Rethinking how we view gang members: An examination into affective, behavioral, and mental health predictors of UK gang-involved youth

Youth Justice

Sarah Frisby-Osman

and

Jane Louise Wood

Center of Research and Education in Forensic Psychology

University of Kent

Author Note

Correspondence concerning this article should be addressed to Sarah Frisby-Osman, Center of Research and Education in Forensic Psychology, University of Kent, Canterbury, Kent, CT2 7NP, United Kingdom. Email: so302@kent.ac.uk

Abstract

Mental health difficulties, conduct problems, and emotional maladjustment predict a range of negative outcomes, and this may include gang involvement. However, few studies have examined how behavioral, mental health, socio-cognitive, and emotional factors all relate to adolescent gang involvement. This study examined 91 adolescents to compare non-gang and gang-involved youth on their conduct problems, emotional distress, guilt proneness, anxiety and depression, and use of moral disengagement and rumination. Analyses revealed that gang-involved youth had higher levels of anxiety, depression, moral disengagement, and rumination. Gang-involved youth also had higher levels of conduct disorder and exposure to violence, but they did not differ from non-gang youth on levels of emotional distress and guilt proneness. Discriminant function analysis further showed that conduct problems, moral disengagement, and rumination were the most important predictors of gang involvement. Discussion focuses on how intervention and prevention efforts to tackle gang involvement need to consider the mental health and behavioral needs of gang-involved youth. Further research is also needed to build an evidence-base that identifies the cause/effect relationship between mental health and gang involvement to inform best practice when tackling gang membership.

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

Adolescent gang involvement gains widespread attention from professional and public audiences because of the serious implications it has for youth involved and the social fabric of communities. A recent report estimates that 27,000 10 to 17-year olds are street gang members (Children's Commissioner, 2018: p.15) and these children tend to have a range of needs, including poor mental and emotional health (McDaniel, 2012; Mayor Office for Policing and Crime, 2018). The etiology of gang membership is multifaceted with a range of precursors, often occurring simultaneously and across numerous risk factors such as family, individual characteristics, social situations, peer groups, and environmental factors (Raby and Jones, 2016; Thornberry, Krohn, Lizotte et al., 2003). Thus, addressing the issues posed by gangs is far from straightforward, but it is one that requires 'better co-operation and collaboration…between traditionally divergent institutions and agencies…' (Densley, 2011, p. 20). Yet, the prevailing view of gang members focuses primarily on their criminality and violence, (Beresford and Wood, 2016).

Recently in the UK, gang-related homicide increased from 29% in 2016 to 37% in 2018 and gang-related knife-crime involving victims under 25 is higher (57%) than that committed by non-gang members (34%; Mayor Office for Policing and Crime, 2018). Thus, it is unsurprising that gang-related violence is an urgent Government priority. However, gang involvement is complex and punitive approaches such as harsher sentencing laws and

inappropriate use of intelligence tools (Densley, 2011; Wood, Alleyne and Beresford, 2016) cannot address these complexities in full.

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

The aim of the current study is to identify the affective, behavioral, mental health, and socio-cognitive predictors of gang involvement. The paper begins with an examination of existing literature in relation to gang membership, violence, mental health outcomes, and gang members' affective, behavioral, and socio-cognitive needs. Findings from the current cross-sectional study, which examined the emotional needs, mental health, and socio-cognitive predictors of gang involvement in England are reported. To end, the results are discussed in line with current evidence and the implications findings have for prevention and intervention with gang-involved youth are identified.

Gang membership, exposure to violence, and mental health outcomes

Exposure to violence, including violent victimization among gang members, is well documented. Peterson, Taylor and Esbensen (2004) identify how adolescent gang members aged between 12 and 16 years are more likely to experience violent victimization, including serious violence, before, during, and after gang involvement compared to non-gang youth (60% and 12% respectively; Taylor, Peterson, Esbensen et al., 2007). This is supported by later findings that active gang members (97.8%) are violently victimized more so than youth

who are loosely involved with a gang (79.9%) and non-gang youth (67.1%; Katz, Webb, Fox et al., 2011).

