Author(s): Katie Dhingra ; Agata Debowska ; Kathryn Sharratt ; Philip Hyland ; Susanna Kola-Palmer

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PSYCHOPATHY, GANG MEMBERSHIP, AND MORAL DISENGAGEMENT AMONG JUVENILE OFFENDERS

Katie Dhingra¹, Agata Debowska², Kathryn Sharratt³, Philip Hyland⁴, & Susanna Kola-Palmer³

¹Manchester Metropolitan University, UK
²University of Chester, Department of Psychology, United Kingdom
³University of Huddersfield, Huddersfield, United Kingdom
⁴National College of Ireland, Dublin, Ireland

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ABSTRACT

Purpose: The aim of the current study was to investigate the impact of psychopathy factors and gang membership on moral disengagement while controlling for age, ethnicity, having run away from home, family member and/or friend arrests, substance misuse, parental physical fights, violence exposure (victimization and witnessing), and maternal warmth and hostility.

Design/methodology/approach: The research is based on data collected from serious juvenile offenders (N = 769) as part of the Pathways to Desistance Study.

Findings: Six independent variables made a unique statistically significant contribution to the model: gang membership, age, gender, violence exposure, and psychopathy Factors 1 and 2. Psychopathy Factor 1 was the strongest predictor of moral disengagement.

Originality/value: Results indicate that youth with heightened psychopathic traits make greater use of strategies to rationalize and justify their harmful behaviour against others. Implications in relation to theory and previous studies are discussed.

Keywords: Moral Disengagement; Psychopathy; Juvenile Offenders; Gang Membership; Pathways to Desistance.
INTRODUCTION

According to social cognitive theory (Bandura, 1986, 1999), most individuals refrain from transgressive behaviour most of the time because they have internalized society’s standards of conduct. Consequently, acts of harmful or aggressive behaviour risk not only external sanctions (e.g., condemnation, rejection, punishment) but also internal moral self-sanctions for acting against their beliefs (e.g., feelings of guilt and shame, damage to one’s self-concept). To avoid self-censure, Bandura proposed that individuals construct rationalizations and justifications for behaviours that violate moral standards (e.g., aggression, delinquency, crime, and violence), a process called moral disengagement. Social cognitive theory, much like neutralization theory (Sykes & Matza, 1957) describes eight inter-related strategies that individuals may employ to rationalize and justify their harmful acts against others. Moral justification, euphemistic labelling, and advantageous comparison refer to mechanisms that serve to cognitively restructure harmful acts so that they appear less damaging. Dehumanization, distortion of consequences, and the attribution of blame mechanisms serve to reduce or eliminate the distress one perceives to be causing a victim. Moral disengagement has been found to influence various forms of antisocial conduct both directly and by reducing pro-social behaviour and guilt, and by promoting aggression (Bandura, 1999, 2002).

Intact emotional processes are seen as essential to moral reasoning, providing immediate and salient feedback on behaviour (Blair, Mitchell, & Blair, 2005; Eisenberg, 2000; Tangney, Stuewig, & Mashek, 2007). Extensive research indicates that individuals with heightened psychopathic traits have difficulties in empathetic responding; showing impaired processing of distress in others (Bate, Boduszek, Dhingra, & Bale, 2014; Blair, 1999; Debowska, Boduszek, Hyland, & Goodson, 2014; Dhingra & Boduszek, 2013). This deficient ability to experience empathy among psychopaths is thought to disrupt their capacity for normal socialization, prevent emotional connectedness to others (which is a
prerequisite to set in motion self-conscious emotions, such as guilt or shame), and interfere with the development of conscience (DeLisi et al., 2013; Salekin & Frick, 2005) as well as the internalization of moral standards of behaviour (Blair, 1995). In line with this, Blair, Jones, Clark, and Smith (1995) found that psychopaths rated moral and conventional transgressions to be equally impermissible (but not equally serious); while Koenigs, Kruepke, Zeier, and Newman (2010) found that psychopaths reported that they would perform actions in impersonal moral scenarios (i.e., involving indirect or remote harm) more often than non-psychopaths. Using a sample of male adolescent offenders, Shulman, Cauffman, Piquero, and Fagan (2011) reported significant associations between callous-unemotional traits, moral disengagement, and delinquency. In addition, they found that reductions in moral disengagement were associated with reductions in delinquency, based on official records. Similarly, Hyde, Shaw, and Moilanen (2010) found that lower empathy (i.e., higher callousness) at age 12 predicts greater moral disengagement at age 15. Finally, DeLisi et al. (2013) reported that moral disengagement varied by level of psychopathy in relation to criminal onset.

