclosure among these individuals reduced substance use ($\beta = -0.222$, $p \le 0.05$).

Table 3 clearly illustrates the direct or indirect association between parental relationships and gang affiliation. The types of parental relationships have been divided as above (supervision, attachment and communication).

Table 3

Direct or Indirect association between parental relationships & gang affiliation

Variables	Di	rect	Ind	irect
	Non significant	Significant	Non Significant	Significant
Supervision	l	!	•	•
Soenens et al. (2007)		✓ = prohibiting predicted peer group deviant behaviour (Main effect)		✓ = adolescents' perception of psychological control reduce the main effect
Kee et al. (2003)		✓ = gang members higher level of control from mothers		the main effect
Hill et al. (1999)		✓ = poor family management strategies at 10- 12yrs more likely to be in a gang		
Lahey et al. (1999)	x = poor parental supervision did not predict gang membership			✓ = age variables had an effect on poor parental supervision and gang affiliation
Sule (2005)	x = no relationship with present gang affiliation	✓ = high parental supervision reduce likelihood of gang affiliation (present & past combined)		

Dryon et al. (2007)	× = did not		a/ = narantal
Ryan et al. (2007)			✓ = parental
	predict gang affiliation		supervision &
	ammation		support reduce
			substance use in
			gang involved
Dall (2000)		✓ - Female	individuals
Bell (2009)			
		gangs less social control and	
		more parental involvement	
		than male gangs	
		members	
		members	
		✓ - greater	
		social control in	
		gang members	
		(both female and	
		male) compared	
		to non members	
Yoder et al. (2003)		✓ - less parental	
(2000)		monitoring for	
		current gang	
		members	
		compared to non	
		gang members	
		and involved	
		gang members.	
		88	
Attachment		•	
Etitle, et al. (2004)	x = no		
	relationship		
	retationship		
Baba (2001)	$\times = no$		
Baba (2001)			
Baba (2001) Hill et al. (1999)	x = no		
, ,	x = no relationship		
, ,	x = no relationship $x = no$	✓ = positively	
Hill et al. (1999)	x = no relationship $x = no$	✓ = positively associated with	
Hill et al. (1999)	x = no relationship $x = no$	associated with gang affiliation	
Hill et al. (1999)	x = no relationship $x = no$	associated with gang affiliation ✓ = high gang	
Hill et al. (1999) Sule (2005)	x = no relationship $x = no$	associated with gang affiliation ✓ = high gang affiliated had	
Hill et al. (1999) Sule (2005) Florian-Lacy et al.	x = no relationship $x = no$	associated with gang affiliation ✓ = high gang affiliated had lower family	
Hill et al. (1999) Sule (2005) Florian-Lacy et al.	x = no relationship $x = no$	associated with gang affiliation ✓ = high gang affiliated had lower family relation scores	
Hill et al. (1999) Sule (2005) Florian-Lacy et al.	x = no relationship $x = no$	associated with gang affiliation ✓ = high gang affiliated had lower family relation scores (perceptions of	
Hill et al. (1999) Sule (2005) Florian-Lacy et al.	x = no relationship $x = no$	associated with gang affiliation ✓ = high gang affiliated had lower family relation scores (perceptions of family	
Hill et al. (1999) Sule (2005) Florian-Lacy et al. 2002)	x = no relationship $x = no$	associated with gang affiliation ✓ = high gang affiliated had lower family relation scores (perceptions of family attachment)	
Hill et al. (1999) Sule (2005) Florian-Lacy et al.	x = no relationship $x = no$	associated with gang affiliation ✓ = high gang affiliated had lower family relation scores (perceptions of family attachment) ✓ - Male gang	
Hill et al. (1999) Sule (2005) Florian-Lacy et al. 2002)	x = no relationship $x = no$	associated with gang affiliation ✓ = high gang affiliated had lower family relation scores (perceptions of family attachment) ✓ - Male gang members less	
Hill et al. (1999) Sule (2005) Florian-Lacy et al. 2002)	x = no relationship $x = no$	associated with gang affiliation ✓ = high gang affiliated had lower family relation scores (perceptions of family attachment) ✓ - Male gang members less parental	
Hill et al. (1999) Sule (2005) Florian-Lacy et al. 2002)	x = no relationship $x = no$	associated with gang affiliation ✓ = high gang affiliated had lower family relation scores (perceptions of family attachment) ✓ - Male gang members less parental attachment than	
Hill et al. (1999) Sule (2005) Florian-Lacy et al. 2002)	x = no relationship $x = no$	associated with gang affiliation ✓ = high gang affiliated had lower family relation scores (perceptions of family attachment) ✓ - Male gang members less parental attachment than male non gang	
Hill et al. (1999) Sule (2005) Florian-Lacy et al. 2002)	x = no relationship $x = no$	associated with gang affiliation ✓ = high gang affiliated had lower family relation scores (perceptions of family attachment) ✓ - Male gang members less parental attachment than	
Hill et al. (1999) Sule (2005) Florian-Lacy et al. 2002)	x = no relationship $x = no$	associated with gang affiliation ✓ = high gang affiliated had lower family relation scores (perceptions of family attachment) ✓ - Male gang members less parental attachment than male non gang	

		members less parental attachment than male non gang members					
Yoder et al. (2003)	x = no relationship						
Communication							
Kee et al. (2003)		✓ = less communication with mother in gang members					
Ryan et al. (2007)				 ✓ = less self disclosure with mixed race predicted greater likelihood of gang affiliation ✓ = self disclosure protected gang involved individuals by reducing 			
				reducing substance use			

Discussion

Interpretation of findings.

The systematic review sought to examine whether parental relationships had a direct or indirect association with gang affiliation. Of the eleven studies included in the review, eight were cross sectional and three were cohort studies (Baba, 2001; Bell, 2009; Florian-Lacy et al., 2002; Kee et al, 2003; Ryan et al., 2007; Soenens et al., 2007 & Sule, 2005; Yoder et al., 2003 and Etitle et al., 2004; Hill et al., 1999 & Lahey et al., 1999 respectively). Due to the broad definition used of parental relationships, not all studies examined the same type of relationships and therefore these were divided into sub categories (supervision, attachment & communication). However, it is important to note that aspects of the subcategories are likely to be interlinked.

Direct Association.

Parental supervision was found to be significantly associated with gang affiliation in six studies (Bell, 2009; Hill et al., 1999; Kee et al., 2003; Soenens et al., 2007 & Sule, 2005; Yoder et al., 2003) however, three studies found no such relationship (Lahey et al., 1999; Ryan et al., 2007; Sule, 2005). The five studies that demonstrated significant relationships received quality scores between 62%-77% (suggesting average quality), all of which were cross-sectional. A major limitation of cross-sectional designs is the direction of causality (Ryan et al., 2007). Of the studies that found a significant relationship, one study combined past and present gang affiliation as one group, which can clearly confound the results (Sule, 2005). The differences between past and present gang affiliation are crucial in determining specific associations. That is to say, parental relationships may have different associations with past and present gang membership (Lahey et al., 1999). This is an important area for future research to distinguish as these could aid our understanding of desistance in gangs. Interestingly, Bell (2009) found that greater social control and supervision was associated with gang membership for both males and females. Although, there were differences when comparing male and female gang members, suggesting female gang members had more parental involvement but less parental control than male gang members (Bell, 2009). This is similar to results obtained from Soenens et al. (2007) but contrary to other results from Sule (2005) and Yoder et al. (2003). Both Lahey et al. (1999) and Hill et al. (1999) used prospective longitudinal designs, which are methodologically rigorous designs and received high quality scores, 83% and 87% respectively. However, Hill et al. (1999) also used more than one measure to assess the exposure variable, parental relationships. In fact, both parents and youth assessed the exposure variable resulting in increased reliability and demonstrating the dyadic relationship between child and parent (O'Connor, 2002). They also assessed

school records, police and court reports, again increasing the reliability of outcome variables. Although both studies were of high quality, the findings were conflicting. Hill et al (1999) found a direct association, while Lahey et al. (1999) found an indirect association, which is discussed in more detail below.

The majority of studies found no association with parental attachment and gang affiliation (Baba, 2001; Etitle et al., 2004; Hill et al., 1999; Yoder et al., 2003). One study found a positive association with gang affiliation (Sule, 2005). All these findings contradict both Bowlby's (1969) theory of attachment and Hirschi's (1969) control theory. However, two results from two studies support the aforementioned theories. Bell (2009) found that, gang membership, male and female, was associated with less parental attachment. Moreover, another study found a negative association with family attachment and high levels of gang involvement (Florian-Lacy et al., 2002). As mentioned previously, a positive association was found between parental attachment and gang affiliation (Sule, 2005). A plausible explanation of this finding could suggest that youth attachments with family members will be stronger if other family members are also involved in gangs. While this hypothesis has not been examined in research, Decker and Curry (2000) have found that family members in a gang predicted gang affiliation in youth. Therefore, it is likely that attachment to family will still be strong, even if maladaptive behaviours are the result. Unfortunately, in the study conducted by Sule (2005) participants were not questioned about family members' membership in gangs and so this cannot be verified (Sule, 2005). Another issue mentioned previously with the study conducted by Sule (2005) is the group categorisation. In this study, present and past gang affiliation was combined and it was only when these two groups were combined that parental attachment was found to be significant. This could suggest that exgang members rebuild their attachment with their parents after leaving the gang. Evidently,

based on one study such inferences are difficult to establish, however, future research should attempt to separate such groups as this could confound the results. In addition, all studies that found a significant relationship were cross sectional designs and as mentioned previously, these designs only demonstrate a correlational relationship and therefore the relationship of causality cannot be established.

Only two studies in the review examined parental communication and only one study found a direct association with gang affiliation. Kee et al. (2003) found that gang affiliated individuals had significantly less communication with their mothers than non-gang affiliated individuals. Only one study found a direct association with communication and therefore it is difficult to make any inferences. This is particularly salient as this study used a small sample and all participants were Chinese. In addition, social economic status of participants was not matched between those in the gang-involved group and those in the matched control group.

Indirect Association.

Three studies found an indirect association between parental relationships and gang affiliation. Three studies found an indirect association with parental supervision (Lahey et al., 1999; Ryan et al., 2007; Soenens et al., 2007). The prohibiting styles of supervision were found to be moderated by adolescents' perception of psychological control and peer group deviant behaviour (Soenens et al., 2007). In addition, parental supervision and support was found to act as a protective factor for youths already involved in gangs in that it reduced substance use (Ryan et al., 2007). This is important when planning interventions as family input can still have a positive function when youths are in gangs. Finally, age variable was also found to have an indirect association with parental supervision and gang affiliation.

Lahey et al. (1999) found that individuals exposed to poor parental supervision at 15 yrs were

more likely to become involved in gangs than those who were exposed to poor parental supervision at 17 yrs. These findings relating to poor parental supervision during early adolescence and increased likelihood of gang affiliation could be linked to the theory that youths are looking for a surrogate family, which has been supported by previous research (Grant & Feimer 2007). In addition, it suggests an increased need for early adolescence to have consistent and supportive strategies of supervision.

Aspects of parental communication also had an indirect association with gang affiliation. Self-disclosure with parents acted as a protective factor for youths already involved in gangs as it reduced substance use. In addition, more self-disclosure in mixed race youths actually reduced the likelihood of gang affiliation. The indirect relationship of parental communication is difficult to interpret as only one study examined this variable and found an association. However, communication and supervision could be interlinked suggesting a more complex relationship.

A number of studies included in the review recruited participants from schools (Bell, 2009; Etitle et al., 2004; Ryan et al., 2007; Soenens et al., 2007). This sampling procedure is likely to under-represent youths most likely to be involved in gangs. In particular, the study conducted by Ryan and colleagues (2007) only examined students who were attending summer school.

Another general limitation of most studies in this review is the use of self-report questionnaires for gang membership, as formal validation of such questionnaires has not been conducted. However, there is a long-standing history of self-report gang membership. Such a procedure has been used in a number of research studies (Bjerregaard and Smith, 1993;

Bjerregaard, 2002; Bradshaw & Smith, 2005; Decker & VanWinkle, 1996; Dukes, Martinez & Stein, 1997; Esbensen & Huizinga, 1993; Esbensen et al., 2001b; Winfree et al., 1992).

Nonetheless, self-report measures are subjective and biased, this may lead to 'wannabes' reporting as being a full-fledged gang member when they are not (Walker-Barnes & Mason, 2004). In addition, they may not differentiate between the levels of membership in the gang. Research has suggested that individuals can be core or peripheral members, current or exmembers (Esbensen et al, 2001b; Walker-Barnes & Mason, 2004). These differing levels of gang membership may have a different association with parental relationships. Given these differences in gang membership alone it does not aid our understanding when studies combine different groups such as past and present gang membership or gang and cliques (Sule, 2005; Baba, 2001) or if the level of gang membership is not clearly differentiated. In fact, Esbensen et al. (2001b) suggests that differing constructs of gangs can lead to over and under representation of gang membership, which would affect the findings of research and further proliferate the so called 'gang problem'.

Strengths and Weaknesses of the Review.

This review is not only the first systematic review to be conducted, but is also the first review to address the association between parental relationships and gang affiliation and has therefore filled a gap in the literature. In addition, the current review has used systematic principles, which allows for a more structured search of citations and includes only good quality studies.

However, there are some limitations with this review. Firstly, due to time constraints, only studies written in the English language were included, this could result in other studies that were relevant being excluded from the review. Secondly, only studies that were published

have been included. This is known as publication bias suggesting that studies are more likely to be included in journals if they demonstrate a significant finding. This could therefore skew the findings if inclusion criteria only allowed for published studies (Petticrew & Roberts, 2006). Thirdly, not all relevant studies may have been included in the final selection as the researcher was unable to perform hand searches on specific relevant journals such as Journal of Gang Research, which may have had many relevant articles. Finally, another bias in the review is the use of only one researcher conducting the quality assurance. The reliability of the review would have been increased had this process been conducted by two researchers.

Conclusions.

Gang affiliation is considered a multifaceted phenomenon. That is to say, that many risk factors combined may increase the risk of gang affiliation. This intertwining of risk factors suggests that risk factors can have both a direct and an indirect association. Due to the limited number of studies, it is difficult to ascertain any clear conclusions. In addition, none of the studies examined research based in the United Kingdom. Therefore, caution needs to be raised with any cross-cultural comparisons.

However, based on the findings and the quality of the studies in this review, it can be inferred that parental supervision can have both direct and indirect effects on gang affiliation. In fact, the review highlighted that the type of supervision and impact this has on an individual may vary between cultures, gender and age. Moreover, our findings suggest that communication between parent-child were seen as a protective factor for youths who were at risk of joining gangs or who were already in gangs (Ryan et al., 2007). While parental relationships, such as parental supervision and communication, demonstrated both a direct and an indirect association with gang membership, research relating to family attachments showed a direct

relationship. Of the three studies, two suggested that lower attachments was linked to gang affiliation and one found higher attachments were linked to gang affiliation. Due to the limited number of studies and the fact that the latter result was based on a solely Hispanic sample, the implications of these studies are less clear. In fact, these studies did not specify family criminality or family gang membership of participants, which may have influenced the results (Decker & Curry, 2000; Sirpal, 2002). In addition, it is evident that there may be some overlap between parental supervision, communication and attachment.

Recommendations and Implications.

Future research could investigate these variables and hence aid our understanding of gang culture in families. The discrepancy in gang constructs suggests future research could benefit from a validated measure of gang membership, which could differentiate between levels of gang membership (Lahey et al., 1999; Esbensen et al., 2001b). In addition, differentiating past, present and re-entry into gangs needs to be looked at individually in order to aid our understanding of desistance of gangs (Lahey et al., 1999).

While it is acknowledged that more research is needed, the findings found in this review could guide intervention and prevention plans. For example, the findings suggest that there may be benefits of using systemic treatment approaches in order to build more positive parental relationships. The review supports the need for enhancing communication skills between parents and children, such intervention programmes help parents manage children who are committing crimes, enable on open dialogue between parents, child and the police. These programmes have been implemented in Scandinavian countries with good effect (Carlsson & Decker, 2006). Furthermore, these programmes provide parents with new skills

and resources to supervise and support their children reducing marginalisation and ensuring youths are not ostracized (Carlsson & Decker, 2006).

The current chapter explored the literature around gang membership and parental relationships. In particular, the review explored areas relating to aspects of supervision, attachment and communication on relation to gang membership. Table 3 clearly illustrates the relationship found between gang membership and parental supervision, attachment and communication. The subsequent chapter attempts to expand on the literature found in this review by examining the relationship between gang membership, family risk factors (e.g., attachment) and individual risk factors (e.g., violent cognitions).

Chapter 3: Research Study

Perceptions and Risk Factors of Gang Association in a UK Sample

Abstract

This research project aimed to examine the differences between the level of gang membership and perceptions about gangs and gang crime. Moreover, attachment theory and anger, violence and self-esteem research were explored, in order to understand why differences may exist between the groups and how this may influence an individual's desire to join gangs. The design was a cross-sectional between subjects design using secondary school pupils aged between 13 and 18 years old. A number of assessments were administered including the Culture Free Self-Esteem Inventory (CFSEI), Inventory of Parent and Peer Attachment (IPPA), Maudsley Violence Questionnaire (MVQ) and Novaco Anger Scale and Provocation Inventory (NAS-PI). The results demonstrated some commonalities between groups (i.e., those acquainted with gangs and those not affiliated with gangs) in relation to definitions of what constitutes a gang. In addition, the MVQ Machismo subscale was positively correlated with peer alienation and negatively correlated with the peer total score, trust and communication subscale scores. However, there were also some differences between the two groups when comparing the Machismo subscale score on the MVQ, the father alienation subscale and mother communication subscale on the IPPA. The findings are discussed in relation to practical implications such as aiding prevention and intervention programmes and areas for future research are recommended.

Introduction

A number of issues are often noted as affecting academics' and practitioners' examining and working with gangs. It is important to note that current policies in the UK advocate and emphasise the value of evidence-based practice when developing and implementing reduction programmes, and theories aim to provide a starting point for such programmes. In fact, the use of evidence-based practice in the psychological field is a long-standing protocol when assessing, formulating, and intervening in a problem. This is considered a pre-requisite in order to understand individuals rather than label or criminalise them. This is relevant to work with gang-involved individuals. In order to understand and develop appropriate theories, to inform intervention, a several issues must be considered. Definitional issues in examining gangs will be briefly reviewed (see Introduction for a more detailed discussion). Moreover, a detailed examination of current gang reduction strategies will be explored and critiqued. Finally, current psychological theories that could aid formulations of youths joining, desisting or resisting gang membership will be explored. Several of these issues will then be explored empirically to contribute to the knowledge-base necessary in devising appropriate evidence-based interventions.