Exposure to violence is also associated with internalizing and externalizing symptoms, such as depression, delinquency, and increased aggression (Gorman-Smith and Tolan, 1998; Schilling, Aseltine and Gore, 2007). It is therefore unsurprising that behavioral disorders, including conduct problems mediate the relationship between gang membership and antisocial behavior (DeLisi et al., 2019). Equally, some authors further note how higher levels of antisocial personality disorder (ASPD) distinguish gang members from non-gang members (Mallion and Wood, 2018). Research examining adolescent indicators of ASPD in adulthood, (characterized by emotion dysregulation, unpredictable & heightened emotional experiences, low empathy, & engagement in violence, APA, 2013; Howard, 2015; Mallion, 2017), identifies how individuals diagnosed with conduct disorder (CD) in adolescence are more likely to develop ASPD in adulthood and engage in higher levels of crime and violence (Loeber, Bruke and Lahey, 2006). Further research shows how CD and ASPD correlates with anxiety and depression (Goodwin and Hamilton, 2003), and Loeber and colleagues (2006) note how when CD is comorbid with depression, substance misuse (marijuana), and callous/unemotional traits, the risk of developing ASPD increases.

CD in adolescence and ASPD in adulthood also positively correlate with traumatic experiences in childhood, including exposure to violence (Ballard et al., 2015; Holmes, Slaughter and Kashani, 2001). Evidence suggests that exposure to adverse childhood experiences (ACEs; defined as "potentially traumatic events that can have negative lasting effects on health and wellbeing," Boullier and Blair, 2018: 132) have a cumulative effect on later behavior. Exposure to ACEs also relates to lower levels of mental and emotional wellbeing (Boullier and Blair, 2018), and the greater the number of ACEs experienced in adolescence, the greater the impact on mental health into adulthood (Chapman et al., 2004;

Schilling et al., 2007). A range of ACEs, such as adverse familial experiences, exposure to delinquency and violent victimization, and mental health difficulties have also been linked to a risk of gang involvement; and just as it is with the impact on mental health, the greater the number of ACEs, the greater the vulnerability of the child to gang involvement (Raby and Jones, 2016; Thornberry et al., 2003).

Collectively, the above evidence suggests that youth who become involved in gangs are vulnerable to a range of problems, particularly mental health difficulties (Beresford and Wood, 2016; Watkins and Melde, 2016). Although research investigating gang members' mental health is still in its infancy, there is plenty of evidence that gang members, compared to nongang counterparts, are involved in higher levels of criminality and violence (Gatti et al., 2005), which also relate to mental ill health. In line with the "cumulative effects" concept, the more exposed to violence a youth is (e.g., via familial maltreatment), the more s/he becomes vulnerable to mental illnesses (Lynch and Cicchetti, 1998; Lynch 2003), including anxiety, depression, and symptoms of psychological distress (Foster, Kupermine and Price, 2004; Gorman-Smith and Tolan, 1998; Kennedy and Ceballo, 2013). Consequently, it is unsurprising that gang membership, which strongly relates to violence (Gatti et al., 2005), leads to or aggravates existing symptoms of depression and suicidal ideation in youth (Watkins and Melde, 2016).

Due to their experiences of violent victimization as both perpetrators and victims (see Beresford and Wood, 2016), it is unsurprising that gang members are more likely to experience symptoms of depression, perpetration trauma (PT), which is trauma from perpetrating violent acts (see Kerig et al., 2016), and posttraumatic stress (Petering, 2016). However, research examining gang members' mental health (Dmitrieva et al., 2014; Madan, Mrug and Windle, 2011; Watkins and Melde, 2016) has produced mixed findings. Although Madan et al. (2011) found that suicidal behavior positively related to gang involvement, this

relationship was mediated by levels of delinquency and exposure to community violence. They also found no relationship between internalizing symptoms, (e.g., anxiety & depression) and gang involvement. One explanation for Madan et al.'s (2011) findings could be that their data includes gang members who still believe their gang will provide protection and a social support network (Vigil, 1988; see Wood, 2014). However, this perception is likely to be short-lived (Venkatesh, 1999), and cross-sectional analyses such as Madan et al.'s (2011) cannot capture how perceptions (and mental health) change across time. Only longitudinal analyses could accurately assess this. Although longitudinal findings regarding gangs and mental health are scarce, findings so far suggest that youth who join gangs already have higher levels of depression and suicide-related behavior, and these only worsen following gang joining (Watkins and Melde, 2016). This suggests that existing mental health difficulties may be useful predictors of future gang involvement. It also suggests that joining a gang exacerbates existing symptoms. Recent research supports this contention by suggesting that the more deeply involved members are in a gang the more severe is their mental illness (Wood, Kallis and Coid, 2017). That is, gang members report more anxiety, are more likely to suffer psychosis, and have ASPD than affiliates (who link loosely to a gang), and non-gang violent men.