Preliminary research suggest that gang members may also employ moral disengagement strategies to cope with the negative consequence of their actions (Esbensen & Weerman, 2005; Esbensen, Peterson, Taylor, & Freng, 2009). Alleyne and Wood (2010), for instance, found that moral disengagement strategies were more prevalent among gang-involved adolescents than their non-gang affiliated peers. Furthermore, results of Alleyne and Wood’s study indicated that although moral disengagement as a whole did not have a significant main effect, at an individual strategy level, gang members used more euphemisms and blamed their victims more than non-gang youth. Thus, given these findings, further research is needed to further explicate the relationship between gang membership and moral disengagement strategies.
A number of demographic and psychosocial factors have also been related to the use of strategies to rationalize and justify behaviours that violate societal rules. In terms of demographic characteristics, previous research suggests that moral disengagement generally declines between adolescence and early adulthood in normative samples of adolescents (Paciello, Fida, Tramontano, Lupinetti, & Caprara, 2008), whilst the limited research that exists suggests that Caucasians may exhibit greater levels of moral disengagement than either African-Americans or Hispanics (Osofsky, Bandura, & Zimbado, 2005). A differential proclivity to disengage moral self-sanctions from transgressive/injurious conduct between boys and girls has also consistently been observed, with males making greater use of moral disengagement strategies over the course of development than females (e.g., Bandura, Barbaranelli, Caprara, & Pastorelli, 1996; Paciello et al., 2008). Furthermore, the decline in moral disengagement over adolescence appears to lower for boys than girls (Paciello et al., 2008), which has been suggested as an explanation for some of the observed gender differences in aggression (Bandura, 1999).

In terms of psychosocial factors, Bandura (1991) posited that children learn the moral standards of their environments by observing interactions around them and by interacting with others. Consequently, if violence is common in their environment (i.e., they are exposed to parental physical fighting), they are likely to learn: a) that it is not against moral standards to use violence as a way to defend themselves, to solve problems, or to obtain goals, and b) to expect positive outcomes of using aggression (Bandura, 1999; Farrington, 1991; Ng-Mak, Stueve, Salzinger, & Feldman, 2002). Thus, exposure to parental fighting might lead to the adoption of attitudes and beliefs consistent with moral disengagement. Hyde et al. (2010), however, found that parental conflict was not directly related to moral disengagement, and suggested that inter-parental aggression/conflict itself may not be related to moral disengagement because inter-parental conflict may not be exhibited in front of the child, or
may not in itself be salient enough to teach children that the world is a harsh and uncaring place. Hyde and colleagues research additionally suggested that parenting style may influence moral disengagement. Specifically, harsh treatment from primary caregivers (i.e., parental rejection) was found to lead to the adoption of attitudes and beliefs consistent with moral disengagement.

Few studies have examined the relationship between violence exposure and moral disengagement. However, it has been suggested that the correlates, consequences, and mechanisms of influence related to direct experiences (i.e., violence victimization) and observation of violence (i.e., witnessing violence) may differ significantly (Schwartz & Proctor, 2000). The potential impact of the experience of violence victimization on moral disengagement is unclear. On one hand, individuals who have experienced violence may be more sensitive towards norms of fairness and care, and consequently less likely to use moral disengagement strategies (Turiel, 2002). On the other hand, individuals who have been victimized might evidence a tendency towards self-blame (Graham & Juvonen, 1998) which suggests that victims of violence may begin to think that violence is morally right (because they or others victims did something wrong) and consequently show more morally disengaged reasoning. Consistent with the first suggestion, Hymel, Rocke-Henderson, and Bonanno (2005) found that the more victimization students experienced the fewer morally disengaged strategies they endorsed. Similarly, Pornari and Wood (2010) found a greater number of peer victimization experiences was associated with lower moral disengagement, when controlling for own aggressive behaviour. By contrast, two studies found no differences between (non-aggressive) victims and non-involved children/adolescents with respect to moral reasoning (Gini, 2006; Menesini, Sanchez, & Fonzi et al., 2003). In terms of witnessing violence, Orue et al. (2014) found that exposure to violence in 8-12 year old children increased later aggressive behaviour, and that this process was mediated by
normative beliefs about aggression. Similar findings were reported Guerra, Huesmann, and Spindler (2003) and Musher-Eizenman, Boxer, and Danner et al. (2004).