Definitional Issues & Gangs

As has been mentioned previously, there are numerous difficulties when researching gangs. These complications have been associated with methodological differences in defining gangs, the most commonly used are stipulative methods such as definition by analysis, synthetic definition and correlational synthetic definition, details of which have been provided in the Introduction (Ball & Curry, 1995). However, other stipulative methods that were not mentioned, involve obtaining personal accounts, perceptions and experiences of what a gang is from youths affiliated or unaffiliated to gangs (Petersen, 2000). For the purpose of this

research, a combination of approaches will be used including, the latter and Sharp, Aldridge and Medina's, (2006) five criteria about gangs. Both procedures use stipulative methods and required participants to self identify as being in a gang or knowing someone in a gang. Such procedures of self-reporting have been used extensively in other research studies (Bjerregaard, 2002; Bjerregaard & Smith, 1993; Bradshaw & Smith, 2005; Decker & VanWinkle, 1996; Dukes, Martinez & Stein, 1997; Esbensen & Huizinga, 1993; Esbensen, et al., 2001b; Petersen, 2000; Winfree et al., 1992).

Prevention and Intervention Strategies

As previously discussed, there are difficulties with defining gangs and this has a knock on effect with intervention and prevention plans. Moreover, the media interest in gangs often exacerbates the problem by attributing gang members as being responsible for serious violent crime (Howell, 1998; Hallsworth & Young, 2008). This has led to a number of new policies and legislation being developed which are punitive in nature (Conly, 1993). This was particularly true in the USA and subsequently led to a proliferation of gang strategies being developed to reduce the problem. These included different approaches such as communitybased programmes, suppression, social intervention, counselling, multi systemic therapy, aggression replacement therapy and providing new opportunities for young people (Howell, 1998; Spergel, Curry, Chance, Ross, Alexander Simmons & Oh, 1994). The latter approach enabled young people to have more prospects in training and job preparation, which aimed to benefit future career opportunities. Social intervention strategies targeted at-risk youths to join mentoring programmes, increased social neighbourhood inclusion with renovation projects and provided youth centres. According to Spergel and colleagues (1994), this approach has received positive outcome in the reduction of gang involvement and crime. In fact, similar approaches exist in other European countries. However, the focus in these

countries is on preventive measures such as school-based programmes targeting topics such as bullying, violence, drug abuse and racism (Carlsson & Decker, 2006).

The labelling and targeting of gang members led to an increase in punitive efforts, in an attempt to reduce crime, which linked to a variety of gang suppression tactics being implemented. For example, many states in the USA increased prison sentences or created new legislation that disallowed community sentences (Esbensen et al., 2001b; Petersen, 2000; Winfree et al., 1992). In fact, such deterrent reactive strategies have been found to be ineffective as they only increase social exclusion and marginalisation (Carlsson & Decker, 2006; Petersen, 2000). Moreover, such extreme suppression tactics can actually increase gang cohesion, solidarity and violence as a form of rebellion from perceived harassment and discrimination because of feelings within the group of being harassed or discriminated against (Carlsson & Decker, 2006).

However, other strategies to reduce the gang problem include gang intervention programmes such as the Gang Resistance Education and Treatment (GREAT) programme or the Illinois Gang Crime Prevention Center. Both programmes have been developed and implemented across many states in the USA without an understanding of which gang specific risk factors are being targeted. For example, the GREAT programme consisted of a broad range of general topics such as conflict resolution, consequences of crime and drugs, individual responsibilities and dealing with peer pressure. The evidence of the programme efficacy has been inconsistent. Some researchers have reported small effects associated with attitudes and an increase in coping skills (Palumbo & Ferguson, 1995), others have reported an increase in pro-social attitudes with a reduction in some criminal behaviour (Esbensen & Osgood, 1999; Esbensen, Osgood, Terrence, Petersen &

Adrienne, 2001). However, Klein & Maxson (2006) raise caution to the latter results suggesting that significant changes were small and marginal and did not constitute support for GREAT being used as a gang prevention programme.

Many researchers have hypothesised factors accounting for the poor efficacy of the programme, which include issues concerning length of programme, age of youth targeted, lack of multicultural framework and lack of specificity on gangs (Klein, Kerner, Maxson & Weitkamp, 2001; Klein & Maxson, 2006; Petersen, 2000). Moreover, the programme did not use the principles of effective correctional intervention (risk, need and responsivity), which has been emphasised as important in any risk reduction programme (Andrews & Bonta, 2003; Di Placido, Simon, Witte, Gu & Wong, 2006). The risk principle proposes that high risk offenders will benefit most from treatment, the need principle suggests that crimonogenic needs are those factors which will reduce recidivism and responsivity principle suggests that the programmes and interventions should be matched to the individuals level of ability, learning style and level of motivation (Andrews & Bonta, 2003). In fact, many of these factors raised are also being highlighted as important factors that need to be taken into account when conducting a violence reduction programme with mentally disordered or personality disordered offenders who are often seen as resistant to intervention strategies (Howells, 2004; Jones & Hollin, 2004).

The research also suggests that programmes which are person centred that encourage intrinsic motivation are more likely to have an impact on change and therefore more likely to influence an individual's decision to desist, resist and avoid gang membership as well as reduce violent behaviour (Burrows & Need, 2009; Chambers, Eccleston, Day, Ward, &

Howells, 2008; Howells, 2004; Jones & Hollins, 2004). The programmes mentioned above have not been developed using evidence based practice, show poor efficacy outcomes and have been criticised by Klein and Maxson (2006) for being ideological and politically driven.

In order to provide effective prevention and interventions programmes, researchers need to understand the risk factors associated in joining gangs (these have been discussed previously in chapter 1) and understand the motives and incentives that attract young people to join gangs. A good model that could highlight such motives is the Good Lives Model discussed below.

Theories of Gang Membership

In previous chapters, a number of explanations have been highlighted in an attempt to understand gang membership; indeed findings indicate that there are a plethora of motives for joining gangs. In fact, adolescents are probably attempting to meet certain needs that everyone attempts to reach in order to achieve a good life. The Good Lives Model (GLM) lends itself to a humanistic perspective suggesting that all individuals are attempting to meet certain needs including *healthy living, knowledge, excellence in work and play, autonomy, emotional control, belonging, meaning in life, happiness, creativity* (Ward & Stewart, 2003). The needs described in GLM resonate similar ideas proposed by Maslow's (1968) hierarchy of needs. However, unlike Maslow's theory, the GLM suggests that needs which are blocked are likely to be attained using inappropriate behaviours. Moreover, the GLM suggests that individuals may have a number of primary needs, which are important to achieving their good life rather than obtaining all needs as with self-actualisation (Maslow, 1968). In fact, Goldstein (2002) suggested similar motivation for joining gangs in concordance with the

GLM. Essentially, all individuals have similar aspirations, whether an offender or nonoffender, however the means of obtaining these needs will vary from person to person. This
model has historically been used in the treatment of sexual offenders but it has more recently
been implemented in other risk reduction programmes such as violent offending behaviour.

In fact, it is likely that this model can be applied to gang reduction programmes.

The aetiology of why individuals attempt to achieve these goals in inappropriate ways links to other psychological theories described below. However, it is beyond the scope of this paper to discuss all theories (for a detailed review see Wood & Alleyne, 2009). The theories discussed include attachment, anger, violence and self-esteem. These theories are likely to work synergistically and complementary to one another.

Attachment Theory.

As has been mentioned previously (Chapter 2), attachment theory suggests that secure attachments early in life provide the foundation for future emotional and interpersonal relationship stability (Bartholomew & Horowitz, 1991). This led to findings that those who were insecurely attached were more likely to be involved in delinquency or criminal activity. This theory has since been paralleled to gang membership. Researchers suggest that gangs act as a surrogate family thereby ameliorating the deficits in their own family (Song, Dombrink & Geis, 1992). However, this view is not shared by all. In fact, others suggest that those young people are more likely to join gangs when they have friends or family members involved in a gang (Decker & Curry, 2000; Spiral, 2002). A literature review (Chapter 2) examined parental relationships and gang affiliation. This found four studies indicating no relationship with attachment and one study indicating a positive association with parental attachment and gang affiliation (Sule, 2005). A plausible explanation of this finding could

suggest that youth attachments to family members will be stronger when other family members are also involved in gangs. However, the research was all conducted abroad therefore it may not necessarily be generalisable to a UK population.

More recently, research has become interested in peer attachments (Armsden & Greenberg, 1987). This has led to differing views of the importance and balance of these relationships when compared to parent attachments. These include the psychodynamic, socialisation and cognitive perspectives. The psychodynamic suggests that peer relationships are a necessary substitute for parents, while the socialisation theory suggests that peer and parent relationships are contending for influence. The cognitive perspective advocates that peer attachments are distinct from parent attachment but interact with one another (Schneider & Younger, 1996). In fact, peer attachments are particularly relevant as risk factors, suggesting that certain peer relationships can have a negative influence (Bjerregarrd & Smith, 1993; Esbensen & Huisinga, 1993; Hill et al., 1999, 2001).

Anger, Violence and self-esteem.

Anger is a human emotion that can result in healthy or unhealthy consequences. The latter can lead to rumination, anger outbursts, revenge, and aggression (DiGiuseppe & Tafrate, 2001). In fact, historically research around violence reduction often orientated around anger management, even though it was deemed 'neither a necessary nor a sufficient condition for aggression and violence' (Howells, 2004 p. 189). However, researchers acknowledge that anger is often a prominent feature in a number of violent offences including rapes, physical violence, and fire setting (Blackburn, 1993; Jones & Hollin, 2004). Moreover, researchers have found that anger intensity and frequency is higher in the offender population (Zamble & Quinsey, 1997). In addition, anger has commonly been associated with perceptions that an

important relationship has been devalued (Leary, Twenge & Quinliavn, 2006). Consequently, an individual's self-esteem is affected. The concept of self-esteem is complex and multifaceted. Many researchers suggest that individuals' self-esteem can vary depending on different areas in their life being examined (Battle, 2002; Walker & Bright, 2009). The developmental perspective of self-esteem links to the attachment theory and suggests that individuals' internal working model of the self can be either positive or negative depending on whether they experienced a secure or insecure attachment (Bartholomew & Horowitz, 1991). Moreover, such evaluations can be internal, (i.e., perceptions made by the person about themselves) or external perceptions made by the person about others' evaluations of them (Gilbert, 1998).

The research around violence and self-esteem has fluctuated, some advocating that high self-esteem results in violent actions (Baumiester, Bushman & Campbell, 2000) while others proposed that low self esteem predicted aggression and/or violence (Schwatz, Waldo & Daniel, 2005; Parker, Morton, Lingefelt & Johnson, 2005). The former used a sample of men who had been involved in interpersonal partner violence while the latter used delinquent adolescents. However, a recent review suggested that there are inconsistent findings in this area (Ostrowksy, 2010). Interestingly, one researcher has found the there may be race specific variation when examining the relationship between self—esteem and violence. A detailed review of the research can be found by Walker and Bright (2009). They propose that false inflated self-esteem predicts greater violence. They suggest that this false inflation protects individuals from the reality that they actually have low self-esteem. Such individuals hold violent prone cognition, which results in feelings of shame, humiliation and/or embarrassment when presented with perceived threats to the self. This leads to consequences of responding in a macho way in an attempt to rectify or re-instate their pride and self-esteem.

In fact, research has found that the Machismo subscale on the Maudsley Violence Questionnaire (MVQ) significantly predicted past violence and institutional violence in a forensic population (Warnock-Parkes, Gudjonsson & Walker, 2008). It is likely that the machismo scale would also predict violence conducted by gang members.

Aim

This research endeavours to explore the following three aims;

- I. To identify different groups depending on whether they identified as being in a gang, having desisted from being in a gang, wanted to be in a gang, had acquaintances (e.g., friends or family) in a gang or had no affiliation with gangs.
- II. To examine differences in the above groups based on perceptions about gang definitions, motives for joining gangs, types of gang crime and strategies for gang prevention. For example, it was hypothesised that those not in gangs would have more harsh views on gangs and gang crime compared to those involved in gangs.
- III. To examine differences in the above groups based on a variety of psychological assessments. For example, it was hypothesised that those involved or acquainted with gangs would have more violent condoning attitudes (e.g., higher scores on Machismo scale) compared to those not affiliated with gangs. In addition, it was expected that those in the acquainted group would also have lower scores on attachment and self-esteem compared to those not affiliated with gangs.

Method

Design.

The research was a cross-sectional between subjects design comparing different groups depending on the level of gang membership and/or affiliation.

Participants.

Participants were recruited from schools in high-risk gang involved areas of
The mean age of the sample was 15.31 (SD = 1.54, range 13-18 years) with 71 females and
61 males. The total sample included 132 participants. The participants identified their
primary carer as biological parents (76.1%), biological mother (12.0%), biological father
(2.1%) guardian (1.4%), step-father (.7%) and this information was missing for the remainder
of the sample (7.7%). Moreover, the majority of the sample identified the marital status of
parents as married (76.8%) followed by living together (5.6%) single (4.2%), divorced
(3.5%), widowed (2.8%), separated (1.4%), in a relationship living apart (.7%) and missing
data (4.9%).

Measures.

Background Information & Gang Questionnaire.

This consists of three sections (demographic, gang and delinquency) resulting in eight, sixteen and six items respectively with a total of 30 items. The majority of the questions are yes/no responses with the remaining questions requiring a descriptive response (Appendix H).

Novaco Anger Scale & Provocation Inventory (NAS-PI) (Novaco, 2003).

The NAS-PI is a two part self-report questionnaire. Part a, the Novaco Anger Scale (NAS) consists of 60 items. The response format is a 3-point Likert scale (1= never true, 2=sometimes true, 3=always true). Part b, Provocation Inventory (PI) consists of 25 items. Individuals are required to rate the degree of anger in a variety of situations. The response format is a 4-point Liker scale (1= not at all angry, 2= a little angry, 3= fairly angry, 4= very angry). Administration time is approximately 25 minutes.

Culture Free Self-Esteem Inventory Third Edition (CFSEI-II) Adolescent Form (Battle, 2002.)

Self-esteem refers to the perception the individual possesses of his or her own self worth. The self-report questionnaire consists of 60 items relating to five domains general, social, academic, parental and personal. General self-esteem is the aspects of self-esteem that refer to the individual's overall perceptions of their worth. Social self-esteem is the aspect of self-esteem that refers to the individual's perception of the quality of their relationship with their peers. Academic self-esteem is the aspect of self-esteem that refers to an individual's perception of their ability to succeed academically. Parent related self-esteem refers to an individual's perceptions of their status in the family home. This includes their subjective perceptions of how parents or parent surrogates view them. Personal self-esteem refers to youths' perceptions of themselves as individuals. The lie subtest measures defensive responding. Individuals who respond defensively to self-esteem items on this subscale refuse to ascribe characteristics which are deemed socially unacceptable to themselves. Individuals are required to respond yes or no to the items. Greater scores on this assessment represent a higher self-esteem. Administration time is approximately 10-15 minutes.

Maudsley Violence Questionnaire (MVQ; Walker, 2005).

The MVQ is a 54-item questionnaire covering a range of cognitions, beliefs and attitudes that may provide support, justification and excuses to use violence in a given situation. Each item is rated true/false. The MVQ comprises two subscales: Machismo (42 items) relates to violence as a reaction to embarrassment or humiliation, to perceived threat, and based on the stereotype of masculinity and strength and Acceptance (14 items) refers to the enjoyment and acceptance of violence (in the media and in sport) and condoning of violence because of rejection. The administration time is approximately 10-15 minutes.

Inventory of Parent and Peer Attachment (IPPA; Armsden & Greenberg, 1987).

The IPPA was developed in order to assess adolescents' perceptions of the positive and negative affective and cognitive dimension of relationships with parents and close friends.

Three broad dimensions are assessed: degree of mutual trust, quality of communication, and extent of anger and alienation. The instrument is a self-report questionnaire with a five point Likert scale response format. The IPPA consists of 25 items for the mother, 25 items for the father, and 25 items for the adolescent. The administration time is approximately 20 -25 mins.

Procedures

Ethical approval was sought and obtained from the Life and Health Sciences Ethical Review Committee at the University of Birmingham. The proposal approved allowed for parents or guardians to opt children out of the research, a procedure that has been used previously with those under 16 year old (Campbell & Morrison, 2007; Procter, Rudolf, Feltbower, Levine, Connor & Robinson, 2008; Rodham, Hawton, Evans & Weatherall, 2005; West, Sweeting, Young & Kelly, 2010; Williams, Daley, Burnside, Hammond-Rowley, 2010). In addition, it required that all participants be provided with information sheets (Appendix K). Included in the information sheets were helpline contact numbers should individual pupils have any concerns regarding gang membership.

After ethical approval had been obtained (Appendix G), 15 schools from a number of areas with high-risk of gang activity were contacted and letters distributed to headteachers in order to gain school participation consent (Appendix I). The letter provided a detailed account of the research aims and a return slip allowing schools to opt in or out of the research (Appendix J). In order to increase response rates a self-addressed envelope was also provided. Out of

the 15 schools that were contacted, five replied, three declined to participate and one school and one college accepted. After consent forms were received, a follow-up phone call was conducted in order to arrange an initial visit.

At the initial visit, the researcher gave a short assembly to pupils about forensic psychology and research. In addition, confidentiality and anonymity was explained. The participants were informed of the research project aims. At the end of the Assembly, pupils over 16 years were given an information sheet (Appendix K). Information sheets and opt out forms were posted to parents/guardians home addresses for those under the age of 16 (Appendix L and M). The parents or guardians were given two weeks to opt their child out of the research, if no opt out form was received parental consent was assumed. There were eight opt-out forms received and those individuals were excluded from the research. The procedure of allowing parents to opt their child out of research has been used in a number of previous studies. Such procedures have commonly occurred in school based samples from children as young as 4 years through to 16 years old (Campbell & Morrison, 2007; Procter, Rudolf, Feltbower, Levine, Connor & Robinson, 2008; Rodham, Hawton, Evans & Weatherall, 2005; West, Sweeting, Young & Kelly, 2010; Williams, Daley, Burnside, Hammond-Rowley, 2010). In fact, the difficulties and biases associated with active parental consent have been found to negatively impact participation. Research has found that active parental consent can create sample selection bias by over-representing families with high socio economic status and educational attainment. Moreover it tends to exclude those pupils deemed to be most at risk (Anderman, et al., 1995; Esbensen, Miller, Taylor, He, & Feng, 1999). For a detailed review of the issues associated with active parental consent see Esbensen, Melde, Taylor and Peterson (2008).

During the second visit, all pupils, except those who were excluded, were given a consent sheet to complete and sign (Appendix N). Pupils were able to decline to participate at this point if they wished. All participants that consented were then asked to complete a questionnaire quietly and independently. This included the demographic and gang questionnaire, CFSEI, MVQ, NAS-PI, and IPPA, which are described above. The administration time is approximately 45-60 minutes. Most pupils completed the questionnaires during form period. Unfortunately one college requested pupils take the questionnaires home to complete. While this was not ideal in order to obtain as many participants as possible this was allowed. However, few were returned using this method. When completing the questionnaire respondents were asked to provide a code name that was only identifiable to them. The purpose of the code name was to ensure that participants could withdraw their data, up until the point of publication of results, if they wished and to ensure anonymity. As a thank you for participating, individuals' names provided on the consent forms were placed into a draw for an iPod nano.