Affective, behavioral, and socio-cognitive processes

In their consideration of the literature, Watkins and Melde (2016) state that "…gang youth are not as emotionally healthy as nongang youth…" (p. 1110). However, emotional correlates of gang membership are rarely examined. Existing studies show how gang members engage in angry rumination (i.e., repeatedly focus on anger-provoking thoughts), which is associated with increased levels of displaced aggression (Vasquez, Osman and Wood, 2012). More recently, the need to examine self-conscious emotions, such as guilt and remorse for their violence in gang-involved populations has become apparent (see Wood et

al., 2017). Guilt is recognized as eliciting and/or inhibiting offending behaviors and recidivism among delinquent samples and can motivate reparative action as the individual focuses on their behavior to 'right a wrong'. In turn, this process minimizes personal feelings of regret or distress (see Tangney, Stuewig and Martinez, 2014). Thus, guilt is an adaptive emotion that can motivate individuals to modify adverse behavior (see Roos, Hodges and Salmivalli, 2014).

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

Empirical investigations have reported mainly on the relationship between guilt and mental health outcomes (Fontana, Rosenheck and Brett, 1992; Henning and Frueh, 1997). However, a lack of guilt may also be associated with the use of moral disengagement

strategies (Bandura et al., 1996; Ring and Kavussanu, 2017). Moral disengagement strategies enable individuals to set aside their existing morals and engage in harmful behavior that they believe will benefit them (Bandura et al., 1996). For instance, research has shown that moral disengagement strategies relate to unethical decision-making (Ring and Kavussanu, 2017). Equally, research has shown that street gang members are more likely to morally disengage than are non-gang offenders by adopting a range of moral disengagement strategies, such as displacement of responsibility (e.g., to other gang members or to victims) and dehumanizing victims (Alleyne, Fernandes and Pritchard, 2014; Niebieszczanski et al., 2015). The more the individual benefits from the harmful behavior (e.g., positive reinforcement from other gang members for violence, which may boost self-esteem), the more morally disengaged the individual will become. Thus, moral disengagement may assuage the normal feelings of guilt that perpetrating harmful acts would arouse in the individual (Bandura et al., 1996). Consequently, the presence or absence of gang members' feelings of guilt may have crucial implications for the treatment of gang-involved youth.

Current study: Towards a public health approach

There is growing consensus that a public health approach should be adopted to address youth violence and this includes gang involvement (Gebo, 2016; Neville, Goodall, Gavine et al., 2015). The public health approach "takes a population-based approach and aims to improve the health and safety of the population" (Neville et al., 2015: 323). The public health approach is based on a four-stage model, which states (1) 'the problem', (2) identifies the risk and protective factors associated with youth violence and/or gang involvement, (3) develops and evaluates responsive interventions at varying levels, and (4) implements successful programs (see Dahlberg and Krug, 2002). Prevention operates at three distinct levels; (1) *primary*, before youth become gang-involved or engage in violence, a public health approach would ensure access to inclusive and quality provisions, including

education, healthcare, and employment regardless of "socio-economic, ethnic, or gender status" (Gebo, 2016: 378); (2) *secondary*, once youth join a gang interventions should be put in place to prevent escalation of gang involvement and violence; and (3) *tertiary*, long-term support to rehabilitate and prevent continued gang involvement and violence should be provided (Neville et al., 2015).

Gebo (2016) argues that given the difficulty in distinguishing between risk factors related to youth violence and those which lead to gang involvement, the public health approach at primary and secondary prevention stages may be better utilized when focusing on youth violence rather than specifically on gang involvement. However, *group processes* conducive to gang involvement and the vital significance of these processes on members' adherence to group norms, including gang-related violence, may explain why gang youth are more delinquent and violent, compared to non-gang delinquent youth (Klein et al., 2006; see Wood, 2014). Research also demonstrates how compared to violent men, gang members self-report greater levels of mental health difficulties and violence (Wood et al., 2017). More recently, qualitative research by Deuchar and Ellis (2013) on the outcomes of a secondary prevention initiative in Scotland, which employed a collaborative approach between youth work and schools to support young people at risk of criminality and gang involvement, reported positive changes in participants attitudes and emotions. These changes included participants' reflecting on their delinquent behavior, becoming aware of the negative consequences associated with gangs and increasingly aware of the positive opportunities available to them, and expressing improvements in emotional adjustment, such as increased empathetic responses and reduction in feelings of anger. The intervention consisted of workshops delivered by youth workers on issues such as emotion regulation, gangs, and antisocial behavior. Thus, although Gebo (2016), understandably, argues that a focus on successful violence prevention efforts should outweigh a 'gang-specific' focus at primary and

secondary levels, an understanding by professionals engaging in primary and secondary prevention efforts of the issues relating to gang membership, including gang members' emotional and mental health needs, would add further value to successful prevention initiatives at these levels.