The strongest and most immediate cause of individual delinquency is involvement with a delinquent peer group (Boduszek, Adamson, Shevlin, Hyland & Dhingra, 2014). Within delinquent peer networks, harmful acts towards others may be modelled, encouraged, and rewarded; and justifications for disengaging one’s moral obligation to others may be taught and reinforced. Consequently, associations with delinquent peers (as indexed by number of friends arrested in the present research) may facilitate moral disengagement by confirming and reinforcing antisocial beliefs (Esbensen, Huizinga, & Weiher, 1993; Klein & Maxson, 2006). A similar deleterious effect on moral reasoning may also be expected to occur if youth’s family members are arrested.

Limited research has examined the association between substance abuse and moral disengagement. However, a study of Australian adolescents found that high moral disengagement was associated with reports of binge drinking and having ever tried cannabis (Newton, Havard, & Teeson, 2012), a finding consistent with studies examining the role of moral disengagement in alcohol and cannabis use amongst younger adolescents (Barnes, Welte, Hoffman, & Dintcheff, 1999, 2005; Kiriakidis, 2008).

When youth run away from home, they become more vulnerable to becoming part of the runaway or homeless youth community which subjects them to a peer groups already engaged in deviant behaviours (Warr, 2002). Exposure to these delinquent peers may lead these adolescents to become morally disengaged from mainstream values and more likely to engage in antisocial activities to attempt to survive financially, cope with life on the street, and protect themselves (Bender, Thompson, McManus, Lantry, & Flynn, 2007).
The Current Study

Identifying predictors of moral disengagement, given its importance as a risk factor for antisocial behaviour in adolescents, is critical and of interest from both theoretical and policy perspectives. If frequent acts of misbehaviour lead to morally disengaged attitudes becoming stable (which allows further acts of delinquency and antisocial behaviour), understanding what underpins moral disengagement may not only help in the identification of individuals at risk for developing morally disengaged attitudes but also aid in the design of interventions. The aim of the current study, therefore, is to investigate the impact of psychopathy factors and gang membership on moral disengagement while controlling for age, ethnicity, having run away from home, family member and/or friend arrests, substance misuse, parental physical fights, violence exposure (victimization and witnessing), and maternal warmth and hostility.
METHOD

Sample
As described in more detail elsewhere (e.g., Schubert et al., 2004), participants were serious adolescent offenders from Philadelphia, Pennsylvania, and Phoenix who were interviewed as part of the Pathways to Desistance Study. Participants were included in the study if they, (a) had been adjudicated guilty of a serious felony (excluding less serious property crimes), misdemeanour weapons, or misdemeanour sexual assault offense in juvenile or adult courts in Philadelphia or Phoenix, and (b) were between the ages of 14–17 at the time of their offence. A total of 3,807 youth met the inclusion criteria, 1,799 of whom were excluded because of operational or design constraints. Of the youths that were located and contactable, 80% agreed to take part in the study ($N = 1,355$). Participants were administered a baseline interview over 2 days in two, 2-h sessions within 75 days of their adjudication (for those in the juvenile system) or 90 days after their decertification hearing in Philadelphia or an adult arraignment in Phoenix (if in the adult system).

Interviewers and participants sat side-by-side facing a computer, and questions were read aloud to avoid any potential difficulties arising from reading difficulties. Participants could answer the questions aloud or, to maximize their privacy, enter their responses on a keypad (although in some facilities, this option was not available). Of 1,335 participants included in the study, only those with no missing responses on any of study variables were included in the analysis ($N = 769$). The participants’ average age was 16.3 years ($SD = 1.12$ years) at the time of the initial interview. Most juvenile offenders were male (86.3%, $n = 664$) and 63.2% ($n = 566$) reported their ethnicity to be Hispanic. Around one third of participants reported having run away from home (35.1%, $n = 270$) and that their parents had physical fights (27.3%, $n = 210$), while 78.2% ($n = 601$) of participants reported that someone in their
family had been arrested. In terms of lifetime history of mental disorders, 7.7% (n = 59) reported depression, 11.7% (n = 90) alcohol abuse, and 25.6% (n = 197) drug abuse.