All questionnaires were returned to the researcher in a sealed envelope to ensure anonymity. Once the questionnaires had been completed, the researcher scored all the questionnaires, ensuring the correct procedures (if scoring information was available) were used for missing data or invalid responding. If an assessment was deemed invalid due to missing data or inconsistent responding it was excluded from the analysis because these assessments are not reliable for interpretation. For the NAS PI there were two validity measures to ensure that participants were responding consistently to similar worded items. Each inconsistent paired response item (Total for NAS = 8, Total for PI = 8) received a score of 1. These are added together to provide a total inconsistent responding index score. If only the NAS was

administered the threshold is 2 or greater, if only the PI was administered the threshold is 3 or higher and if both sections (NAS & PI) were administered the threshold is 4 or higher. If the responding index scores met these threshold criteria they were deemed invalid. If no procedures for missing data were provided, for example the MVQ and the IPPA, the researcher used similar cut off standards. For example for the MVQ if more than two items were missing per subscale the subscale was deemed invalid. For the IPPA if more than one item was missing on the subscale then the subscale was invalid, if more than three items were missing on full attachment score then the assessment was invalid. This resulted in four peer attachment, four father attachment and 3 mother attachment scores being excluded from the analysis. There were five CFSEI excluded due to invalid responding. Unfortunately, there were a high number of participants who received an inconsistent responding index score at or above the threshold criteria on the NAS-PI and this resulted in 90% of the sample being excluded from the analysis. This high rate of inconsistent responding is likely to be due to the NAS-PI having stricter criteria compared to other assessments used. Nonetheless, as explained earlier it is not advisable to score assessments or psychometrics that are deemed invalid because interpretations of these assessments are unreliable. In fact, due to the remaining sample being small, the NAS-PI was not used in the final analysis of data. Once all measures had been scored these were inputted onto the Statistical Package for Social Sciences (SPSS) database. The paper copies of the questionnaires were stored in a locked cabinet in the Principlal Investigator's office in the School of Psychology.

Based on the responses to the demographic and gang questionnaire, the participants were allocated into groups including those with no affiliation to gangs, those who had family members or friends in a gang (acquainted group), and those that self-identified as being in a gang, although this group was quite small (n= 10). The additional groups were devised based

on level of acquaintance with gangs due to the lack of pupils that self-identified as wanting to be in a gang or as desisting gang membership.

Results

Initial descriptive analyses were conducted examining the samples in terms of gang status. This resulted in three groups, those that self identified as being in a gang (gang member), those that had acquaintances (e.g., family and/ or friends) in a gang and those that had no affiliations to gangs. The demographic variables such as gender, age and ethnicity and the assessment variable mean scores such as global self-esteem, machismo, acceptance, and peer, mother, father attachment scores were examined. This resulted in a total of 77 (47 female, 30 male), 45 (21 female, 24 male) and 10 (3 female, 7 male) participants in the not affiliated, acquainted and gang-identified group respectively. The age range was between 13 and 18 for all groups with mean ages of 15.65, 15.09 and 15.00 respectively. In the not affiliated group the majority of participants were Pakistani British (46.8%), Asian British (22.1%), and Bangladeshi British (18.2%). In the acquainted group, the majority of participants were of 53.3% Pakistani British, 22.2% Bangladeshi British, 20% Asian British. Finally, the majority of participants in the gang-identified group were either Pakistani British (30%) or Asian British (30%).

Reliability analyses were conducted on all measures and subscales expect for the NAS-PI measure which was excluded from further analyses for reasons explained earlier. The majority of measures and scales demonstrated moderate to good reliability. This is illustrated below in Table 4. However one subscale, the IPPA Peer Trust subscale demonstrated very poor reliability. In fact, one item (21: My friends respect my feelings) from this subscale indicated that it significantly affected the overall reliability and if this item were removed

from the subscale the reliability improved (α = .937, number of items = 9, N = 68). This is a cause for concern and must be considered when examining results for subsequent analyses. However, a more detailed review of the reliability and validity of the IPPA measure can be found in Chapter 5.

Table 4

Cronbach's alpha for assessment measures and subscales

Measure & Subscale	Cronbach Alpha(α)	Number of items	N
IPPA			
Father			
Total	.934	25	46
Trust	.862	10	65
Communication	.835	9	57
Alienation	.858	6	68
Mother		•	
Total	.806	25	64
Trust	.483	10	77
Communication	.835	9	69
Alienation	.827	6	75
Peer			
Total	.943	25	58
Trust	.002	10	67
Communication	.874	8	71
Alienation	.688	7	65
MVQ			
Machismo	.811	14	59
Acceptance	.961	42	53
CFSEI			
Total	.897	59	71
Academic	.646	10	72
General	.720	11	73
Parental/ Home	.689	12	74
Personal	.738	14	73
Social	.751	12	74
Defensiveness	.536	8	73

Table 5 illustrates the descriptive statistics of the groups based on the assessment mean scores. As can be seen, due to incomplete or missing data the sample size was reduced for the gang-identified group. Therefore, statistical differences between the groups were unable to be

conducted. However, the trends in the data were discussed below. These three groups were later collapsed into acquainted and not affiliated in order to conduct statistical analysis. As stated earlier in Chapter 1, individuals with family or friends in a gang are considered high risk in joining a gang (Decker & Curry, 2000; Esbensen & Huizinga, 1993). The different psychological characteristics between the two groups were deemed important in understanding the trajectory of joining gangs.

Table 5

Descriptive statistics based on group status

	Gang identified		Acc	Acquainted (family &		Not affiliated			
				frie	nds in a g	ang)			
	N	Means	Std.	N	Means	Std.	N	Means	Std.
			deviation			deviation			deviation
CFSEI									
Global Self-	3	41.33	13.05	21	38.97	10.01	51	43.89	9.86
esteem Score									
MVQ									
Machismo Score	4	30.75	13.35	24	21.96	11.16	38	12.42	11.74
Acceptance	4	10	2.71	24	8	3.46	38	6.47	3.63
Score									
IPPA									
Peer Attachment	4	79.25	25.67	28	89.21	16.79	44	93.5	19.35
Score									
Father	5	76	32.64	29	81.86	18.21	37	91.73	20.82
Attachment									
Score									
Mother	4	97.5	22.3	25	86.48	20.06	54	97.76	17.4
attachment score									

The pattern in the table illustrated higher mean scores for both subscales (Machismo & Acceptance) on the MVQ assessment in the gang –identified group. The not affiliated group had higher mean scores for the CFSEI assessment and all three IPPA attachment scores (peer, father, mother). As was mentioned previously, a small sample of participants self-identified as being in a gang, therefore statistically significant differences could not be obtained and the subsequent results sections examined differences and similarities between the acquainted and not affiliated group only.

However, prior to conducting such statistical analysis, a qualitative analysis was conducted to examine differences between the groups based on their perceptions of what defined a gang, as lack of clarity in the definition of a gang has been noted as a problem in previous research. This analysis also ensured that those who were included in the group identified as being acquainted with a gang in subsequent analyses, were using a consistent definition of what a gang is.

Youths Perceptions of Gangs: A Qualitative Analysis

The groups described above were used to conduct a qualitative analysis examining participants' perspectives of what constitutes a gang and what distinguished a gang from a group of friends. The participants from both groups have been identified with a numeric value when quoted. Moreover, the frequency of statements supporting each theme can be seen in Tables 6 and 7.

The first question allowed participants to respond, in their own words, to 'describe what a gang is.' There were many themes present including *social context, unity and protection, intimidation and fear, attitude* and *behaviour*. The majority of these were paralleled across

the two groups. Many respondents alluded to *social context* as being important in describing a gang. For example in the not affiliated group youth five illustrated a gang as "a group of young boys who hang around on corners". In addition, youth 13 portrayed a gang as a "group of friends who take interest in the same thing or activity" and youth 52 described "a group of people who are into the same kinds of hobbies". In fact, this theme of sharing time together was paralleled with those in the acquainted group. For example, youth 40 commented that gangs are "a group of friends who enjoy hanging around together". In fact, one youth (two) from the gang-identified group also described "hanging around with each other" as a criterion.

The second theme that was considered an important criterion of what constituted a gang was *unity and protection* and this theme resonated with all groups. For example, in the not affiliated group, youth 33 described gangs as "stick[ing] up for each other" while youth 8 illustrated them as "considering themselves a family". Youths in the acquainted group also referred to elements of loyalty and solidarity as being important, however this also focused on elements of protection. For example, youth 29 expressed that gangs "back each other up when in trouble". One youth (22) in this group even alluded to gangs as "help[ing] people cause they can't go to the cops". Finally, Youth 18 in the gang identified group described "sticking together whatever the terms".

The third theme that was identified in the respondents' answers as being relevant to gangs linked to aspects of *intimidation and fear*. This was referred to by only one youth in the acquainted group who described gangs as "threatening" and no such patterns were present in the gang-identified group. However, there was a higher frequency of participants that perceived gangs as intimidating in the not affiliated group. This was illustrated by terms used to describe individuals in the gang, such as "bullies". In fact, one youth (10) described gangs

as people who "bully people possessing a threat". Another youth (six) referred to the gangs as "making other people around them feel inferior to them" and yet another youth (9) commented that gangs "make others feel uncomfortable by doing certain things and say[ing] certain things".

The penultimate theme was *attitudes or beliefs* that youths associated with gangs. In general, these were mixed but often associated with a bravado mentality or were associated with a lack of respect for others. There were more examples of bravado mentality in the acquainted group. For example, youth 25 referred to gangs as "thinking they are tough and hard" while youth 27 commented that gangs are "acting hard in front of everyone". Another example of bravado but which also hints to elements of egocentricity was youth 17 who commented that gangs "think its all about them". There were similar examples of this theme in the not affiliated group, youth 22 describing gangs as "think[ing] they are cool and hard". On a different note, youth 33 commented that gangs "don't care about their family" and youth 30 described gangs as "think[ing] they are gaining respect". There were no such examples in the gang-identified group.

The final theme was *behaviour* and this was the most plentiful in terms of examples. In fact, it was apparent that behaviour was perceived by youth to be a key criterion of what constituted a gang. Moreover, the groups were similar in the types of behaviour that were perceived to be gang related; many referred to examples of criminal activity and violence. In the acquainted group, youth 26 described gangs as "caus[ing] trouble and vandalising the neighbourhood". In the not affiliated group youth 37 referred to gangs as being involved in "bad things like robbing houses and stealing from houses" and youth 50 wrote that gangs "damage surrounding area e.g., graffiti". However, participants in the gang-identified group

also described specific criminal behaviours as a criterion for gangs. For example, youth 42 described gangs as "carry[ing] guns and claim[ing] territory". Many other youths in all groups perceived gangs as causing trouble and behaving in an antisocial manner.

Table 6

Themes and frequencies of characteristics describing a gang

	Sample N	Social Context	Unity & protection	Intimidation & fear	Attitude	Behaviour
		% (n)	% (n)	% (n)	% (n)	% (n)
Not Affiliated	77	27.2 (21)	7.8 (6)	11.7 (9)	3.9 (3)	29.9 (23)
Acquainted	45	26.7 (12)_	11.1 (5)	2.2(1)	8.9 (4)	35.6 (16)
Gang-identified	10	10(1)	10(1)	0 (0)	0 (0)	40 (4)

The second question, 'what distinguishes a gang from a group of friends?' allowed respondents to describe what they thought were the differences between these two groups. The majority answered this question, although a couple were unsure or could not identify characteristics that separated the two, and a few thought there were no differences. This response occurred with similar frequency across all groups. As with the previous question, similar themes were portrayed across two of the three groups with the following themes emerging: appearance, intimidation & intention to harm, unity, behaviour, and social context. However, there was an extra theme present in the not affiliated group relating to peer pressure. There were also fewer themes classified in the gang group. In fact, only two themes were present in the gang group: unity and behaviour.

Both the acquainted group and not affiliated group perceived that *appearance* differentiated gangs from a group of friends. This identified three key areas that the respondents thought were unique to gang members including their attire and accessories. For example, in the

acquainted group, youth 18 depicted gangs as having a "dress code [e.g.,] hoodies". This youth also described gangs as "talk[ing] a certain way". There was a higher frequency (see Table 2) of individuals who referred to appearance as being unique to gangs in the not affiliated group. For example, youth 62 portrayed gangs as "wearing hoodies..... and have ferocious dogs with them and be smoking". There were a couple of other references to "vicious dogs" as well as to style of clothing.

The second theme that was present and perceived as differentiating gangs from friendship groups was *intimidation and intention to harm*. Again, both the acquainted and not affiliated groups had elements of this theme in participant responses (see frequency Table 2). However, there were more examples and the language used was more emotive in the not affiliated group than the acquainted group. For example, in the acquainted group youth 55 commented that gangs are "looking to cause trouble" and youth 56 described friendship groups as being "less threatening". However, youths in the not affiliated group depicted gangs as being "threatening and suspicious", "targeting" and "scary". One youth (46) even illustrated gangs as "pursu[ing] the thing they do to deliberately hurt, kill or threaten somebody". In the gangidentified group, the dialogue also alluded to intention as being important for gangs, one youth (49) commented that when "someone messes with you you get your gang to sort 'emout'

The third theme was *unity* and as before this referred to gangs as having close bonds or demonstrating a high degree of loyalty towards each other. In fact, the dialogue used was very similar if not the same as the responses to the first question. However, the difference here was that the acquainted group also attributed this as a trait common in groups of friends.

For example youths 12 and 24 described groups of friends as "stick[ing] up with each other" and "look[ing} out for each other".

The fourth theme, *behaviour*, had a similar focus as the theme behaviour in the first question, which referred to crime, illegal activity and violence. For example, in the not affiliated group, youth 63 talked about gangs "carry[ing] weapons" while youth 13 described gangs as doing "graffiti, drugs and alcohol". However, this was paralleled to those in acquainted and gangidentified groups. The former described gangs as "act[ing] violent" (youth six) and "do[ing] stuff that are illegal". The latter also referred to violence, fights, crime and guns. This was in comparison to how groups of friends were perceived. In fact, all groups generally alluded to groups of friends as not breaking the law, not causing trouble and not "resort[ing] to violence" (youth 75). While the not affiliated group made more references to enjoyment such as youth 26 who described a group of friends as "chilling and having a laugh".

Another theme that appeared in the previous example was *social context*. In fact, this was a prevalent criterion for defining gangs in the previous question for both the acquainted and not affiliated group. However, the mode of socialising was elaborated on in this question and there was agreement between the two groups, both illustrating gangs as "hanging on corners" (youth 10) and "knowing each other by doing bad stuff" (youth 19) while groups of friends "hang around and enjoyed life" (youth 41) and "know each other through many ways" (youth 19).

The final theme that was observed as occurring in only one group was *peer pressure*. Those in the not affiliated group perceived gangs as having to use "violence to prove to be a part of the gang more peer pressure in a gang especially with weapons" (Youth 43), while another

youth alluded to members having to "complete tasks ... in order to represent the group in order to initiate membership".

Table 7

Themes and frequencies of characteristics distinguishing gangs from groups of friends

	Sample N	Appearance	Attitude	Intention to harm & intimidation	Unity	Behaviour	Social Context	Peer Pressure
		%(n)	%(n)	%(n)	%(n)	%(n)	%(n)	%(n)
Not	77	11.7 (9)	2.6 (2)	15.6 (12)	2.6 (2)	37.7 (29)	14.3	2.6 (9)
affiliated							(11)	
Acquainted	45	4.4 (2)	0 (0)	11.1 (5)	13.3	44.4 (20)	11.1 (5)	0 (0)
					(6)			
Gang	10	0	0	10(1)	10(1)	60 (6)	0	0
identified								

Youth Perceptions of Gangs: A Statistical Analysis

Subsequently, a number of chi-squared analyses were conducted to examine the qualitative data from responses to multiple choice questions related to the five criteria (i.e., group of people spending time together in public, considers it OK to do illegal things, committed an illegal activity together in last 12 months, has some type of structure such as a leader or dress code and has existed for more than three months) outlined by Sharp and colleagues (2004), motives for offending, types of gang crime, and strategies to stop gang crime, in order to see if there were any difference and/or similarities between the acquainted and not affiliated group. Only these two groups were used due to the small sample size in the gang identified group. Table 7 illustrates that one criterion, "a gang has done an illegal thing together in the last 12 months", was found to be identified as important significantly more often in the acquainted group ($X^2 = 4.48$, df=1, p<0.05). Interestingly the quantitative and qualitative

analysis both demonstrated a high degree of consistency concerning the definitional issues, in particular when considering criminal activity as a requirement.

Table 8

Bi-variate analyses comparing the acquainted and not affiliated groups

Variables	N	Acqua y, frie	uinted(famil nds)	Not Aff	iliated	X^2
		%	n	%	n	
Definition A gang is a group of people the spend time together	130	77.4	41	70.1	54	0.83
A gang considers it ok to do illegal things	130	69.8	37	70.1	54	0.00
A gang has done an illegal thing together in the last 12 months	130	71.7	38	53.2	41	4.48*
The gang has some structure e.g., leader, name, rules or belongs to particular territory	130	92.5	49	92.2	71	0.00
The gang has existed for more than three months	130	62.3	33	50.6	39	1.77
Gang Crime						
Robbery	127	74	37	75.3	58	0.03
Burglary	127	64	32	64.9	50	0.01
Motor theft	127	52	26	48.1	37	0.36
Vandalism	127	78	39	71.4	55	0.68
Graffiti	127	92	46	84.4	65	1.58
Assaults	127	70	35	51.9	40	4.09*
Sexual Assaults	127	46	23	42.9	33	0.12
Drug dealing/ trafficking	127	56	28	68.8	53	2.16
Drug use/ possession	127	60	30	58.4	45	0.03
Murder	127	44	22	36.4	28	0.74
Threats/ intimidation	127	46	23	57.1	44	1.51
Drive by shooting	127	32	16	29.9	23	0.07
Weapon Use	127	66	33	48.1	37	3.95*
Knife Crime	127	74	37	64.9	50	1.16
Gun Crime	127	54	27	53.2	41	0.01
Gang Recruitment	127	50	25	63.4	28	2.32
Stop Gang Crime						
Police in school	124	56	28	54.1	40	0.05

Police in community	124	74	37	73	54	0.02
Gang Units	124	52	26	44.6	33	0.66
Tougher laws	124	36	18	52.7	39	3.35+
Neighbourhood watch	124	30	15	43.2	32	2.22
After school	124	26	13	36.5	27	1.50
programmes						
Parent/ Family	124	26	13	29.7	22	0.21
interventions						
Curfew laws	124	22	11	32.4	24	1.60
Community	124	22	11	35.1	26	2.46
Programmes						
Job training	124	56	28	44.6	33	1.55
programmes						
Mentor Schemes	124	24	12	36.5	27	2.16
Motives						
Friendship	131	79.2	42	91	71	3.7+
Family	131	47.2	25	44.9	35	0.67
Protection	131	75.5	40	74.4	58	0.21
Money	131	56.6	30	56.4	44	0.00
Respect	131	77.4	41	73.1	57	0.31
To belong to something	131	62.3	33	71.8	56	1.32
Fear	131	45.3	24	54.1	50	4.55*
Access to drugs	131	50.9	27	64.1	50	2.26
Excitement	131	62.3	33	51.3	40	1.54
School problems	131	28.3	15	39.7	31	1.81
Family problems	131	17	9	43.6	34	10.13***
No job	131	34	18	37.2	29	0.14
Nothing better to do	131	52.8	28	57.7	45	0.30

⁺ Just missed significance level (0.05)

In addition, the perceptions of what constituted gang crime was also examined. Assaults ($X^2 = 4.09$, df=1, p<0.05) and weapon use ($X^2 = 3.95$, df=1, p<0.05) were thought to be common types of gang crime significantly more frequently by those in the acquainted group. Moreover family problems were considered to be a common motive for joining gangs more often in the not affiliated group ($X^2 = 10.13$, df=1, p<0.001). Finally, there were no significant differences between the two groups when examining perspectives about what strategies would stop gang crime indicating the groups thought similar strategies would work or not work at reducing gang crime.