More recently in the UK, a public health approach to youth violence, including gang membership has been adopted. In Scotland, the Violence Reduction Unit (VRU, 2005) was developed to target violence at all levels, including in the community, education, and the home by utilizing a range of community initiatives supported by multi-agency stakeholders (e.g., professionals in the criminal justice system, education, health care, and outreach programs). Following implementation of the VRU, homicide reduced by 39% between the years 2008 and 2018 (Homicide in Scotland, 2018). As part of the VRU, a gang-specific intervention program titled 'Community Initiative to Reduce Violence' (CIRV) was developed to tackle gang membership effects and violence in Glasgow (see CIRV, 2009). In line with the public health approach, the CIRV incorporates a deterrent, rehabilitative, and a community-based approach to gang-related violence. In addition to the VRU, which provides primary prevention, the CIRV addresses anti-social behavior and violence through secondary and tertiary prevention by providing at-risk or gang involved youth with self-development programs, extra-curricular activities, such as sport, and mental health support (e.g., counselling). The success of the VRU in Scotland has led to the adoption of a public health model to youth violence in London, England, which has in recent years recorded a rise in gang-related homicide (Mayor Office for Policing and Crime, 2018, 2019).

Indeed, there remains gaps in our knowledge of gangs and the risk factors synonymous with gang membership do not render every young person with ACEs as gang involved. However, young people who may be lured to gangs may have specific needs, including mental health difficulties, above and beyond those which make youth engage only

in violence, but not join a gang. Thus, empirical gang research must begin to examine and understand these vulnerabilities specific to gangs and in turn these must be considered at primary, secondary and tertiary levels of prevention within any public health approach. Consequently, the current study seeks to contribute to the evidence base of a public health approach to tackling gang membership.

The study considers whether; (1) anxiety and depression, (2) emotional distress and proneness to guilt (i.e., dispositional guilt) (3) conduct problems, (4) exposure to violence as victims, and (5) socio-cognitive processes (e.g., moral disengagement & rumination), are needs that gang-involved youth have, and which need to be addressed. We hypothesized that, compared to non-gang youth, gang-involved youth would experience higher levels of mental illness, specifically anxiety and depression, be more likely to have conduct problems, and be more likely to engage in rumination, and moral disengagement. We also expected that, compared to non-gang youth, gang-involved youth would have lower levels of emotional distress, and guilt-proneness.

Method

Design

A cross-sectional, between-participants design was used. Predictor variables consisted of mental and emotional health variables, including anxiety, depression, guilt proneness, and emotional distress; conduct problems, and socio-cognitive variables including rumination and moral disengagement. Gang involvement was used as the outcome variable with participants categorized as (1) non-gang or (2) gang-involved.

Participants

Three co-educational schools in England, in areas identified as having high levels of gang activity by the UK Government (HM Government, 2016) were approached for participation. All were state-funded; one was a mainstream secondary school for ages 11 to 18 years (*n* =

44), one was a college for ages 16 to 19 years (n = 23), and the third was a Pupil Referral Unit (PRU) for ages 11 to 16 years (n = 24) who were experiencing a range of difficulties, including social, emotional, and behavioral problems, and permanent exclusion from mainstream schools. Consistent with sample sizes from previous gang research (Mallion and Wood, 2018) and with young people in secondary schools (Pearce et al., 2016), 91 participants with a mean age of 14.93 (SD = 1.52, range = 13 – 19 years) took part. Sixty-two per cent identified as non-gang youth (n = 56), 35% as gang-involved (n = 32), and 3% had unspecified status (n = 3).

Table 1

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

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

Consistent with previous categorizations of gang and non-gang members (Wood and Dennard, 2017), participants were categorized as White (33%) or Black and Minority Ethnic (BAME; 67%), see Table 1 for demographics.

Materials

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

Depression. The Beck Depression-II Inventory (BDI-II) was used to assess symptoms of depression, in line with diagnostic criteria for major depressive disorder as outlined in the Diagnostic and Statistical Manual of Mental Disorders (IV and V; APA, 1994, 2013). Each of the 21 items on the BDI-II assesses symptoms on a four-point scale (0 to 3) with severity of depressive symptomology indicated by the total summed score of all items (range = 0 to 63). The four-point scale ranges from low to high intensity of symptoms; higher scores indicate higher levels of depression. Items include symptoms such as low mood, '*I am sad all the time and I can't snap out of it',* suicidal thoughts and behaviors, '*I have thoughts of killing myself, but I would not carry them out*', loss of interest '*I don't get real satisfaction out of anything*

anymore', and excessive feelings of guilt '*I feel guilty all of the time'*. One item was removed as it was deemed unsuitable for an adolescent sample ('*I have lost interest in sex completely'*). In line with previous research demonstrating good reliability estimates for the BDI-II with an adolescent sample (Osman et al., 2004), Cronbach's Alpha indicated that for the current study the BDI-II had good internal consistency (*a* = .88).

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

Angry rumination: Symptoms of anger and rumination were identified using the 19 item Anger Rumination Scale (ARS) by (Sukhodolsky, Golub and Cromwell, 2001). Items assess, (1) ***Angry Afterthoughts*** ('*I re-enact the anger episode in my mind after it has happened*')*;* (2) ***Thoughts of Revenge*** ('*when someone makes me angry, I can't stop thinking about how to get back at this person*'); (3) ***Angry Memories*** ('*I feel angry about certain things in my life*') and (4) ***Understanding of Causes*** ('*I think about the reasons people treat me badly')*. Items were rated on a 4-point Likert scale (1 = 'almost never' , 4 = 'almost always'). A higher total score indicated higher levels of anger rumination. The ARS has

previously been used with gang-affiliated youth (Vazquez et al., 2012), and for the current study Cronbach's Alpha confirmed its high internal consistency (*a* = .93).

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

Moral Disengagement. The mechanisms of moral disengagement scale (Bandura et al., 1996) was used to assess moral disengagement. This is a 32-item measure examining eight moral disengagement strategies; (1) ***moral justification*** (e.g., '*It is alright to fight to protect your friends*'); (2) ***euphemistic labeling*** (e.g., '*slapping and shoving someone is just a way of joking*'); (3) ***advantageous comparison*** (e.g., '*Stealing some money is not too serious compared to those who steal a lot of money*'); (4) ***displacement of responsibility*** (e.g., '*kids cannot be blamed for misbehaving if their friends pressured them to do it*'); (5) ***diffusion of responsibility*** (e.g., '*A kid in a gang should not be blamed for the trouble the gang causes*'); (6) ***distortion of consequences*** (e.g., '*It is okay to tell small lies because they don't really do any harm*'); (7) ***Attribution of blame*** (e.g., '*If kids fight and misbehave in school it is their teacher's fault*'); and (8) ***Dehumanization*** (e.g., '*Some people deserve to be treated like animals*'). One item ('*Children do not mind being teased because it shows interest in them'*) was removed because one school considered it to be inappropriate. Participants responded to items on a 5-point Likert scale (1 = 'strongly disagree', 5 = 'strongly agree'); higher scores

indicated higher moral disengagements. For the current study, Cronbach's Alpha showed that the scale had high internal consistency (a = .94).

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

Items from the Test of Self-Conscious Affect for Adolescents (TOSCA-A; Tangney et al., 1991) were used to identify an inclination to feel guilt (guilt-proneness) in a range of situations. Participants were presented with fifteen scenarios (e.g., '*You break something at a friend's house and then hide it*') and asked to how they would be likely to respond, from a choice of five which indicated, externalization, guilt-proneness, shame-proneness, and/or pride, (e.g., 'I would think "This is making me anxious, I need to either fix it or replace it"'). Guilt-proneness was assessed according to the number of responses indicating feelings of guilt and low scores were used to assess an inclination to callous-unemotional responses. Cronbach's Alpha revealed that for the current study the TOSCA-A had adequate reliability (a = .70).

Violence Exposure Participants' exposure to violence was assessed in the form of violent victimization via the Eurogang Youth Survey items; (1) '*Have you been hit by someone trying to hurt you in the past year?*' (2) '*Had someone use a threat, a weapon, or force to get money or things from you?*', and (3) *Been attached by someone with a weapon or*

by someone trying to seriously hurt you?'. Participants rated their response on a 5-point scale (1 = 'Never', 2 = '1 to 2 times', 3 = '3 to 5 times', 4 = '6 to 10 times', and 5 = '10 times of more'; Cronbach's Alpha; a = .86).