^{*} p < 0.05

^{**} p< 0.01

^{***} p < 0.001

Psychological Characteristics

The previous section examined two groups; acquainted and not affiliated groups in terms of their opinion of characteristics of gangs. The current section continues to use the same groups, however this time an inclusion/exclusion criterion was also added. Only those who agreed to four or more of the characteristics used by Sharp and colleagues (2006) were considered in the analysis. This resulted in 33 participants in the not affiliated group and 34 in the affiliated group. However, this sample size varied between assessments due to missing or invalid data. Initially, a number of normality checks were conducted including Skewness, Kurtosis and Kolmogrov Smirnov test. This indicated that the majority of the scores were normally distributed. However, a few required non-parametric tests and so were analysed as such.

Correlations.

Initially a Spearman's correlation was conducted in order to examine any relationships between scores, including both the full scores and the subscale scores. These were divided under sub headings based on name of assessment for ease of reading.

CFSEI

As would be expected there were significant relationships between the subscale scores on the CFSEI. Moreover, these were found to be in the predicted direction. The subscales; Defensive (r = 0.53, df = 37, p < 0.01, 2-tailed), Academic (r = 0.65, df = 37, p < 0.01, 2-tailed), Parental/Home (r = 0.71, df = 37, p < 0.01, 2-tailed), personal (r = 0.92, df = 37, p < 0.01, 2-tailed) and Social(r = 0.77, df = 37, p < 0.01, 2-

tailed) of the CFSEI demonstrated a significant positive relationship with the global rating scores.

In addition, the total Father Attachment score (r = 0.51, df = 21, p < 0.05, 2-tailed), Father Trust subscale (r = 0.51, df = 21, p < 0.05, 2-tailed), total Mother Attachment score, (r = 0.54, df = 36, p < 0.01, 2-tailed), Mother Trust subscale (r = 0.5, df = 36, p < 0.01, 2-tailed) and Mother Communication (r = 0.34, df = 36, p < 0.05, 2-tailed) all demonstrated a significant positive relationship with total Global Self Esteem score. However, Mother and Father Alienation (r = -0.44, df = 36, p < 0.01, 2-tailed and r = -0.47, df = 21, p < 0.05, 2-tailed respectively), demonstrated a significant negative relationship with Global Self-Esteem.

MVO

There was a significant positive correlation between Machismo and Acceptance (r=0.81, df=32, p<0.01, 2 tailed). This indicates that as one subscale score increased so did the other subscale. In addition, there was a significant inverse relationship with the defensive score and Machismo score (r=-0.43, df=28, p<0.05). In fact, on closer examination this demonstrated an inverse relationship with defensive score only for acquainted group (r=-0.69, df=13, p<0.01). For the Machismo subscale there was also a significant positive correlation with Peer Alienation subscale (r=0.39, df=30, p<0.05, 2-tailed). However, the total Peer Attachment score, Peer Trust score, and Peer Communication score was significantly negatively correlated (r=-0.59, df=30, p<0.01, 2-tailed, respectively). However, closer investigation suggested that these relationships were only present in the not affiliated group (alienation peer r=0.56, df=15, p<0.05; Peer Attachment score r=-0.67, df=15, p<0.01; Peer Trust r=-0.69, df=15, p<0.01; Peer Communication r=-0.71, df=15, p<0.01). Finally, there was also a statistically

significant negative correlation with these variables when compared with the Acceptance score (r= -0.41, df = 30, p<0.05, 2-tailed; r= -0.39, df=30, p<0.05; r= -0.50, df=30, p<0.01, respectively).

IPPA

The total Peer Attachment score demonstrated a statistically significant positive relationship between Peer Trust and Communication (r= 0.95, df= 36, p<0.01, 2-tailed and r= 0.90, df=36, p<0.01, 2-tailed) but resulted in a significant inverse relationship with the Peer Alienation subscale (r= -0.52, df=36, p<0.01). There were also two positive relationships with the total Mother Attachment score and the Mother Trust subscale, both were statistically significant (r= 0.41, df= 28, p<0.05, 2-tailed and r= 0.38, df= 28, p<0.05, 2-tailed).

Moreover, there was a significant positive correlation with the total Father Attachment score and the Father Trust, Communication subscale and Mother Attachment score (r= 0.94, df=35, p<0.01, 2-tailed; r=0.86, df=35, p<0.01 and r=0.55, df= 23, p<0.01). However, there was a significant negative relationship between total Father Attachment score and Alienation subscale (r= -0.67, df=35, p<0.01). As with the total Father and Peer Attachment score, there was a significant positive relationship with the Mother Trust and Mother Communication subscale (r= 0.91, df=46, p<0.01, 2-tailed; r= 0.84, df= 46, p<0.01, 2-tailed) but a significant inverse relationship with Mother Alienation subscale (r= -0.77, df=46, p<0.01, 2-tailed).

Independent T-tests and non-parametric equivalent.

Subsequently, independent t-tests or their non-parametric equivalent (Mann-Whitney test) were conducted in order to examine any difference or similarities between groups. The table

below indicates the means and standard deviations for the Global Self Esteem score, Machismo score, Acceptance Score, Peer Attachment score, and Mother Acceptance Score.

Table 9

Means and Standard Deviations for the Global Self Esteem score, Machismo score,
Acceptance Score, Peer Attachment score, and Mother Acceptance Score

Psychological Characteristic	Group	Mean (M)	Standard Deviations (SD)
Global Self-Esteem Score	Acquainted	34.49	10.24
	Not affiliated	43.06	10.60
Machismo Score *	Acquainted	25.00	11.85
	Not affiliated	15.07	12.71
Acceptance Score	Acquainted	8.29	3.57
	Not affiliated	6.20	3.55
Peer Attachment Score	Acquainted	85.47	19.74
	Not affiliated	91.88	20.06
Mother Attachment Score	Acquainted	89.72	22.8
	Not affiliated	99.14	15.79

^{*}p<0.05

There was no statistically significant difference between the acquainted group and the not affiliated group when examining Global Self-Esteem (t=1.59, df=35, p>0.05, 2-tailed). Moreover, there was no significant difference between the two groups when examining General, Academic and Social Self-Esteem (t=.731, df=35, p>0.05; U=117, p>0.05, U=127.5, p>0.05). However, there were significant differences between the acquainted and not affiliated group when examining Personal and Parental Self-Esteem (t=2.17, df=35, p<0.05; U=102, p<0.05). In fact, both subscales indicate a higher mean self-esteem score for the not affiliated group.

When examining the differences between MVQ subscales scores, there was a statistically significant difference in the Machismo subscale (t = 2.29, df = 30, p < 0.05, 2-tailed) but no significant difference was found with Acceptance subscale (t = 1.66, df = 30, p > 0.05, 2-tailed).

Moreover, there was no significant difference between the two groups when examining Peer and Mother Attachment (t= 0.97, df = 34, p > 0.05, 2-tailed and t= 1.66, df= 44, p>0.05, 2-tailed). In addition, there was no significant difference between the acquainted and the not affiliated group for the Father Attachment scores (U = 93.5, p>0.05). The average rankings were 15.45 and 21.82 respectively. However, there were some significant differences when examining the attachment subscales. There was a significant difference between the two groups when examining Father Alienation scores (t=2.17,df = 52.6, p<0.05). This found that the acquainted group had higher mean scores than the not affiliated group. The other two Father subscales, Communication and Trust, did not differ significantly between the groups (t=1.82, df=64, p>0.05 and t=393.5, t>0.05 respectively). However, the subscales Trust and Communication for Mother were found to be significantly different between groups t=477.5, t=0.05 and t=477, t=0.05. There were higher mean scores for both subscales (trust and communication) on the not affiliated group (43.66 and 43.67) than the acquainted group (32.10 and 32.08).

Discussion

The aim of the research was to examine whether differences exist between different groups depending on whether they self-identified as being in a gang, had acquaintances in a gang, desisted from gang membership or had no affiliation to gangs. Unfortunately, it was not possible to statistically examine the self-identification group due to the small sample size or the desistance group due to lack of individuals identifying with this group. Participants'

perceptions of gangs were examined using qualitative and quantitative approaches. Finally, the groups were examined on a number of psychological characteristics.

Gang Status

The results found that very few participants acknowledged wanting to be in a gang, desisting from gang membership or self-identifying as being in a gang. In fact, there was considerable overlap with these questions on the survey where participants positively acknowledge all three. This led to the researcher having to exclude groups (e.g., ever been in a gang and want to be in a gang) due to small samples and combining these participants with other groups. This procedure of combining groups together has been criticised by the current author (in Chapter 2) because the level of involvement within gangs was considered important and could provide useful information (Esbensen et al., 2001b; Esbensen & Huizinga, 1993; Klein & Maxson 2006; Winfree et al., 1992). Unfortunately, this procedure was used because of the lack of self- disclosure in this sample. Another possible explanation resulting in low levels of self-reported gang involvement links to the sampling procedures used. Researchers using a school sample have acknowledged that it may underestimate the problem or exclude the most high-risk individuals who may have already been removed from formal education (Ryan, Miller-Loessi & Nieri, 2007).

Youths Perceptions of Gangs

The results of the qualitative analysis yielded similar themes as that of other qualitative studies conducted abroad (Petersen, 2000). Moreover, young people's perceptions of what constituted gangs placed a large emphasis on *behaviour* and *social context*. These themes can be paralleled to other definitions or typologies (Gordon, 2000; Hallsworth & Young, 2004, 2005, 2008; Klein & Maxson, 2006). Interestingly, the theme *unity and protection* alluded to

some reasons why youths may want to join gangs. For example, this may link to aspects of the Good Lives Model, which suggests that individuals are attempting to meet certain needs in order to have a good life. The theme *unity and protection* could be linked to a number of needs such as *belonging, meaning in life* and *happiness* and could explain why youths are drawn to gangs. In fact, this theme has been paralleled to other research about motives for joining gangs (Ward & Steward, 2003; Curry, 2004). Perceptions of *intimidation, fear or intent to harm* were higher in the not affiliated group. In fact, such perceptions are likely to be exacerbated by media reports that often misrepresent the gang problem (Hallsworth & Young, 2008).

The two groups, acquainted and not affiliated, were also compared using qualitative data. This looked at participants' perceptions of gang crime, perceptions relating strategies linked to stopping gang crime, and perceptions relating to motives for joining a gang. The acquainted group perceived gangs as being more associated with assaults and weapon use than the not affiliated group did. This finding is likely to be associated with those individuals in the acquainted group having more 'insider knowledge' about what goes on in gangs because they have friends, family members and/or relatives in a gang. These close ties suggest that these individuals may be at risk of joining gangs, if they are not already in a gang (Decker & Curry, 2000; Esbensen & Huizing, 1993; Spiral, 2002; Thornberry et al., 1993). However, on all other types of crime there was general agreement between the groups. This pattern of gangs being involved in a wide variety of criminal behaviour has been found in other research (Esbensen & Huzinga, 1993; Dukes, Martinez & Stein, 1997; Howell, 1998; Thornberry et al., 1993). Interestingly, the two groups did not differ on their perception of useful gang prevention and intervention strategies. However, perception of the use of tougher laws just missed significance level and this finding was higher (although not significantly so)

in the not affiliated group. In fact, this would be consistent with the observation that public fear can create hysteria and result in politicians creating harsh punitive legislation in attempts to reduce public panic. This has occurred in some countries, despite the literature suggesting that such reactive strategies are unsuccessful (Carlsson & Decker, 2006; Petersen, 2000). In fact, such fear of gangs was also found to be a motive for joining into a gang. This was perceived to be associated more with the not affiliated group and could be linked to individuals trying to gain emotional control, one of the needs of the Good Lives Model (Ward & Stewart, 2003). In fact, the not affiliated group thought that family problems were strongly associated with gang membership and this could be linked to a number of needs in the GLM such as happiness, belonging and autonomy (Ward & Steward, 2003).

Psychological Characteristics

The subsequent section examined the results of the research in relation to previous research conducted. This was spilt into two sections attachment theory and violence and self-esteem.

Attachment Theory.

When examining the parental (father and mother) attachment scores, there were significant relationships with global self-esteem scores. This finding supports the attachment theory and the internal working model of the self being viewed as positive in the presence of secure attachment by the primary carer (Bowlby, 1969; Bartholomew, 1990; Bartholomew & Horowitz, 1991). However, no differences were found between the two groups when comparing the total father and mother attachment scores, supporting previous findings (Baba, 200; Etitle, Gunkel & VanGundy, 2004; Hill et al., 1999; Yoder, Whitbeck & Hayt, 2003). One explanation for the results in this research could be the lack of distinction between the groups and that participants in the groups did not identify as being in a gang. On the other

hand, there was a significant difference between the two groups when examining father alienation subscale. This suggested a greater level of perceived alienation by those in the acquainted group. While initially this may appear to provide support for gangs acting as a surrogate family, interpretations need to be considered with caution. This mainly centres around the fact that the acquainted group did not identifying as being in a gang and these differences in feelings of alienation could be a result of resisting gang membership while the family (e.g., the father) is attempting to encourage gang membership.

There were also some significant differences found between the groups when examining mother trust and communication. The mean scores were found to be higher in the not affiliated group than in the acquainted group and were statistically significant. In fact, other researchers have also found both direct and indirect relationships with communication (Kee et al., 2003; Lahey et al., 1999). In fact, Carlsson and Decker (2005) described a variety of family interventions that were used in Scandinavian countries, which encouraged communication between parents and child. Finally, no differences were found between the groups when examining the peer relationships. Again, this could be due to the lack of distinction between the groups. However, this could also suggest that peer relationships are equally secure, irrelevant of whether individuals had friends associated with gangs.

Anger, Violence & Self-esteem.

There was no significant difference between the two groups when examining global general, academic and social self-esteem. However, there were significant differences between the acquainted, and not affiliated group, when examining personal and parental self-esteem, both subscales indicating a higher mean self-esteem score for the not acquainted group. These findings support previous research, which suggests that self-esteem is multidimensional and

that differences between groups may not always be found when examining solely global selfesteem ratings (Battle, 2002; Walker & Bright, 2009).

In addition, there were significant differences between the two groups when examining Machismo subscale score. This indicated that those in the acquainted group had higher scores, representing more machismo prone cognitions, than did the not affiliated group. This suggests that those with acquaintances in gangs may be influenced by similar cognitive styles. Moreover, when examining the mean machismo scores in all three of the groups (gang members, acquaintances and not affiliated), the results demonstrated a higher mean score in the gang members group. Unfortunately, the Machismo scale could not be compared to self-reported delinquency because there was a significant poor disclosure rate in this area. However, previous research has indicated that violent cognitions are a risk for committing future violent acts (Warnock-Perkes et al., 2008). Unfortunately, whether individuals had committed a violent offence could not be substantiated. Moreover, the sample was not representative and some researches have found ethnic differences when examining the relationship between violence and self-esteem (Gillespie, 2005).

Unfortunately, anger measures were excluded from the analysis and therefore no interpretations can be made because they would be unreliable. However, there were some interesting relationships found when examining the subscale scores on the MVQ. In particular, a negative relationship was found between defensive responding on the CFSEI and Machismo subscale of the MVQ. This suggests that as the machismo score reduced the defensive score increased or vice versa. However, on closer examination these results were only significant in the acquainted group. Such findings do not support the theory of false inflated self-esteem (Sandstrom & Jordon, 2008; Walker & Bright, 2009). Moreover, the

results do not suggest machismo had any relationship with the global self-esteem or the self-esteem subscale scores. Therefore, this research has found no relationship between high or low self-esteem and machismo, contrary to previous research (Baumeister et al., 2000; Schwatz et al., 2005; Parker et al., 2005).

In fact, Ostrowsky (2010) suggested a number of reasons why findings may be inconsistent. This included factors such as self-esteem being multidimensional, being unstable, lack of self-disclosure, sample and gender. The former has been assessed in this research as all subscales were examined in relation to violent cognitions. However, unstable self-esteem has been associated with an increased risk of anger and hostility (Ostrowsky, 2010). Unfortunately, the stability of self-esteem was not monitored and therefore this could explain differences between the current research and previous research. Moreover, Walker and Bright (2009) point out that many self-esteem measures do not always monitor socially desirable responding and defensive responding and as such, false inflation may be difficult to assess. Finally, other research has been criticised for using restricted samples, which cannot be generalised to other populations; such criticisms also are applicable to this research (Ostrowsky, 2010).

Moreover, research has found contradictory evidence associated with self-esteem, violence and gender (Baumeister et al., 2000; Ostrowsky, 2009). This research combined both males and females in the two groups, which could have masked any significant findings. Finally, it is important to note that this research examined self-esteem in relation to violent cognitions, while previous research has examined aggressive and violent behaviour. Moreover, such violent cognitions could not be compared to delinquency rates, as there was very poor reporting in this area. In fact, given the defensive or possibly socially desirable responding to

questions relating to delinquency is could be hypothesised that this style of responding is applicable to all assessments.

Another finding that was significant was the relationship between the peer attachment scores. All peer attachment scores (total, trust and communication) showed a negative relationship with the MVQ scores while alienation showed a positive relationship. This significant relationship was found to be associated with the not affiliated group. The direction of causality could not be established, however it could indicate that those with macho cognitive styles are excluded by their peers or that those already excluded by peers have an increased macho cognitive style. Moreover, it may suggest that those with violent attitudes may become marginalised by pro-social peers. The experience of being marginalised is likely to have a further detrimental effect (Carlsson & Decker, 2006; Petersen, 2000).

Limitations of the research

There were a number of limitations relating to the research, some of which have already been highlighted. These were mainly focused around definitional issues, design, sampling procedures and level of involvement. A detailed review of definitional issues was discussed and the author attempted to take into account the limitations of previous research. In fact, the author used definitions provided by youth and standard definitions provided by Sharp, et al. (2004). Moreover, due to a lack of participants self-reporting as being in a gang, the author also added inclusion and exclusion criteria in order to have a more restrictive definition. This research used a cross-sectional design that limits interpretation and is not as rigorous as longitudinal design (Kantowitz, Roediger III, & Elmes, 2001). Another limitation relates to the sampling procedure that consisted of secondary school pupils. This is likely to under-represent gang members, and is likely to exclude the most high-risk individuals (Ryan, et al.,

2007). Moreover, the demographic variables, in particular ethnicity, were not representative of the general population and therefore results cannot be generalised. Finally, due to participants' poor self-disclosure identifying themselves as in a gang, characteristics related to gang involvement could not be assessed statistically. Moreover, as stated previously, groups were combined which can confound important differences.

Theoretical Implications

Notwithstanding the limitation mentioned above, it is clear that the findings in the research have expanded and supported the literature in this area. As was mentioned previously, research around attachment, violent cognitions and gang membership has not been conducted previously in the UK. Moreover, the findings also found an interesting relationship between machismo and peer relationships, which warrants further research. In addition, these findings may benefit the development of future intervention programmes, both in school and at home. It is particularly important to use UK research findings, rather than using research findings from other countries (Feinstein & Kuumba, 2006; Hallsworth & Young, 2004, 2008; Marshall, Webb & Tilley, 2006) as consistent differences have been found between gangs from different areas (Klein & Maxson, 2006). In fact, the research findings provide some tentative support around the type of content that may benefit gang programmes in the UK.

Practical Implications

As mentioned earlier, the results provide some tentative support for programme content. The differences between the Machismo subscale when comparing the two groups supports the use of a cognitive approach in programmes in order to reduce these macho cognitions. In fact, programmes in Canada have targeted violence and cognitions in gang members. The results indicate positive outcomes, including a reduction in offending, when compared to gang

members who did not attend the programme (Di Placido et al., 2006). However, the findings indicated higher scores in the acquainted group and this group is likely to be high risk for joining gangs. In fact, previous research has provided support for peer and family factors influencing individuals in joining gangs (Bjerregarrd & Smith, 1993; Erickson, 1968; Esbensen & Huizinga, 1993; Hill et al., 2001; Harris, 1995). Addressing such cognitions may reduce the risk of joining gangs and subsequently reduce the risk of violence. If such a hypothesis were correct, it implies that the cycle would need to be broken and therefore may benefit from interventions which incorporate siblings at the same school and combine family awareness groups in order to break the cycle. However, the author acknowledges that this finding did not specifically address gang members and future research (discussed further in Chapter 6) in this area would be of benefit.

Moreover, mother communication was also found to be different between the two groups. Lower scores were significantly associated with the acquainted group. In fact, this supports current prevention and intervention strategies being used in Scandinavian countries, which encourage communication between parent and child and use school-based programmes (Carlsson & Decker, 2005). The evidence from these programmes has been promising and supports the use of systemic therapies with youth at risk of joining gangs or already members. In fact, current research advocates the effective use of systemic of family therapy with children and young people for a variety of child focused problems including attachment, emotional and behavioural problems (Carr, 2009). Moreover, Multi-Systemic Therapy as proposed by Henggeler and colleagues uses a holistic approach incorporating schools and families into treatment. In fact, the evidence shows that this form of treatment has been effective with youths involved in criminal and violent behaviours (Henggeler, Cunningham, Pickrel, Schoenwald & Brondino, 1996; Henggeler, Schoenwald, Borduin, Rowland &

Cunningham (2009). In addition, research has also found that cognitive behavioural approaches show positive effects when attempting to reduce antisocial behavioural in young people but has also bee found to benefit adult male offenders who are gang members (Connor, 2002; DiPlacido et al., 2006). The evidence advocates that both systemic and cognitive behavioural approaches can be effective for prevention and intervention programmes for gang members.

The current chapter explored perceptions and risk factors associated with gang membership. The research found the young people perceived unity, social context and behaviour as being important factors that distinguish gangs form a group of friends. The former two factors, unity and social context, illustrate possible motives for joining gangs that would link into the Good Lives Model. Moreover, young people in the not affiliated group perceived family problems as being a reason why people may join gangs. In fact, such family risk factors have been discussed previously in Chapter 1 and 2. Finally, the current research found that those acquainted to gang members had more violent cognitions than those not affiliated.

The subsequent Chapter compares the evidence around perceptions, risk factors and motives for gang membership found in the research described here and other literature as they relate to a case study example. The case study reviews the literature on gang membership and explores the client's historical background in order to examine whether the risk factors for gang membership found in previous examples are relevant to this client. As has been mentioned previously, understanding this background information has been found to be important when planning effective intervention programmes. The intervention used in this case study was discussed in relation to other gang related interventions mentioned in previous chapters.

Chapter 4: Case Study of Mr XY

Abstract

The case study focuses on a patient, Mr XY, who has been detained under the Mental Health Act and diagnosed with paranoid schizophrenia. He had previously been a member of a gang and had numerous convictions, including robbery, theft and assault. The literature reviews the risk factors and motives associated with gang membership. In addition, in line with professional practice, a detailed background history about Mr XY was explained along with assessment results (Test of Memory Malingering (TOMM), Weschler Adult Intelligence Scale - Revised (WAIS III), Millon Clinical Multi-axial Inventory (MCMI), Anger Disorder Scale (ADS) in order to assess his level of functioning and to aid the development of a Cognitive Behavioural Therapy (CBT) formulation. The formulation examined the client's offending behaviour which included factors relevant to his affiliation to gangs, offending behaviour, drug use and his mental health deterioration. In addition, the Rational Emotive Behaviour Therapy (REBT) formulation was used to demonstrate the maintenance cycle of his behaviour. The intervention focused on his anger problems, in particular his hostility towards others, using a CBT model (e.g., REBT) this was to be conducted in juxtaposition with sessions focusing on his drug use by another professional. Unfortunately, due to a series of constraints, no post treatment measures were not conducted. However, a brief review of his progress has been discussed.

Ethical Considerations

The information in the case study is based on a factual account. The client has been referred to as Mr XY in order to protect his anonymity and confidentiality. He has consented to participate during all the sessions of which the majority have been conducted by the author and to being described in this case study.

This chapter is not available in the digital version of this thesis.

Chapter 5: Critique of a Psychometric Tool

Abstract

Attachment theory has been around for over 3 decades, however, there are very few measures to assess an individual's attachment. The critique described an attachment measure, the Inventory of Parent and Peer Attachment (IPPA), and discussed previous studies that had used this measure. Moreover, the reliability and validity of the measure was examined. In addition, the implications and limitations of using this measure in research and practical setting were discussed.

Introduction

The research and literature discussed previously (Chapter 1) indicated that poor family and/ or peer bonds were risk factors for violent behaviour and joining gangs. The attachment theory suggests that human beings are innately programmed to form attachments with others (Bowlby, 1969). Bartholomew defined an attachment as "an enduring affective bond between particular individuals" (Bartholomew, 1990, p.149). Such attachments begin to develop towards the primary caregiver during the early stages of infancy and childhood. This initial attachment allows the child to develop one of four attachment styles including secure, insecure, anxious & ambivalent (Bartholomew & Horowitz, 1991). The different styles provide the individual with internal models, differing frameworks and cognitive representations about others and the self. These models allow individuals to develop schemas of how to respond and behave to others. For example, an individual who has experienced a caregiver as distant or unreliable is likely to develop the assumption that others cannot be trusted and /or may develop feelings of worthlessness (Ainsworth, 1989; Ainsworth, Blehar, Water & Wall, 1978). Such poor attachments can have serious consequences on an

individual's psychological state, emotional regulations and behavioural responses when forming future relationships. In fact, some suggest that these early experiences foster maladaptive schemas, dysfunctional models and poor coping strategies (Young, Klosko, Weishaar, 2003). Moreover, research suggests that initial models play an important role in the formation of future attachments including adolescent friendships, adolescent intimate relationships and adult intimate relationships (Collins & Van Dulman, 2006). This finding has since redirected interest in attachment theory towards examining other attachments across the life span, including adolescence and the focus on peer relationships.

Adolescence is considered a transitory stage because of the mixture of cognitive, biological and social changes that occur during this period (Elliot & Feldman, 1990). Among the social changes are the developments of friendships and peer attachments. The debate around the importance of peer attachment has fluctuated around different perspectives. These include the psychodynamic, socialisation and cognitive perspective (Cooper & Cooper, 1992). The psychodynamic approach suggests that peer relationships are a necessary substitute for parents, while socialisation theory suggests that peer and parent relationships are contending for influence. The cognitive perspective suggests that peer attachments are distinct from parent attachment but work synergistically (Schneider & Younger, 1996).

In light of the proliferation of attachment theory and the growing interest of attachments to others, Armsden and Greenberg (1987) developed a measure examining both parent and peer attachments. The Inventory of Parent and Peer Attachment (IPPA) assesses adolescents' perceptions of the cognitive and affective components of attachment with their parents and peers (Armsden & Greenberg, 1987). The theoretical premise of the IPPA was attachment theory.

The aim of the review is to examine both the original and revised version of the IPPA in terms of its psychometric properties, including its reliability and validity. In addition, an overview of recent research is discussed, as well as possible limitations of using the IPPA.

Overview of the Tool

The original version of the IPPA consists of 53 items; 28 items for the parent subscale and 25 for the peer subscale. The parent subscale combined participants' perceptions of both their mother and father. The items examine three factors including trust, communication and alienation, factors thought to be intrinsic to attachment theory. For the parent subscale this resulted in ten, ten, eight items respectively. The peer subscale consists of ten, eight and seven items respectively. However, the revised IPPA (IPPA-R) consists of 25 items for each parent subscale and 25 items for the peer subscale. The 15 items are scored with particular items being reverse-scored, giving a total attachment score. While the authors advise against scoring the three sub-factors, directions of scoring have been provided (via personal communication) including trust, communication and alienation consisting of ten, nine, and six items respectively. The peer subscale remained the same. Participants are required to answer all questions on a 5-point Likert scale (1 = almost never/never true, 2 = not very often true, 3 = sometimes true, 4 = often true, 5 = almost always/ always true). The IPPA is scored by reverse scoring the relevant items and summing all 25 items for each subscale. Both versions of the IPPA are self-report questionnaires and the administration time is approximately 20 -25 minutes (Armsden & Greenberg, 1987).

Research using the IPPA.

There have been a number of studies that have used the IPPA. It is beyond the scope of this paper to discuss all these. However, a selection of research studies will be considered. The authors of the IPPA conducted a study examining parent attachments and the impact this has on adolescents. They found that adolescents with secure attachments had high self-esteem, greater life satisfaction and less psychological distress (Armsden & Greenberg, 1987). Moreover, attachment to parents, using the IPPA, has been found to be associated with delinquency. Nelson and Rubin (1997) found that higher attachment scores in adolescence, aged between 13-18 years old, were less likely to be associated delinquency (Nelson & Rubin, 1997). A recent study conducted by Laible, Carlo and Raffaelli (2000) examined both parent and peer attachments on adolescent adjustment. Adjustment was measured using scales of depression, empathy, perspective taking, anxiety and aggression. Laible and colleagues (2000) found that those who were considered high on both peer and parent attachments were the most adjusted, while those low on both were the least well adjusted. In addition, they found that those individuals that were high on peer, but low on parent attachments were better adjusted than those who were high on parent but low on peer attachment (Laible, et al., 2000). This suggests that parent attachments as well as peer attachments are important in development and supports the theory that multiple attachments are important in promoting adolescent adjustment. It also suggests that individuals can form positive attachments with others in the absence of positive parent attachments. In fact, this supports the notion that such models of attachment are susceptible to change because they are responsive to other experiences (Waters, Merrick, Treboux, Crowell & Albersheim, 2000).

Reliability of IPPA.

The reliability of a measure refers to the consistency and reproducibility of the results. Here two types of reliability are discussed including internal reliability (consistency) and test-retest reliability (reproducibility).

Internal reliability.

The authors of IPPA report the internal reliability of scores for the original version to be of high quality (Armsden & Greenberg, 1987). They found the Cronbach's alpha coefficient for the parent subscale was .91, .91, and .86 for trust, communication and alienation factors respectively. The alpha coefficients for the peer subscales were found to be .91, .87 and .72. Using Cronbach's alpha coefficient, the internal reliability for the revised version has been reported by Armsden and Greenberg (1987) to be .87 for mother attachment subscale, .89 for father attachment subscale and .92 for peer attachment subscale. These were based on the total subscale scores rather than the three factors. In fact, Papini, Roggman and Anderson (1991) found very similar internal consistency coefficients for the mother and father subscale of .88 and .89 respectively. However, Bablitz (2000) used the revised scoring version (IPPA-R) and found Cronbach's alpha coefficients for trust, communication and alienation subscales for the mother to be .92, .92 and .83 and for the father to be .93, .92 and .82. It was also found that alpha coefficients for peer scales were .91, .92 and .71 for the three subscales respectively. The internal reliability coefficients quoted in the studies mentioned above used undergraduate samples as well as school samples of adolescents ranging from 9 to 17 yrs old. Other studies have found slightly lower but still good internal consistency scores, ranging from 81 to 83 for parent and 66-80 for peer, for the IPPA-R when examining a combined sample of children (9-11 yrs) and adolescents (14-15yrs) (Gullone & Robinson, 2005). This demonstrates good internal reliability in a number of studies. However, Johnson, Kettering

and Abshire (2003) criticises these studies as they propose that there has been little research examining the reliability of attachment measures in low income or less educated participants.

Test retest reliability.

The test-retest reliability for the original version of the IPPA was found to be .93 for parent attachment and .86 for peer attachment. This suggests that the assessment has good test-retest reliability (Armsden & Greenberg, 1987). However, this consisted of a small sample, only 27 participants of college students ranging from 18-20 yrs. The use of such a small and restricted sample is likely to influence the effect size, which measures the strength of a relationship between two variables (Botella & Gambara, 2006). This suggests that the results cannot be generalised to other populations (Johnson, Ketring & Abshire, 2003). Moreover, the retesting of the IPPA occurred after an interval of three weeks. This short retesting period has implications for those using the IPPA as a measure when examining therapeutic outcomes, as longer retesting periods have not been assessed. Without a longer period of retesting, it would be difficult to establish whether the therapy was successful or whether an adolescent's perception of parents and/or peer attachments changed overtime. The test-retest reliability for the revised version has not been documented (Bablitz, 2000). Without any test-retest reliability, it is advisable to use the assessment measure with caution and is ill advised to use this measure as a means of examining therapeutic outcomes.

Validity of IPPA.

The construct validity of a measure refers to whether the assessment is measuring what it purports to measure, in this case parent and/ or peer attachment. Convergent validity is a subcategory of construct validity and examines whether this measure correlates with other measures assessing similar constructs. Therefore a larger correlation would suggest that a

similar construct is being measured. In fact, Cohen (1988) suggests that correlations were small (.1-.3), medium (.3-.5) or large (.5 or greater). Ecological validity suggests that in order for an assessment to be valid it should be measures with a using a varied sample of different ages, ethnicity and socioeconomic backgrounds.

Convergent validity.

Bablitz (2000) found that there were large correlations (.58 - .89) between the IPPA and the PAQ parent total attachment scores suggesting that both measures are assessing similar constructs. Moreover, Lopez and Glover (1993) reviewed the literature and found that the following measures (Parental Bonding Instrument (PBI: Parker, Tupling & Brown, 1979), Parental Attachment Questionnaire (PAQ: Kenny, 1987) and the Inventory of Parent and Peer Attachment (IPPA: Armsden & Greenberg, 1987) had evidence of convergent validity with the revised IPPA although correlation sizes were not reported. Heiss, Berman and Sperling (1996) found high factor loadings (.38 – .84) using a four factor solution on five attachment measures including the Parental Attachment Questionnaire (PAQ), Attachment Style Inventory (ASI: Sperling, Berman & Fagan, 1992), Continued Attachment Scale (CAS: Berman, Heiss & Sperling, 1994), PBI (Parker et al., 1979) and the IPPA (Armsden & Greenberg, 1987). All measures were found to discriminate between healthy and unhealthy parental relationships.

While Heiss and colleagues (1996) found evidence of convergent validity, they suggest that all measures used for attachment need more specificity (Garbarino, 1998; Heiss, et al., 1996). In fact, they further advocate that such measures examine closeness and affective quality of attachment to parents rather than measuring attachment styles (Heiss, et al., 1996). However, Vivona (2000) found supporting evidence for using the IPPA to distinguish between

Ainsworth's (1989) three different attachment styles (secure, ambivalent and avoidant). Moreover, Lyddon, Bradford and Nelson (1993) suggest the separate subscale scores (trust, communication and alienation) are useful and the overall score provides a good indication of the level of security perceived by adolescents. The above research all focused on the convergent validity of parent attachment. However, recent research has also found moderate to strong correlations with the IPPA and the Adolescent Friendship Attachment Scale (AFAS) (Wilkinson, 2008). Wilkinson (2008) found that the subscales on the AFAS, including secure, anxious and avoidant were correlated with the peer attachment subscale on the IPPA, yielding moderate to strong correlations .58, .50, -.46 respectively. Moreover, Wilkinson's research demonstrated discriminant validity as the correlations for the three subscales on the AFAS (secure, anxious and avoidant) were considerably lower when examining the parent attachment subscales on the IPPA, .19, -.27, -.10, respectively (Wilkinson, 2008). This suggests that the peer attachment subscale on the IPPA measures similar constructs as in other assessments.

Construct validity.

Armsden and Greenberg (1987) found construct validity with the IPPA by examining the correlation of parent attachment scores family self-concept as measured by the Tennesse Self Concept Scale (TSCS) was found to be highly associated (.78) with parent attachment scores. The social self-concept as measured by the TSCS was moderately correlated (.57) with peer attachment scores, however this was more strongly correlated with peer attachment scores (.57) than parent attachment scores (.46). In addition, they found that the parent attachment scores were correlated with subscales of the Family Environment Scale (FES). This included positive correlations with cohesion (.56) and expressiveness (.52) and organisation (.38) and negative correlations with conflict (-.36) (Armsden & Greenberg, 1987).

One of the criticisms with the IPPA is the lack of evidence supporting the construct validity and limited evidence of the convergent validity of the peer attachment subscale. In fact, Babiltz (2000) found that scores on the IPPA peer attachment scale were correlated equally with parent attachment as well as anxiety and self-esteem measures. If peer attachment subscale had good construct validity one would expect higher correlations with the parent attachment subscale than to other constructs. However, this was not the case. This could suggest a lack of specificity with the peer attachment subscale and raises doubts about interpretations of its use. This may suggest that attachment to peers is distinct from that of parents (Babiltz, 2000). If this were the case it could provide support for the cognitive perspective mentioned earlier. In fact, other research found that the peer attachment subscale was moderately correlated with the parent attachment subscale (Armsden & Greenberg, 1987).

External validity.