Ethics and Procedure

Ethical approval for the study was sought from a university Ethics Committee, in line with the British Psychological Society code of conduct (2009). Once approved, three schools known to the researcher were approached via convenience sampling. Each school agreed to research access. Meetings between the researcher and leadership teams took place at each site to outline the study's aims and objectives, inclusion/exclusion criteria, and address any questions or concerns schools might have. Consent was sought from head teachers to act 'in loco parentis' for participants. In addition, and to ensure transparency, opt-out consent was sought from parents/carers via each school. Letters explained that a study was taking place on group memberships and mental and emotional wellbeing. Reference to gangs was not made to avoid biased associations and responses (see Alleyne and Wood, 2013). Thus, parents and/or carers were only required to return the forms if they did not wish for the young person to participate. As a further check, potential participants (over age 13) were deemed able to participate if they understood what the study involved and what it meant to consent to participation. This is in line with the principles of 'Gillick competence', which follows a legal ruling enabling young people to provide consent if they are mature and competent to understand the information presented to them (see Pearce et al., 2016).

Given the sensitive nature of some items, staff teams at each school were informed of inclusion/exclusion criteria prior to inviting participants to participate. Participants deemed at risk of harm to self or others were excluded. Participants who met inclusion criteria were invited to attend a one-to-one interview with the researcher where they were told the aims of

the study and could ask questions. Participants were also informed that some questions were sensitive and should they indicate any risk of harm to self or others, a member of the school team would be informed. Any participant indicating 1 or more on the BDI question; 1 = '*I have thoughts of killing myself, but I would not carry them out*', 3 = '*I would kill myself if I had the chance*', would be referred to the relevant school team for support. Once happy to continue, each participant was asked to complete a consent form. All were told that their participation was voluntary, confidential, and that they could withdraw at any point and their data would be removed from the sample. A unique participant identification code was created and stored separately from identifying information. As some participants had low literacy, the researcher read each question aloud and participants indicated their chosen responses. On completion of interview, participants were thanked, verbally debriefed, and given a debrief form which included the researchers' contact details. Participants were also provided with information on three helplines, two related to mental health and one specifically for gang-involved youth, that participants could contact confidentially. To ensure there was immediate support available, participants were also referred to a named support staff member as an on-site response to managing distress.

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

Results

Data analyses were carried out using SPSS Statistics, Version 25, at a significance level of $p < .05$.

Demographic Variables

Chi square analyses and an independent t-test were conducted to compare non-gang and gang involved youth on demographic variables of age, ethnicity, gender, and exposure to

violence. An independent t-test revealed no difference in age between gang-involved (M = 15.34, SD = 1.26) and non-gang youth (M = 14.63, SD = 1.58); $t(75) = -1.80$, $p = .76$. A chi square analysis found no differences between groups according to gender; x^2 (1, N = 88) = 3.34, $p = .068$. However, a difference in ethnicity between gang and non-gang youth was found. A chi square analysis revealed that more BAME youth were involved with gangs than were white British youth, x^2 (1, N = 88) = 6.08, $p = .014$.

Predicting Gang Involvement

Analyses examining gang involvement was two-fold. Firstly, independent t tests were conducted to identify differences between gang-involved and non-gang youth on affective, behavioral, mental health, and socio-cognitive predictors. Results showed that gang-involved youth were more likely to experience symptoms of anxiety and depression, have conduct problems, ruminate negatively, morally disengage, and have higher levels of exposure to violence by being violently victimized. There was no difference between gang and non-gang youth on their emotional distress and their guilt proneness (see Table 2).

Table 2

Comparisons between Gang-Involved and Non-gang Youth on All Variables

Variable	***Gang-involved***	***95% CI***		***Non-gang***	***95% CI***		
	M (*SD*)	*LL*	*UL*	*M* (*SD*)	*LL*	*UL*	***p***
Anxiety	20.43 (9.80)	16.78	24.09	12.82 (12.34)	-12.46	-2.76	.003
Conduct Problems	99.03 (11.67)	94.75	103.31	79.32 (16.35)	-25.83	-13.60	<.001

Depression	18.38 (9.81)	14.84	21.91	11.34 (9.05)	-11.27	-2.81	<.001
Emotional Distress	6.59 (2.70)	5.62	7.57	5.75 (3.70)	-2.22	.525	.223
Guilt Proneness	29.40 (24.95)	20.08	38.72	24.46 (10.83)	-14.64	4.77	.309
Moral Disengagement	91.94 (20.39)	84.59	99.29	73.79 (18.60)	-26.98	-9.31	<.001
Rumination	64.06 (10.25)	60.37	67.76	49.91 (15.68)	-19.66	-8.64	<.001
Violence Exposure	5.31 (2.67)	4.35	6.27	3.69 (1.63)	-2.67	-.573	.003

To establish which factors were more likely to account for gang involvement, a discriminant function analysis was conducted. This was deemed the most appropriate method because it is robust when analyzing categorical variables with numerous predictors in studies with small sample sizes (Mallion and Wood, 2018; see Tabachnik and Fidell, 2013). For this analysis, we included anxiety, conduct problems, depression, emotional distress, guilt proneness, moral disengagement, rumination, and violence exposure as predictors in a single block. The grouping variable, non-gang and gang-involved (non-gang = 1, gang-involved = 2), was entered as the dependent variable. The discriminant function revealed a significant model, $\Lambda = .61$, x^2 (8) = 34.68, $p = .001$, which accounted for 39% of the variance in group affiliation (canonical correlation = .62). The cross-validated classification showed that 75% of all cases were classified correctly.

Based on loadings of .3 or over and the direction of the coefficient, the model's structure matrix (see Table 3) showed that the strongest predictors of gang involvement were higher levels of conduct problems, moral disengagement, and rumination, which is in line with our hypotheses. Anxiety, depression, and violence exposure, were also important predictors of gang involvement, but levels of emotional distress and guilt proneness were not. This suggests that gang involved youth were not more inclined to experience emotional distress and/or guilt than non-gang youth.

Table 3

Discriminant loadings for predictor variables in order of importance for gang and non-gang involvement.

Predictor Variable	Discriminant Loading
Conduct Problems	.792
Moral Disengagement	.727
Rumination	.668
Depression	.519
Violence Exposure	.441
Anxiety	.429
Emotional Distress	.197
Guilt Proneness	.095

Discussion

The aim of the present study was to compare gang-involved and non-gang youth on their levels of anxiety and depression, conduct problems, emotional distress, guilt proneness, moral disengagement, rumination, and exposure violent victimization. As predicted, our findings successfully demonstrated that compared to non-gang youth, gang-involved

adolescents experience higher levels of mental health difficulties, present more conduct problems, are more likely to engage moral disengagement strategies and ruminative thinking, and experience higher levels of violent victimization. We also hypothesized that, compared to non-gang youth, gang-involved youth would show lower levels of emotional distress and guilt-proneness, and this was not supported by our findings. Consequently, our findings reiterate the important role that psychological research can take in examinations of gang involvement (Wood and Alleyne, 2010).

Consistent with previous studies examining the mental health of gang members (Coid et al., 2013; Watkins and Melde, 2016), our findings show how higher levels of anxiety and depression predict gang involvement. Our finding relating to depression contributes to a mixed evidence base of internalizing symptoms. Whist Coid et al. (2013) found gang members suffered less depression than nonviolent men in their adult sample, Watkins and Melde (2016) found that adolescents had higher levels of depression than nongang youth at the onset of gang membership, and this worsened following membership. It may be that for adolescent youth, gang involvement is an attempt to buffer a range of other depressing experiences, such as disillusionment, low self-esteem, and a perceived lack of opportunities (see Wood and Alleyne, 2010 for review). However, gang involvement may not actually meet the expectations of youth (Venkatesh, 1999), and this may lead to an increase in depressive symptoms such as 'feeling sad' or 'discouraged about the future,' as measured in the current study. Thus, our findings support Watkins and Melde's (2016) work and suggest that adolescent gang involvement requires an informed, responsive approach that focuses on mental health.

We found that having conduct problems was the strongest predictor of adolescent gang involvement, and this supports recent findings that note how behavioral problems, including oppositional defiant disorder (ODD), CD, and ASPD mediate the gangs-criminality

nexus (Delisi et al., 2019). Egan and Beadman (2011) suggest that ASPD links to gang membership by consolidating existing antisocial attitudes and beliefs, which in turn, foster a stronger attachment to the gang. Thus, the role of CD among gang-involved adolescents warrants further investigation and the findings suggest how antisocial and mental health factors need consideration in the response to gangs.

Our finding that exposure to violent victimization predicts gang involvement was also anticipated. Earlier studies show how youth living in disadvantaged communities, which in and of themselves are risk factors for gang involvement (see O'Brien et al., 2013), report experiencing direct (through stabbings or targeted shootings) or indirect (witnessing) violence in their communities (Taylor et al., 2007). However, although research examining the relationship between community violence and mental health has gained increasing attention, it has suffered from a lack of attention in terms of gang involvement. Gang members form a distinct offender group whose engagement in violence goes above and beyond other delinquent groups (see Gatti et al., 2005). Thus, understanding the unique effects of gang membership on mental and emotional health requires a lot more attention if we are to counteract gang-related violence and *prevent* youth from joining gangs. In addition, research by Ballard et al. (2015) suggests how different experiences of traumatic experiences in childhood, including violent victimization, relate to varying levels of mental health outcomes. Given that interventions have positive effects on younger, compared to older age groups (Granpeesheh et al., 2009), that gang membership has been identified in children as young as 10 years of age (Children's Commissioner, 2018), and peaks at a crucial age (14 years; Pyrooz and Sweeton, 2015), our findings together with previous work, highlights the urgency of addressing gang membership via early intervention and prevention because this is when youth may be particularly responsive to treatment.