Researchers have also raised concerns about the generalisability of the IPPA for two main reasons, including age and population of samples used (Johnson, Kettering & Abshire, 2003). The differences between the reliability scores could be attributed to different age and population sample used (Babiltz, 2000). It could be hypothesised that such differences account for the change in perceptions during younger and older adolescence and may reflect the change in importance of parent and peer attachment. This idea relates back to the earlier models discussed, including the psychodynamic, socialisation and cognitive models.

Johnson, Kettering and Abshire (2003) stated that there is limited research on the validity of IPPA with low income or less educated samples. This is important because perceptions may be different in these samples. In fact, use of restricted samples means limits generalisability.

Conclusion

The IPPA has been used in a variety of research studies relating to adolescent adjustment, depression and delinquency (Armsden & Greenberg, 1987; Laible, Carlo & Raffaelli, 2000; Nelson & Rubin, 1997). The literature suggests that the IPPA has good reliability. The retest reliability of the IPPA was found to be good (Armsden & Greenberg, 1987; Bablitz, 2000; Gullone & Robinson, 2005; Papini, Roggman & Anderson, 1991). However, there were no reports about the retest reliability coefficients for the revised version of the IPPA (Bablitz, 2000). While the test retest reliability was found to be good, this was conducted over a short interval period (Armsden & Greenberg, 1987). However, future research might benefit from examining the changes in perception of attachment throughout adolescence. Such a longitudinal study would provide further evidence for the consistency of the measure and may also provide evidence around the debate as to whether parent and peer attachments are competing, substituting or complementing each other (Schneider & Younger, 1996).

The evidence suggests that although there appear to be similarities with regard to the convergent validity of the measure for the parent and peer subscales, there is still debate as to the specificity of the measures it has been compared to. The pretext of this debate is focused on whether these measures tap into Bowlby's (1969) conceptualisation of attachment rather than the affective quality of attachment. While such debates persist, there is some evidence to suggest that the IPPA can be used to classify individuals into attachment styles (Vivona, 2000). One of the major limitations with the IPPA concerns the limited evidence for the construct and convergent validity of the peer attachment subscale. This weakens the psychometric properties of the IPPA (Babiltz, 2000). However, in support of the IPPA it is one of the few measures to attempt to measure both parent and peer attachments.

This review demonstrates that there is ample research supporting the reliability and validity of the IPPA suggesting that it is an assessment that is consistent and measures perceived attachment to both friends and parents (Gullone & Robinson, 2005; Lyddon, Bradford & Nelson, 1993). However, currently research suggests there is a lack of external validity and hence a lack of generalisability with some populations (Johnson, Kettering & Abshire, 2003). Overall, reports indicate adequate to excellent psychometric properties of the IPPA but it should be used with considerations of the limitations outlined here (Gullone & Robinson, 2005; Lopez & Glover, 1993). This is also true when considering the results of the research in Chapter 3.

This Chapter found that a number of studies support the use of the IPPA due its excellent psychometric properties (e.g., good reliability and validity). Moreover, it provides support for such a measure being used in future research that aims to investigate secure and insecure attachment styles. The next chapter provides a summary of all the chapters and attempts to knit the findings relating to risk factors and motives together in order to add to a previously proposed pathway to gang membership.

Chapter 6: Discussion

The aim of this thesis was to examine the gang membership in the UK to improve and expand on previous research that had examined gang membership. The main difficulty with this type of research was deciding on the method of defining a gang. This has been problematic for many researchers and practitioners as this has implications for quantifying gangs. However, as with previous research self-report methods were used as well as using a definition by Sharp and colleagues (2006). Each chapter is briefly described and the findings are summarised. In fact, all chapters have contributed to the development of the research and have added to the literature in this area.

Summary of findings

The literature review in Chapter 2 examined the association between gang affiliation and parental relationships. Most studies examined supervision, some examined attachment and two examined communication. The majority found that controlling parenting styles increased the risk of gang membership, while one study found contrary predictions (Bell, 2009; Kee et al., 2003; Soenens et al., 2007; Sule, 2005). Moreover, two studies found that poor parental management was also associated with gangs (Hill, Howell, Hawkins & Battin-Pearson, 1999; Yoder, Whitbeck & Hayt, 2003). Ryan, Miller-Loessi and Nieri, (2007), Lahey et al. (1999) and Soenens et al. (2007) found indirect relationship with parental supervision. Seven studies examined attachment, four of which found no relationship. Florian-Lacy, Jefferson & Fleming (2002) found gang members perceived family attachment as worse than the comparison group. Moreover, Bell (2009) found similar patterns for both male and female gang members. Sule (2005) found contradictory evidence that suggested higher scores of attachment when combining the past and present members in one group. Finally, two studies examined communication, one found a direct relationship and one found an indirect

relationship. Kee et al. (2003) found that less communication with mothers was associated with gang membership. All selected studies used international samples and had not asked participants about whether family members were involved in a gang. This was deemed particularly important considering the contradictory theories associated with gang membership, some suggesting gangs act as a family substitute for deficits in their own family, while others suggest that family membership is a risk factor for gang involvement (Decker & Curry, 2000; Esbensen & Huizinga, 1993; Song, Dombrink & Geis, 1992; Thornberry et al., 1993). It was hypothesised that the lack of significant relationships between attachment and gang membership may have been affected by the dynamics associated with whether family members were involved in a gang or not. This led to such aspects being examined in the research (Chapter 3).

Chapter 3 examined young people's involvement in gangs using a UK sample. The participants were divided into groups based on self-identification of gang affiliation. This led to two groups being compared those not affiliated with gangs and those who were acquainted with gangs (e.g., had friends, family or relative was in a gang). The aim of the research was to examine the two groups based on perceptions of what defined a gang, gang crime, motivations to join a gang and strategies to stop gang crime. Moreover, the two groups were compared on a number of psychological characteristics including violent cognitions, self-esteem, as well as attachments to parents and peers. Three groups were compared (gang members, not affiliated, acquainted) in the qualitative analysis examining the defining criteria of what constituted a gang. This found general consistency of gangs being groups, involving a variety of criminal activities, spending time together and having to rely on each other for protection. However, there were some differences in perceptions, in particular, the dialogue used by the not affiliated group was more emotive and highlighted aspects of peer pressure

when in a gang. When examining psychological characteristics, there were some significant differences between the not affiliated and acquainted group. It is important to note that some researchers would advocate that the acquainted group in this research (Chapter 3) would be classified as high-risk for joining gangs (Decker & Curry, 2000; Esbensen & Huizinga, 1993; Thornberry et al., 1993). Such a group could highlight areas for interventions. In fact, two factors, machismo and father alienation, demonstrated higher scores in this group, while personal and parental self-esteem as well as mother trust and communication revealed lowers scores for this group. Moreover, there were negative correlations for the Machismo subscale and the Peer Attachment scores for the not affiliated group.

Chapter 4 described a case study about a client who had been involved in gangs, because his cousin was also in a gang, and who had committed a number of offences. An extensive account of his history is described and results of a number of psychometric assessments were reported. These methods were used in order to formulate his offending behaviour and his deterioration in mental illness. This indicated that Mr XY had an insecure attachment with both his parents, leading to negative internal working models of both others and himself, which made it difficult for him to regulate his emotions and form positive relationships with others. In fact, his disposition was negative, hostile and untrusting of others, leading him to develop a number of maladaptive coping strategies (e.g., avoidance and drug use), which exacerbated his problems (e.g., offending, drugs use, mental health deterioration, and emotional disturbances). One of his difficulties that he acknowledged having problems with was his anger. While this was hypothesised as being a meta-emotion, it was an area that Mr XY demonstrated motivation in changing. The intervention was based on the risk-need responsivity principle and used a cognitive behavioural approach (Andrews & Bonta, 2003; DiGiuseppe & Tafrate, 2001, 2003). The outcome was positive, although not formally

assessed. He demonstrated a more positive and realistic cognitive style and used more adaptive coping strategies. However, there were still some areas which he had difficulty with, such as his drugs use, although even this reduced and has enabled him to continue to live in the community.

Chapter 5 examined the psychometric properties of an attachment measure called the IPPA which has relevance in assessing potential attachment problems in individuals involved with gangs. This examined individual's perceptions of both parent and peer attachment. The internal reliability (e.g., consistency) of this measure was found to be good, although this appeared to be better when examining the parent attachment subscales compared to peer attachment subscales (Armsden & Greenberg, 1987; Bablitz, 2000; Gullone & Robinson, 2005; Papini, Roggman & Anderson, 1991). The test-retest reliability was found to be good but was only reported by one study (Armsden & Greenberg, 1987). There was ample evidence supporting the convergent and construct validity for the parent attachment. However, only one study reported moderate to strong correlations when comparing the peer attachment with another friendship measure (Wilkinson, 2008). There was little evidence supporting the external validity of this measure due to the restricted samples that had been used in previous research (Johnson, Kettering & Abshire, 2003). This measure was used in the research due to evidence suggesting that parent and peer attachments might impact gang affiliation (Bell, 2009; Florian, Jefferson & Fleming, 2002; Sule, 2005 and Bjerregarrd & Smith, 1993; Esbensen & Huizinga, 1993; Hill et al., 1999; 2001). Another rationale for using the IPPA was that the previous research studies in the systematic review (Chapter 2) had not used complete standardised measures; some assessed attachment based on a couple of questions, while others used their own questions to asses the attachment.

Theoretical Implications

Risk factors for gang involvement

The main risk factors that were examined in the thesis included family, peer and individual factors. The family factors predominantly focused on attachment (trust, communication and alienation) but also family member's gang membership. The peer risk factors also examined attachment, while the individual factors examined violent cognitions and self-esteem.

Family factors.

The risk factors around attachment still appear inconclusive. This could be associated with problems when measuring the construct. In fact, Chapter 5 noted that the IPPA measure ought to be used with caution. Moreover, these findings relating to attachment may be criticised by some, as they do not represent a reciprocal relationship and therefore it is difficult to establish whether there is congruence or disparity between adolescents' and parents' perceptions (O'Connor, 2002). These differences or similarities in perspectives would be an important distinction in further efforts to understand the dynamics of family relationships and gang membership. Moreover, a lack of significant findings could be a result of the attachment measure used because this may not be assessing the construct originally proposed by Bowlby (1969). What may be of benefit in research is to examine different forms of maltreatment in relation to gang membership. This has been found to be an important risk factor for violence (Edleson, 1999; Elliott, 1994; Farrington, 1989; McCord, 1979). Moreover, such differing forms of maltreatment will clearly have an impact on an individual's attachment, as was the case for the case study client, even though attachment itself has not been directly assessed.

Peer factors.

The findings found between machismo and peer attachments suggest that those with macho cognitive styles are excluded by their peers or that those already excluded by peers have an increased macho cognitive style. In fact, previous research has supported the view that peer rejection is a risk factor for joining delinquent peers (Loeber & Hay, 1994). The lack of significance between peer attachment and machismo, in the high-risk acquainted group, could support the view of the selection model that states individuals at risk of joining gangs are already delinquent (Dukes, Martinez & Stein, 1997; Thornberry et al, 1993; Wood & Alleyne, 2009).

Individual factors.

Previous research found that violent attitudes predicted violence in an offender population (Warnock-Perkes, Gudjonsson, Walker, 2008). Moreover, pro-criminal, deviant, violent and hostile attitudes were found to be a risk factor for both gang membership and future violence (Herrenkohl et al., 2002; Hill et al., 1999; 2001). The current research found higher scores on violent cognitions and Acceptance scores for the high-risk acquainted group compared to the not affiliated group. These findings could support the social facilitation model in that those in the high-risk group were already delinquent. In fact, the acquainted group was found to have significantly lower Personal and Parental/Home Self-Esteem scores compared to the not affiliated group. This supports previous research, which found differences in self-esteem scores when comparing different levels of gang membership (Dukes, Martinez & Stein, 1997; Florian-Lacy, Jefferson & Fleming, 1999). All these risk factors have been discussed in Chapter 1 as increasing the likelihood of violent behaviour and gang membership. In fact, a number of these risk factors were present in the case study of Mr XY. For example, he had poor relationships with his parents and peers at school, family member was in a gang, excluded by peers, hostile attitudes and evidence of low self-esteem.

Theories of gang membership

Adapted unified theory of gang membership.

In order to understand the findings of the thesis a subsection of Wood and Alleyne's (2009) unified theory of gang membership diagram (Figure 3) has been taken. This theory has been paralleled and adapted to some of the current findings. In Chapter 1, a number of risk factors were discussed and in fact such risk factors have also been described above. These risk factors described previously (e.g., individual, peer and family) can be paralleled onto the unified adapted theory illustrated in Figure 3. For example, individual risk factors such as self-esteem and cognitions link to individual characteristics, while peer and family risk factors link to the social factors in the diagram (Figure 3). The literature review examined parental relationships and gang affiliation. This specifically examined supervision, attachment and communication. These elements of parental relationships can also be paralleled to the societal and environmental factors in Figure 3. Moreover, the findings from the research study relating to family bond (e.g., low mother trust and communication, high father alienation) are also relevant to the societal and environmental factors in Figure 3. However, from these results in the research an element has been added to the diagram. This related to the positive relationship between machismo attitudes and peer alienation that may link to peer rejection in the diagram (Figure 3). Finally, the case study of Mr XY and the adapted unified theory diagram (Figure 3) also have a number of similarities (e.g., societal factors and individual characteristics). This diagram illustrated how individuals may become involved in gangs.

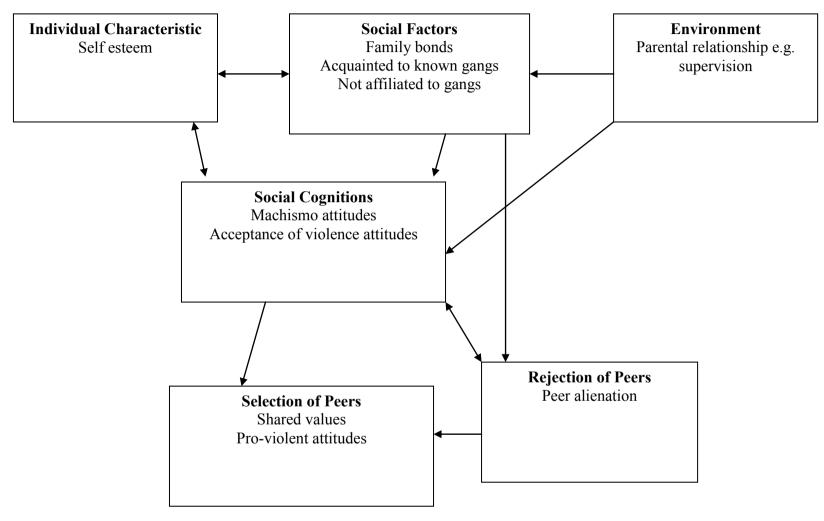


Figure 3: Unified adapted theory of gang membership

Good Lives Model.

The figure above illustrated how risk factors and previous theory interlinks with the current findings. However, these findings described can also be paralleled to the good lives model. In Chapter 3 the good lives model was discussed which suggested that all human beings attempt to meet certain needs in order to achieve a good life. These included *healthy living*, *knowledge*, *excellence in work & play*, *autonomy*, *emotional control*, *belonging*, *meaning in life*, *happiness*, *creativity* (Ward & Stewart, 2003). However, some individuals may attempt to meet these needs in inappropriate ways such as offending behaviour. For example, Mr XY attempted to *belong* by becoming involved in a gang, taking drugs and being involved in criminal behaviour. These factors may also have given him a sense of *happiness* though only temporary. In addition, his drug use was also used as a method to gain *emotional control*. Moreover, the risk factors in figure 3 suggested that individuals who perceiving peer alienation may attempt to gain a sense of *belonging* by associating with others who have similar values and attitudes (e.g., enhancement model; Dukes, Martinez & Stein, 1997; Thornberry et al, 1993; Wood & Alleyne, 2009). Moreover, this may provide them with a sense of happiness.

Practical Implications

Throughout, the need for rigorous research to be conducted in order to aid intervention and prevention strategies has been emphasised. This supports the principles of risk-need responsivity when planning intervention programmes (Andrews & Bonta, 2003). In fact, these principles were considered when planning the intervention with Mr XY (Chapter 3). Moreover, the case study highlighted similar deficits in areas such as attachment as well as hostile and angry attributions. These risks were intervened using a cognitive behavioural approach, which has been found to be effective (Beck & Fernandez, 1998; DiGiuseppe & Tarfrate, 2001, 2003; Howells, 2004; Jones & Hollin, 2004; Walker & Bright, 2009).

It was evident in this research (Chapter 3) that violent cognitions may also be a risk factor for peer rejection and for high-risk youth in becoming involved with gangs. In fact, the literature around gang prevention also supports the use of these cognitive behavioural approaches, in particular, when targeting violent cognitions (Walker & Bright, 2009). These types of cognitions may be particularly resistant to interventions because they may be normalised by peers and family members (Chambers et al., 2008). The evidence suggests a need to tackle these cognitions during school, where both peer and family influences are important. However, research has found that interventions are more appropriate when individuals are intrinsically motivated to change. Such intrinsic motivation may not be obtained through the GREAT programme, which is of a short duration and has demonstrated poor effectiveness (Klein & Maxson, 2006; Petersen, 2000). Moreover, research around positive psychology, such as the Good Lives Model, is currently being implemented in sexual offending and violent programmes (Ward & Stewart, 2003). This focus aims to highlight areas of need for the individual without labelling the individual based on their behaviour. The effect of labelling individuals as being a gang members has already been discussed and generally leads to negative or punitive strategies (Conly, 1993; Howell, 1998; Hallsworth & Young, 2008).

In addition, the research highlights continued benefits of using parental programmes, as are conducted in Scandinavia, in order to enhance communication between parent and child (Carlsson & Decker, 2005). This research (Chapter 3) and previous literature (Chapter 2) highlighted poor communication as a risk factor for potentially being involved in gangs. Moreover, lower scores on the parental/home self-esteem scores for the acquainted (high-risk) group compared to the not affiliated group suggests further treatment targets when considering prevention strategies.

Limitations of thesis

Many studies discussed, including those mentioned in the literature review (Chapter 2), and the current research used a cross-sectional design. This has been criticised as it only assesses individuals at one time point. Given that adolescence is a transitory stage, such a design is unlikely to detect any age-associated variations. In fact, researchers have highlighted a number of areas where age associated changes may vary. This includes self-esteem instability, which has been associated with violence (Ostrowsky, 2010). Moreover, parental supervision (Chapter 2) (Lahey et al., 1999) and perceptions of parental attachments (Chapter 5) may change through the age range. In fact, models suggest that parental and peer attachments are compensating, competing or complementing each other (Schneider & Young 1996). However, there may be age-associated differences where one of these models is more prominent than others. For example, different models could be important when considering the findings by Lahey et al. (1999) which found that poor supervision predicted gang membership at age 15 years but not at 17 years. It is evident that such fluctuations in individuals will not be identified using cross sectional designs. Instead, future research should consider longitudinal or cross-sequential design when examining adolescence and gang membership.