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

Our finding that emotional distress and guilt proneness did not predict gang involvement, but anxiety and depression did, supports the work of Kennedy and Ceballo (2016). These authors provided evidence that urban youths' exposure to violence was associated with emotional desensitization and symptoms of anxiety and depression. As feelings of guilt are associated with attempts to rectify wrongdoing, if they are absent, then prolonged engagement and escalation of gang-related delinquency and violence, may result. Equally, in line with previous findings, indicating how chronic exposure to ACEs is associated with progressively worse outcomes (Chapman et al., 2004), it is possible that a lack of guilt, which is nurtured via adverse behavior over time, may impact to prevent successful engagement with interventions. If this is so, it may also deepen pre-existing conduct problems, aggravate mental health difficulties, and promote further embeddedness in the gang (Egan and Beadman, 2011).

Implications

Our findings have important implications for a number of areas. Responses to gangs have largely focused on strategies and policies that aim to deter and suppress gangs with policy-based interventions, such as injunctions being employed to separate known or perceived gang members (Wood et al., 2016). This retaliatory approach to tackling gang violence, in comparison to the much-needed public health and multi-agency approach adopted in parts of the United Kingdom, such as in Scotland (Deuchar and Ellis, 2013; Neville et al. 2015), and more recently London (Mayor Office for Policing and Crime, 2018, 2019), has several implications. First, it fails to address the underlying risk factors of gang membership, including low self-esteem (Dmitrieva et al., 2014) and mental health difficulties, such as suicide and depression (Watkins and Melde, 2016), and which our findings support. In short, our findings appear to support that there is still inadequate responding to the needs of vulnerable individuals whose motivation to join a gang arose "from an attempt to have their basic needs met" (Raby and Jones, 2016, p. 601). Thus, targeting the needs of at-risk and gang-involved youth *as well as* the rehabilitation of criminal behavior through primary, secondary and tertiary prevention response is vital.

Second, there has been a failure to respond accordingly to the mental and emotional health consequences from violence exposure on vulnerable adolescent gang members (Kelly et al., 2012), and our findings support this. We know that interventions have positive effects on younger compared to older age groups (Granpeesheh et al., 2009). We also know that children are becoming involved with gangs from a younger age (Children's Commissioner, 2018). Therefore, together with our findings, this body of work suggests that there is an urgent need to address gang membership via early intervention and prevention and at an age where youth are more responsive to treatment. However, primary prevention and secondary and tertiary interventions need to be evidence-based and include behavioral, mental health, and psychological factors that we, and others, have identified as related to gang involvement.

Without such an informed approach, there is a risk that efforts to prevent and intervene with gang-involved youth will not be effective.

The current study possessed numerous strengths, including examination of a range of psychological and socio-cognitive predictors of gang involvement that can inform our response to gangs. Furthermore, the current study provides an empirical examination of emotional distress and guilt proneness specific to gang-involved adolescents. Our findings point to the importance of considering emotional adjustment and callous-unemotional traits among gang samples (Mallion and Wood, 2018). However, there are also limitations to our work. The cross-sectional nature of the design and self-report nature of measures may mean our data is subject to reporting bias. Furthermore, recent evidence suggests the importance of examining how mental ill health relates to *levels* of gang embeddedness (Wood et al., 2017), which the current study could not address. Future research could include qualitative research, such as case studies, in addition to national data samples, to better explore and understand the perspectives of gang-involved youth, including their mental health and emotional needs at all levels of involvement.

Conclusion

This study provides insight into the affective, behavioral, and mental health predictors of adolescent gang involvement. The findings presented here show how mental health difficulties, such as anxiety and depression, conduct problems, and emotional maladjustment may motivate youth to become involved with gangs. Furthermore, exposure to violence such as by being violently victimized and socio-cognitive processes, such as angry rumination and moral disengagement are also associated with gang involvement. Thus, our findings highlight the need to consider youth gang involvement through a lens that considers the extent and nature of a range of vulnerabilities, including young people's experiences of mental health, their emotional development, and problem behaviors. There is consequently a need to rethink

how we view and respond to gangs and our findings have significant implications for gang interventions to focus on affective and psychological factors and to target antisocial behavior.

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