Finally, the level of involvement was not differentiated. This is a major criticism of the research and was a criticism in the literature review (Chapter 2) as it has been previously stated that the level of organisation and level of involvement are important. In fact, research has previously found that when including level of involvement (e.g., wannabe, core member or ex member) the frequency of offending or perceptions of self-worth varies within each level (Esbensen et al., 2001b; Esbensen & Huizinga, 1993; Dukes et al., 1997; Florian-Lacy, Jefferson & Fleming, 1999; Klein & Maxson, 2006; Winfree et al., 1992). Unfortunately, due to a lack of participants self-identifying as being in a gang the research had to combine a

number of participants to form the acquainted group which as stated earlier would be considered a high risk group by some (Decker & Curry, 2000; Esbensen & Huizinga, 1993; Thornberry et al., 1993).

Future Research

Future research could use Vivona's (2000) group allocation of secure, avoidant and ambivalent attachments, using the IPPA scores, in an attempt to explore differences in specific attachment styles with the acquainted group as well as other levels of gang membership. Furthermore, research could benefit from exploring Machismo subscale scores with the different levels of gang membership (e.g., currently a member, never a member, want to be a member and used to be a gang member) because this may demonstrate utility in intervention and prevention programmes. However, future research could also examine differences between youths' or inmates' machismo cognitions before and after interventions, whether individual or collectivist offenders, in order to examine whether any reductions were evident. These changes in cognitions and further long-term follow-ups examining violent offending could support the need for intervention to challenge these machismo attitudes in more detail. Finally, as has been highlighted throughout, future research endeavours should be mindful of ensuring that definitions of gangs are clearly articulated and ideally use previously identified criteria, as was done throughout this thesis.

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Appendices

Appendices: Systematic Review

Appendix A Syntax

PsychINFO 1986-2010

- 1. (adolescen* or youth or Juvenile* or Child*).mp. [mp=title, abstract, heading word, table of contents, key concepts]
- 2. (girl or boy or teen*).mp. [mp=title, abstract, heading word, table of contents, key concepts]
- 3. (young offender* or young person* or young people).mp. [mp=title, abstract, heading word, table of contents, key concepts]
- 4. (delinquen* or devian* or antisocial).mp. [mp=title, abstract, heading word, table of contents, key concepts]
- 5. (gang* or peer group*).mp. [mp=title, abstract, heading word, table of contents, key concepts]
- 6. exp Juvenile Gangs/
- 7. 1 or 2 or 3 or 4
- 8. 5 or 6
- 9. 7 and 8
- 10. (relationship* or attachment* or bond* or affiliation).mp. [mp=title, abstract, heading word, table of contents, key concepts]
- 11. (supervision or monitoring or management).mp. [mp=title, abstract, heading word, table of contents, key concepts]
- 12. (communication or involvement).mp. [mp=title, abstract, heading word, table of contents, key concepts]
- 13. 10 or 11 or 12
- 14. (family or parent* or adult*).mp. [mp=title, abstract, heading word, table of contents, key concepts]
- 15. 13 and 14
- 16. 9 and 15
- 17. limit 16 to (all journals and english language)
- 18. from 17 keep 7.55.64.67-68.71.75.83.92.97.121.124.147.165.172-
- 173,180,190,192,195,199,212,226,228-229,237,242,257,259,272,279,286,289,301-302,307,340

Embase 1988-2010

- 1. (adolescen* or youth or Juvenile* or Child*).mp. [mp=title, abstract, heading word, table of contents, key concepts]
- 2. (girl or boy or teen*).mp. [mp=title, abstract, heading word, table of contents, key concepts]
- 3. (young offender* or young person* or young people).mp. [mp=title, abstract, heading word, table of contents, key concepts]
- 4. (delinquen* or devian* or antisocial).mp. [mp=title, abstract, heading word, table of contents, key concepts]
- 5. (gang* or peer group*).mp. [mp=title, abstract, heading word, table of contents, key concepts]
- 6. exp Juvenile Gangs/

- 7. 1 or 2 or 3 or 4
- 8. 5 or 6
- 9. 7 and 8
- 10. (relationship* or attachment* or bond* or affiliation).mp. [mp=title, abstract, heading word, table of contents, key concepts]
- 11. (supervision or monitoring or management).mp. [mp=title, abstract, heading word, table of contents, key concepts]
- 12. (communication or involvement).mp. [mp=title, abstract, heading word, table of contents, key concepts]
- 13. 10 or 11 or 12
- 14. (family or parent* or adult*).mp. [mp=title, abstract, heading word, table of contents, key concepts]
- 15. 13 and 14
- 16. 9 and 15

Science Direct

All to present

((((ALL(gang or gangs or peer group)) and adolescen* or youth or juvenile* or child* or girl or boy or teen* or young offender* or young people or delinquen* or devian* or antisocial) and relationship* or attachment* or bond* or affiliation or supervision or monitoring or management or communication or involvement) and family or parent* or adult* AND LIMIT-TO(contenttype, "1,2","Journal") AND EXCLUDE(contenttype, "2,3,4,5",",Book")) and "youth gangs" or "street gangs"

Appendix B Quality Assessment Scoring Sheets

Cross sectional Studies

Questions	Yes	No	Unknown	Comments
	Selection B	ias		
Was the population studied representative?				
Is the definition and type of poor parental				
relationships clear?				
Is the definition and types of poor parental				
relationships comparable to other studies?				
Is the description of the groups (gang member				
vs. non-gang member) and distribution of				
demographic/background (age, gender, SES,				
ethnicity) clear?				
Were the groups comparable in all important				
confounding variables?				
Was there any control or adjustment for the				
effects of theses confounding variables?				
	ance and de	tection bi	as	
Was the outcome of the assessment or survey				
blind to all participants?				
Was the outcome (gang affiliation) assessed				
in the same way across groups?				
Was the outcome gang affiliation validated?				
Were the assessment instrument(s)				
(psychometrics/questionnaire) standardised?				
Were the assessment instrument(s)				
comparable to instruments used in other				
studies?				
	Attrition bi	as	I.	l
Were those who complete the assessment the				
same as those who did not?				
Were the drop out rates and reasons for drop				
out similar across groups?				
	Statistics	I.	1	<u> </u>
Was the statistical analysis used correct?				
	Results	ı	1	1
Are results unbiased?				
Are the results significant?				

Is the size of effect reasonable?			
Are methods and design reliable?			
Have limitations been discussed?			
Appl	cability of I	indings	
Are the participants representative of UK youths?			
Can results be applied to youths regardless of culture and size?			
Can the results be applied to the UK population?			

Appendix C Quality Assessment Scoring Sheet

Cohort Studies

Question	Yes	No	Unknown	Comments
	ial Scre	ening		
Has the study addressed a clear focused				
issue?				
Is the study addressing risk factors of gang				
affiliation?				
	udy De	sign		
Is a cohort study an appropriate way of				
answering the question under the				
circumstances?				
Has the study addressed the question being				
asked?				
	lection	Bias		
Was the cohort representative of the				
defined population?				
Was a sufficient sample sized use?				
Were the descriptions of the groups (gang				
member vs. non-gang member) and				
distribution of demographic/background				
(age, gender, SES, ethnicity) clear?				
Were the groups comparable in all				
confounding variables?				
Was there any control of adjustment for the				
effects of these confounding variables?				
Performan	ce and o	letection	ı bias	
Has gang affiliation been clearly defined				
and measured?				
Has the definition and type of parental				
relationship been clearly defined and				
measured?				
Were the measurements for outcome				
objective?				
Was the outcome gang affiliation				
validated?				
Was the outcome (gang affiliation)				
assessed in the same way across groups?				
Were the assessment instrument(s)				
(psychometric / questionnaires)				
standardised?				
Were the assessment instrument(s)				
comparable to instruments used in other				
studies?				
Was the outcome of the assessments or				
survey blind to all participants?				
Were the assessor(s) blind to exposure?				
	trition	Bias		
Was the outcome of the assessment or				
survey blind to all participants?				
Was the outcome (gang membership)				
assessed in the same was across groups?				

Outcome Bias						
Was the outcome measured in a correct						
way?						
Were the measures valid and reliable for						
the defined population?						
Statistics						
Was the statistical analysis used correct?						
Results						
Are results unbiased?						

Appendix D

References of Included Studies

Baba, Y. (2001). Vietnamese gang, cliques and delinquents. *Journal of Gang Research*, 8, 1-20

Bell, K.E. (2009). Gender and gangs: A qualitative comparison. *Crime and Delinquency*, 55, 363-387.

Etitle, D., Gunkel, S. & VanGundy, K. (2004). Cumulative exposure to stressful life events and male gang membership. *Journal of Criminal Justice*, *32*, 95-111

Florian-Lacy, D.J., Jefferson, J.L. & Fleming, J. (2002). The relationship of gang membership to self-esteem, family relations and learning disabilities. *Texas Counseling Association Journal*, 30, 4-16.

Hill, K.G., Howell, J.C., Hawkins, J.D. & Battin-Pearson, S.R. (1999). Childhood risk factors for adolescent gang membership: results form the Seattle Social Development Project. *Journal of Research in Crime and Delinquency*, *36*, 300-322.

Kee, C., Sim, K., Teoh, J., Tian, C.S., & Ng, K.H. (2003). Individual and familial characteristics of youth involved in street corner gang in Singapore. *Journal of Adolescence*, 26, 401-412.

Lahey, B.B., Gordon, R.A., Loeber, R., Stouthamer-Loeber, M., & Farrington, D.P. (1999). Boys who join gangs: a prospective study of predictors of first gang entry. *Journal of Abnormal Child Psychology*, 27, 261-276

Ryan, L.G., Miller-Loessi, K. & Nieri, T. (2007). Relationships with adults as predictors of substance use, gang involvement and threats to safety among disadvantaged urban high school adolescents. *Journal of Community Psychology*, *35*, 1053-1071.

Soenens, B., Vansteekiste, M., Smits, I., Lowet, K. & Gossens, L. (2007). The role of intrusive parenting in the relationship between peer mamangement strategies and peer affiliation. *Journal of Applied Developmental Psychology*, 28, 239-249

Sule, D. (2005). Correlates of Hispanic female gang membership. *Journal of Gang Research*, 12, 1-23.

Yoder, K.A., Whitbeck, L.B. & Hoyt, D.R. (2003). Gang involvement and membership among homeless and runaway youth. *Youth and Society*, *34*, 441-467.

Appendix E

References of Excluded Studies

Tsunokai, G.L. (2005). Beyond the lenses of the 'model' minority myth: A descriptive portrait of Asian gang members. *Journal of Gang Research*, 12, 37-58.

Appendix F

Data Extraction Form

Data Extraction Sheet

Information

Author Title Date

Eligibility of study

Population	Youths aged 10 -25	Y	N
Exposure	Supervision (management and monitoring) Disciplinary Styles Attachment Involvement Communication	Y Y Y Y Y	N N N N
Comparator	Youths not affiliated in gangs None Past affiliation in gangs	Y Y Y	N N N
Outcome	Gang affiliation	Y	N

Methodological Quality

Study design

Recruitment procedures

Characteristics of participants (demographic background e.g., age, gender, SES, ethnicity)

Quality assessment Score

Blind procedures (assessor blind/ participants blind)

Exposure Method

Outcome Measurement				
Assessments of outcome used				
Validity of measurement				
Drop out rates & participant retention				
Statistical Analysis				
Statistics used?				
Attrition rates				
Confounding variables assessed.				
Number or follow up from each condition (if relevant)				

Assessments or questionnaires used

Valid measures?

Appendix G

Ethical Approval

Re: "Young people's involvement in gangs in a UK sample"

Appendix H

Survey Questionnaire

Part 1. Demographic Section

1.	Hov	v old	are	you?							
2.	Wha	at is y	your	gend	er?			∏Fe	male	∏Ma	le
3.	Wha	at eth	nicit	y/race	e wou	ıld yo	ou sa	y you a	re?		
a.	b. c. d. e.	Asia	Ban Indi Pak	glade an istani	shi					Scottish specify	or Asian Welsh
f.	g. h. i.	Blace	Afric Car	can bbea	n					Scottish of specify	or Black Welsh
j. [k. I. m. n.	Mixe	Whi Whi Whi	te & A te & E te & E othei	Black Black	Caril	bbea		please	specify	
о.	p.	Whi q. r. s. t.	Briti		sh ish h	ish (v	vhite)) - plea	se spec	cify	
w.	u. v. x. y z.	Oth	er et Chii Mid	other hnic b nese dle Ea	ackg asterr	roun n/Nor	d th Af			specify	
4.	Wha	at ar	ea			do	o you	ı live in	?		
5.	Who	is/a	ıre y	our pr	imary	/ care	er or	caregiv	ers wit	h whom	you live at home?
	Gua	_	า/Re	rents lative		siolog step-N		Father er		ological I ep-Fathe	
6.	Wha	at is 1	the n	narita	statı	us of	your	parent	s?		
	Mar	ried	[Div	orced	ı []Se _l	oarated	Liv	ing toge	ether

Single Widowed In a relationship but living apart	
7. Do you have any brothers/sisters?	
☐ Brother/s, Number ☐ Sister/s, Number	
8. Do they also live with you?	□Yes □No
Part 2. Gang Section	
9. In your own words describe what you think a gang is?	
10. What distinguishes a gang from a group of friends?	
11. Do you think there are gangs in your area?	☐Yes ☐No
12. If Yes, does it concern you?	☐Yes ☐No
13. Below are some statements that may be linked to a gang. If you agre	e please tick.
Statements A gang is a group of people who spend time together in public	Agree
A gang considers it OK to do illegal things A gang has done an illegal thing together in the last 12 months The gang has some type of structure e.g., a leader, name, rules or belong to a particular area The gang has existed for more than 3 months	gs
A gang has done an illegal thing together in the last 12 months The gang has some type of structure e.g., a leader, name, rules or belong to a particular area	
A gang has done an illegal thing together in the last 12 months The gang has some type of structure e.g., a leader, name, rules or belong to a particular area The gang has existed for more than 3 months	
A gang has done an illegal thing together in the last 12 months The gang has some type of structure e.g., a leader, name, rules or belong to a particular area The gang has existed for more than 3 months Based on the statements you agreed with, now answer the following	g questions:
A gang has done an illegal thing together in the last 12 months The gang has some type of structure e.g., a leader, name, rules or belong to a particular area The gang has existed for more than 3 months Based on the statements you agreed with, now answer the following 14. Have you ever been a gang member?	g questions: ☐Yes ☐No
A gang has done an illegal thing together in the last 12 months The gang has some type of structure e.g., a leader, name, rules or belong to a particular area The gang has existed for more than 3 months Based on the statements you agreed with, now answer the following 14. Have you ever been a gang member? 15. Are you currently involved in a gang? 16. Do you want to be involved in a gang? 17. If you answered yes to 14, 15, or 16, why?	g questions: YesNoYesNoYesNo
A gang has done an illegal thing together in the last 12 months The gang has some type of structure e.g., a leader, name, rules or belong to a particular area The gang has existed for more than 3 months Based on the statements you agreed with, now answer the following 14. Have you ever been a gang member? 15. Are you currently involved in a gang? 16. Do you want to be involved in a gang?	g questions: YesNoYesNoYesNo
A gang has done an illegal thing together in the last 12 months The gang has some type of structure e.g., a leader, name, rules or belong to a particular area The gang has existed for more than 3 months Based on the statements you agreed with, now answer the following 14. Have you ever been a gang member? 15. Are you currently involved in a gang? 16. Do you want to be involved in a gang? 17. If you answered yes to 14, 15, or 16, why?	g questions: Yes No Yes No Yes No
A gang has done an illegal thing together in the last 12 months The gang has some type of structure e.g., a leader, name, rules or belong to a particular area The gang has existed for more than 3 months Based on the statements you agreed with, now answer the following 14. Have you ever been a gang member? 15. Are you currently involved in a gang? 16. Do you want to be involved in a gang? 17. If you answered yes to 14, 15, or 16, why? 18. Do you think young people get involved in gangs for any of the reasor	g questions: Yes No Yes No Yes No Respect

19. Do you know anyone currently in a	gang?		□Yes □No
20. If answered Yes to question 19, ple	ease tick who they a	re (Please tick	ALL that apply)?
☐I am in a gang ☐Friend ☐Relatives (e.g., cousins) ☐Neight	=		., Brother/Sister)
21. I have been or my family has been	affected by gang ci	rime (Please ti	ck ALL that apply)
☐ Assaulted ☐ Robbed ☐ Burgle☐ Not affected by gang crime	dThreatened	Murdered	☐Intimidated
22. I am afraid of me or my family being gang?	g assaulted, burgled	l, robbed and/o	or threatened by a
□Yes □No			
23. There are criminal activities that ma (Please tick ALL that apply).	ay be linked to gang	activities in m	y community
Robbery Motor Vehicle Theft Graffiti Sexual Assaults/Rape Threats/Intimidation Weapon Use Gun Crime Drug dealing/trafficking No gang activities in my community	Burglary Vandalism Assaults Murder Drive by Sh Gang recru Knife Crime Drug Use/P	itment	
24. What is needed to stop gang crime	in your community	is (Please tick	ALL that apply).
Tougher laws Curfev Parent/Family intervention neighb		Community	ol programs
Part 3. Delinquency Section			
25. Have you ever committed an illega	I activity alone?		□Yes □No
26. If answered yes to 25, what did you	u do (Please tick AL	L that apply)?	
Robbery Motor Vehicle Theft Graffiti Sexual Assaults/Rape Weapon Use Gun Crime Drug Use/Possession	☐ Burglary ☐ Vandalism ☐ Assaults ☐ Threats/Inti ☐ Drug dealin ☐ Knife Crime ☐ Other	g/trafficking	

27. How many times in the last year have you committed an illegal activity alone?

☐0 times per year ☐7-9 times per year ☐16-19 times per year ☐27-29 times per year	☐ 1-3 times per year ☐ 10-12 times per year ☐ 20-23 times per year ☐ 30 plus times per year	☐ 4-6 times per year ☐ 13-15 times per year ☐ 24-26 times per year					
28. Have you ever committee	28. Have you ever committed an illegal activity with more than 2 others? ☐Yes ☐No						
29. If answered yes to questi	on 28, what did you do (Pleas	se tick ALL that apply)?					
☐ Robbery ☐ Motor Vehicle Theft ☐ Graffiti ☐ Sexual Assaults/Rape ☐ Weapon Use ☐ Gun Crime ☐ Drug Use/Possession	☐Knife Crime	ng/trafficking					
30. How many times in the la	ast year have you committed a	n illegal activity with a group?					
☐0 times per year ☐7-9 times per year ☐16-19 times per year ☐27-29 times per year	☐ 1-3 times per year ☐ 10-12 times per year ☐ 20-23 times per year ☐ 30 plus times per year	☐ 4-6 times per year ☐ 13-15 times per year ☐ 24-26 times per year					

Appendix I

INFORMATION SHEET FOR SCHOOLS

Dec 2009

School of Psychology, University of Birmingham, Edgbaston, Birmingham, B15 2TT

Dear,

RE: Investigating what young people consider a gang and why young people join, leave or resist gang affiliation.

We would like to invite you to provide your consent for pupils at your school to be approached to request their participation in a research study. Before you decide, we would like you to understand why the research is being done and what it will involve for you. Please take time to read the following information carefully. Talk to others about the study if you wish. Ask the researcher if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

What is the purpose of the study?

The aim of this study is to investigate what young people consider a gang and why young people join, leave or resist gang membership by examining their thoughts, feelings and behaviours. Individuals taking part in this study will be asked to fill out some questionnaires at an appropriate time, to be agreed with the school and teachers, at a time that causes minimal disruption. This should take approximately 45 to 60 minutes to complete.

Who has been invited?

People invited to take part in this study are male and female aged 11-18 years and attend a school or college in the area known to have gang involvement. Your school has been contacted because your school matches these requirements. Participation in this research study is completely voluntary and you do not have to take part if you do not wish to. Whether or not you provide your consent for participation in this research study will have no effect on your current or future relationship with the University of Birmingham.

What will happen if pupils take part?

If you decide to take part in this research study, you will be asked to sign a consent form and then arrangements will be made for the investigator to come into the school and administer questionnaires to the pupils at convenient time for your school.

The pupils will be given information about the study and asked to volunteer to participate. Consent will be obtained from all pupils but additional consent will be obtained from parents of pupils under 16 years. Once consent has been gained, the pupils will be given a set of questionnaires to complete. These could be administered in several different ways, depending on which will cause the least disruption to the pupil's coursework. For example, a drop in

facility could be organized allowing students to attend during free periods or questionnaires could be completed in form room classes. Special arrangement will also be arranged for pupils wanting to complete the questionnaires alone.

The participants will be offered an optional session after completion of the questionnaires where they can talk about the purpose of the questionnaire and ask any questions or raise any concerns they may have.

What are the possible disadvantages and risks of taking part?

During participation in this study, pupils may feel anxious about answering some questions. All participants are provided with details of helplines to contact in the information sheet and they will have the opportunity to discuss their concerns in the voluntary session or with the researcher individually, if desired, who can then refer to the appropriate services to assist them.

What are the possible benefits from taking part?

The pupils will receive no direct benefit from taking part in this study. However, participation will provide beneficial information about how young people describe gangs and how they become involved in gangs, leave gangs or resist gang affiliation. As a thank-you for participating, students names will be entered into a draw for an iPod.

What happens when the research study stops?

We will not contact you or the pupils after completion of the questionnaires however, we will be happy to provide you with a summary of the study findings, when such becomes available. If you would like a copy of our summary or any other details regarding the study, please ask.

What if there is a problem?

It is not anticipated that there will be any problems. However, please feel free to contact the investigators with any problems or queries associated with the research using the details on this information sheet.

Will participation in the study be kept confidential and anonymous?

Yes. The pupils' identities will not be recorded as part of the data, and will not be revealed in any publication that may result from this study. All information the pupils provide will be kept confidential and will be anonymous. Pupils will not be asked to write names on the questionnaires only unique code names known only to the pupil. Therefore, it will not be possible to link individuals to their questionnaires ensuring complete anonymity.

All records related to you and your pupils' involvement in this research study will be stored in a locked filing cabinet at the University of Birmingham. Data gathered from this study will be maintained as long as required by regulations, which is up to 10 years following the publication of the results or communications describing the results of the study.

What will happen if pupils do not want to carry on with the study?

Pupils are free to withdraw from the study at any time. Should they choose to withdraw, they can also request that any data collected from their participation be withdrawn from the study.

If they request this, any data collected from them will be located, using the unique code name, and destroyed. Pupils may make this request up to the point of publication.

Pupils will be asked to make up a unique code name and then to write the code name on the questionnaires. Should the pupil decide to withdraw their data up to the point of publication they should contact the investigator with the code name asking for their data to be withdrawn.

What will happen to the results of the research study?

The results of this study will be part of the investigator's doctoral research and may be published in an academic journal.

Should you wish or wish not to participate please complete the consent form attached and return using the self-addressed envelope provided. Once consent forms have been received, a follow up phone call will be arranged.

If you require further details of the research study, please contact one of the researchers (details below).

Thank you for you time and we hope to hear from you soon.

Nellie Haddock

Contact details of the researchers included in this project:
Post Graduate Investigator:
Nellie Haddock
Telephone
Email address:
Address: School of Psychology, University of Birmingham, Edgbaston, Birmingham, B15
2TT
Supervisors:
Dr Leigh Harkins
Telephone:
Email address:
Address: School of Psychology, University of Birmingham, Edgbaston, Birmingham, B15

Dr Louise Dixon

Telephone: Email address:

Address: School of Psychology, University of Birmingham, Edgbaston, Birmingham, B15

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Appendix J

SCHOOL VERSION 4 – DEC 09

CONSENT SHEET

School of Psychology, University of Birmingham, Edgbaston, Birmingham, B15 2TT

Consent sheet for schools participating in the research about gangs

4	ove study and have had the opportunity to ask questions.
• • • • • • • • • • • • • • • • • • • •	opriate) for my school (print name) to take part in this study.
-	fusal (delete as appropriate) for my school to take part in the y schools current or future relationship with the University of at school.
Signature of Head Teacher:	
Date:	

Appendix K

Version 4 - 14/11/09

INFORMATION SHEET FOR PARTICIPANTS

I would like to invite you to take part in a research study. Before you decide you need to understand why the research is being done and what it would involve for you. Please take time to read the following information carefully. Talk to others about the study if you wish. Ask the researcher if there is anything that is not clear or if you would like more information on anything. Take your time to decide whether or not you wish to take part.

What is the purpose of the study?

The television and newspapers often talk about gangs. The aim of this study is to examine why young people join gangs, leave gangs and get your opinion of what a gang is. In order to do this we need to look at young peoples' feelings, attitudes and behaviours relating to gang membership. If you take part in this study, you will be asked to fill out some questionnaires, which should take between 45 and 60 minutes. As a thank you for your time, your name will be entered into a draw for an ipod at the completion of the study.

Why have I been invited?

People invited into this study are male and female aged between 11-18 years who currently attend a school or college in the area, which is a known gang area. You have been invited because your school matches these requirements.

Do I have to take part?

Your participation in this research study is completely voluntary and you do not have to take part if you do not wish to. There is no penalty if you chose not to participate.

What will happen to me if I take part?

If you decide to take part in this research study, you will be asked to sign a consent form and you will think of a code name, which only you will know.

You will then complete some questionnaires and write your code name **only** on the sheet. Here are some examples of questions: 'Children pick on me very often', 'Have you ever committed an illegal activity alone, if yes what did you do' and 'It is ok to hit someone who upsets you'. For the first example, you are required respond yes/no. For the last example, you are required to respond true/false

You are free to withdraw at any time, without giving a reason. Whether or not you provide your consent for participation in this research study will have no effect on your current or future relationship with the University of Birmingham or from teachers in your school.

You will also be provided with an opportunity to attend a voluntary session held by the researcher in which you will be able to ask questions, raise any concerns and to gain more information about the study.

What are the possible disadvantages and risks of taking part?

During participation in this study, you may feel anxious about answering some questions. However, if you feel uncomfortable at anytime we encourage you to talk to someone such as a teacher or the researcher or raise your concerns in the voluntary session. There are also a number of helplines you can call in confidentially should you need, some are provided below:

Samaritans

Website: www.samaritans.org

Tel: 08457 90 90 90

Get Connected

Website: www.getconnected.org.uk

Tel: 0808 808 4994

Youth2Youth

Website: www.youth2youth.co.uk

Tel: 020 8896 3675

What are the possible benefits from taking part?

You will receive no direct benefit from taking part in this study. Your participation may, however, provide beneficial information to help young people who are involved in gangs.

What happens when the research study stops?

I will not contact you after completion of the questionnaires however, there will be an optional session where you can ask me questions and I will be happy to provide you with a report of the study findings when it is finished. If you would like a copy of the summary or any other details regarding the study, please contact me using the details below.

What if there is a problem?

Please feel free to contact the investigators with any problems or queries associated with the research using the details below.

Will my taking part in the study be kept confidential and anonymous?

Yes. All records related to your involvement in this research study will be stored in a locked filing cabinet. Data gathered from this study will be maintained as long as required by regulations, which is up to 10 years following the publication of the results or communications describing the results of the study.

Your responses will be anonymous. Your identity will not be recorded as part of your data, and will not be revealed in any publication that may result from this study. All information you provide will be kept confidential and anonymous. You will not be asked to write your name anywhere on the questionnaires. There will be no way to link your name to your responses on the questionnaires.

What will happen if I do not want to carry on with the study?

You are free to withdraw from the study at any time. Should you choose to withdraw, you can also request that any data collected from your participation be withdrawn from the study

up to the point of publication. If you request this, any data collected from you will be located and destroyed.

If you decide to fill out the questionnaire, you will make up a unique code name (max 10 letters) and then to write the code name on your questionnaire. Should you decide to withdraw your data you should contact the investigator with the code name asking for your data to be withdrawn – so remember your code name.

What will happen to the results of the research study?

2TT

The anonymous results of this study will form part of my degree programme research and may be published in an academic journal.
Thank you for your time. Nellie
Contact details of the researchers involved in this project: Student Investigator: Nellie Haddock Telephone: Email address: Address: School of Psychology, University of Birmingham, Edgbaston, Birmingham, B15 2TT
Supervisors:
Dr Leigh Harkins Telephone: Email address: Address: School of Psychology, University of Birmingham, Edgbaston, Birmingham, B15 2TT
Dr Louise Dixon Telephone: Email address:

Address: School of Psychology, University of Birmingham, Edgbaston, Birmingham, B15

Appendix L

Version 4- 14-11-09

INFORMATION SHEET FOR PARENTS/GUARDIANS

I would like pupils from schools in this area to take part in a research study. Before you decide, you need to understand why the research is being done and what it would involve for your child/children. Please take time to read the following information carefully. Talk to others about the study if you wish. Ask the researcher if there is anything that is not clear or if you would like more information on anything. Take your time to decide whether or not you wish to take part.

What is the purpose of the study?

The aim of this study is to examine why young people join gangs, leave gangs and get your child/children's opinion of what a gang is. In order to do this we need to look at young peoples' feelings, thoughts and behaviours relating to gang membership. If you consent for you child/children to take part in this study they will be asked to fill out some questionnaires, which should take between 45 to 60 minutes and will be done at school.

Why have I been invited?

People invited into this study are male and female aged between 11-18 years who currently attend a school or college in this area of ______, which is a known gang area. You have been invited because your child or children's school match these requirements.

Do I have to take part?

Your child's/children's participation in this research study is completely voluntary and you do not have to consent for them to take part if you do not wish to. There is no penalty if you chose for them not to participate.

What will happen to me if I take part?

If you decide your child/children can take part in this research study, you will be asked to sign a consent form (enclosed) to be returned to school with your child/ children and your child/ children will think of a code name. Please ask them to choose different code names, if more than one child is participating.

Your child/children will then complete a consent form and some questionnaires at school and will write this unique code name on the questionnaire sheet. Here are some examples of questions, which your child may be asked: 'Children pick on me very often', 'Have you ever committed an illegal activity alone, if yes what did you do' and 'It is ok to hit someone who upsets you'. For the first example, your child/children will respond yes/no. For the last example, they will respond true/false.

You are free to withdraw your child/children at any time, without giving a reason. They will just need to provide their code word and their data will be removed. Whether or not you provide your consent for participation in this research study will have no effect on your child/children's current or future relationship with the University of Birmingham or teachers in the school, nor will it effect you relationship with the University of Birmingham.

You will also be provided with an opportunity to attend a voluntary session held by the researcher in which you will be able to ask questions, raise any concerns and to gain more information about the study.

What are the possible disadvantages and risks of taking part?

During participation in this study, your child/children may feel anxious about answering some questions. Pupils' questionnaires are anonymous and your child or children cannot be identified from these questionnaires. However, below are contact helplines should pupils require.

Samaritans

Website: www.samaritans.org

Tel: 08457 90 90 90

Get Connected

Website: www.getconnected.org.uk

Tel: 0808 808 4994

Youth2Youth

Website: www.youth2youth.co.uk

Tel: 020 8896 3675

These are confidential calls should they need them. Pupils will have the opportunity to discuss their concerns in the voluntary session or with the researcher, individually, if desired.

What are the possible benefits from taking part?

Your child/children will receive no direct benefit from taking part in this study. Your participation may provide beneficial information to help young people who are involved in gangs or those who wish to leave gangs. The names of participants will be entered into a draw for an ipod as a thank-you for their participation.

What happens when the research study stops?

I will not contact you after completion of the questionnaires however, there will be an optional session where you can ask me questions and I will be happy to provide you with a summary of the findings when it is finished. If you would like a copy of the summary or any other details regarding the study, please contact me using the details below.

What if there is a problem?

Please feel free to contact the investigators with any problems or queries associated with the research using the details below.

Will my taking part in the study be kept confidential and anonymous?

Yes. All records related to your involvement in this research study will be stored in a locked filing cabinet. Data gathered from this study will be maintained as long as required by regulations, which is up to 10 years following the publication of the results or communications describing the results of the study.

Your child's/children's identity will not be recorded as part of your data, and will not be revealed in any publication that may result from this study. All information that your child/children provide will be kept confidential and will remain anonymous. They will not be asked to write their names anywhere on the questionnaires so there will be no way to link their name to their responses.

What will happen if I do not want to carry on with the study?

You are free to withdraw your child/children from the study at any time. Should you choose to withdraw your child/children, you can also request that any data collected from their participation be withdrawn from the study up to the point of publication. If you request this, any data collected from your child/children will be located, using the unique code name, and destroyed.

If you decide to consent for your child/children to fill out the questionnaire, your child/children will make up a unique code name (max 10 letters). Your child/children will write this code name on the questionnaire. Should you decide to withdraw the data you should contact the investigator, and ask your child to provide the investigator with the code name asking for the data to be withdrawn – so encourage them to remember their code name.

What will happen to the results of the research study?

Thank you for your time.

Telephone: Email address:

2TT

The anonymous results of this study will form part of my degree programme research and may be published in an academic journal.

Nellie
Contact details of the researchers involved in this project: Student Investigator: Nellie Haddock Telephone: Email address: Address: School of Psychology, University of Birmingham, Edgbaston, Birmingham, B1: 2TT
Supervisors:
Dr Leigh Harkins Telephone: Email address: Address: School of Psychology, University of Birmingham, Edgbaston, Birmingham, B1: 2TT
Dr Louise Dixon

Address: School of Psychology, University of Birmingham, Edgbaston, Birmingham, B15

Appendix M

PARENT/GUARDIAN VERSION 1 – 10-05-10

OPT-OUT FORM

School of Psychology, University of Birmingham, Edgbaston, Birmingham, B15 2TT

Opt-out form for parents/guardians not allowing their child/children to participate in the research about gangs

A couple of weeks ago, you were provided with an information sheet (copy attached) about your child/ children taking part in a study about gangs. The study would involve your child/ children completing an anonymous and confidential questionnaire during school hours and should take no more than 45mins.

Your child/ children's information can be withdrawn at anytime by quoting the unique code name and withdrawing will not effect your child's/ children's current or future relationship with the University of Birmingham or with their current school.

If you **do not** want your child to take part in this study please complete and return this opt-out form. If we do not receive an opt out form from you in the next week then we will assume that you do not have any objections for your child to take part.

(3	have read and understood the information shee nd have had the opportunity to ask questions.
-	to
Signature of parent/guardian	
Date	

Appendix N

PUPIL VERSION 3 – 14-11-09

CONSENT SHEET

School of Psychology, University of Birmingham, Edgbaston, Birmingham, B15 2TT

Consent sheet for pupils participating in the research about gangs

	have read and understood the information sheet
dated November 2009 for the above study a	and have had the opportunity to ask questions.
I agree to take part in this study and to provstudy.	vide information to the researcher for use in the
I understand that I can withdraw at anytime withdrawing will not effect my current or f Birmingham or with my school.	e by quoting my unique code name and that my uture relationship with the University of
Signature of participant	
Date	

Please think of a unique code name and please remember this code name. Once you have thought of a code name, please request the questionnaires from the researcher and write this code in the space provided in the right hand corner.

Appendix O

A. ABC Form

Centre for Rational Emotive Behaviour Therapy

School of Psychology

(Copyright Peter Trower 2006)

Situation Adversity		
Irrational Beliefs	Rational Beliefs	
Unhealthy Consequences	Healthy Consequences	

Appendix P PUTTING THE PAST BEHIND YOU

- What is past is all said and done. What remains to be seen is what I can bring to my present and future.
- Better for me to concentrate on what I'm doing today rather than on what I did or didn't do yesteryear.
- Better to do in the present than to stew about the past.
- The past isn't going to get any better!
- Poor decisions made in the past do not have to be repeated in the present.
- Because something once happened doesn't mean that it has to continue to happen.
- No matter how bad any event was, I do not have to allow it to continue to have a negative influence on my life.
- I cannot rewrite history and change what has already happened.
- Whining and screaming about the injustices and unfairness of the past will only take a bad situation and make it worse.
- I don't have to be the one person in the universe to have been treated with total fairness and kindness and I don't have to moan and groan about the fact that I wasn't.
- I'm going to put more money down on what can yet be made to happen than on what has already happened.
- Having been treated unfairly in the past is all the more reason to treat myself fairly in the present.
- Now that I have been shown how *not* to treat people, I can have a better start on how *to* treat them.
- I don't have to take the unkindnesses of the past and turn them into insults in the present.

- I can use what did not kill me in the past to make myself emotionally strong in the present.
- I may have suffered deprivation in the past, but I have not been degraded or demeaned by it. Demeaningness is a state of mind that only I can give myself, and I've got better things to do than rake myself over the coals.
- People's treating me like dirt in the past does not mean that I am dirt.
- Feeling sorry for myself, angry toward others, guilty, or ashamed for getting the short end of the stick in the past will only continue to keep me from achieving happiness in the present and future.
- I am an active stewing-in-my-own-juices participant in my present victimization and can choose instead to make plans to move forward with my life.
- What I tell myself today is much more important than what others have told me in the past.
- Past experiences do not represent me. Rather, they represent things I have experienced; they do not make me into a better or worse person.
- The enemy is not my past; the enemy is my way of thinking about my past.
- Going on an archeological dig of my past in an effort to explain my present difficulties is like trying to find a needle in a haystack and will only divert me from present problem-solving.
- Everything that has happened in my life *happened*. Therefore, I'd better get off my high horse and stop pigheadedly demanding that it should not have occurred, when in truth it *did* occur.
- What has happened to me is not nearly as important as what I decide to do with it.
- I will try to be successful in putting my past behind me by changing my thoughts and feelings about it, but I don't have to put myself down if I fall short of the put-it-behind-me mark.