**Measures**

**Moral Disengagement**

The Mechanisms of Moral Disengagement (Bandura, Barbarinelli, Caprara, & Pastorelli, 1996) was used to measure adolescent's attitudes concerning the treatment of others. The self-report measure contains 32 items to which participants respond on a 3-point Likert scale (1 = Disagree to 3 = Agree), with higher scores indicating a greater moral detachment. Mean item total scores were used as an overall scale measure of moral disengagement (α = .88).

**Psychopathy.** The Psychopathy Checklist: Youth Version (PCL-YV; Forth, Kosson, & Hare, 2003) was used to assess youths’ psychopathic traits. This 20-item rating scale is based on two sources: (1) an interview with the youth, and (2) charts and collateral information. The original semi-structured interview guide was adapted for use in this study and reviewed with the interview’s developer. This interview was designed to assess the youth’s interpersonal style and attitudes, obtain information on various aspects of individual functioning, and assess (through comparison with records or collateral reports) the credibility of his/her statements. Following the interview and a review of records/collateral information, the interviewer used a 3-point ordinal scale to indicate how well each of the 20 items applied to the youth (0 = does not apply, 1 = applies to a certain extent, and 2 = applies). A two-factor solution (Factor 1: Interpersonal-Affective and Factor 2: Antisocial-lifestyle) to the PCL: YV was adopted in the present research, although 3- and 4-factor solutions, and a bifactor model, including two general factors (interpersonal-affective and antisocial-lifestyle), and four method factors (interpersonal, affective, antisocial, and lifestyle) have been found to provide better model fit (see Dhingra, Boduszek, Hyland & Debowska, in press; McCuish, Corrado, Lussier, & Hart, 2014) due to these researchers being unable to access all PCL:SV item
scores (see www.pathwaysstudy.pitt.edu/codebook/pcl-sb.html). Internal consistency of Factor 1 ($\alpha = .76$) and Factor 2 ($\alpha = .78$) was good. Recent studies suggest that psychopathy is a dimensional rather than a categorical construct, providing an empirical basis for studying individuals in terms of level of psychopathic traits (e.g., Dhingra, Boduszek, & Kola-Palmer, in press).

**Gang Membership.** Consistent with a long line of gang research, self-nomination was used to operationalize gang membership (i.e., participants were asked if they were "ever in a gang" (yes/no), which has been described as a “robust measure of gang membership” (Esbensen, Winfree, He, & Taylor, 2001, pp.147).

**Number of Friends Arrested.** Participants were asked to report the number of friends that they had who have been arrested (count variable).

**Depression and Substance Abuse (Alcohol and Drugs).** Depression and substance use problems were assessed using the Composite International Diagnostic Interview (CIDI), a highly structured clinical interview based on *DSM-IV* and ICD-10 diagnostic criteria (Kessler & Ustün, 2004). The CIDI is a computerized assessment tool administered by non-clinical interviewers (Kessler et al., 2004) that has good concordance with other clinician-based diagnostic instruments (First, Spitzer, Gibbon, & Williams, 2002). The present study only uses obtained diagnostic information on lifetime major depressive disorder, alcohol abuse, and drug abuse. All items were coded as 0 (*no diagnosis*) or 1 (*diagnosis*).

**Exposure to Violence.** A modified version of the Exposure to Violence Inventory (ETV; Selner-O'Hagan, Kindlon, Buka, Raudenbush, & Earls, 1998) was used to assess the frequency of exposure to violent events. Items from the ETV document the types of violence that individuals have both experienced (i.e., Violence Victimization - 6 items, e.g., "Have you ever been chased where you thought you might be seriously hurt?"; $\alpha = .62$) and observed
(i.e., Violence Witness - 7 items, e.g., "Have you ever seen someone else being raped, an attempt made to rape someone or any other type of sexual attack?"; \( \alpha = .78 \)).

**Gun Access.** To assess the availability of guns and estimate the presence of gun markets as part of the neighbourhood context, participants were asked, “If a young person in this neighbourhood wants to buy a gun, he/she can” (1 = strongly agree to 5 = strongly disagree).

**Parental Warmth and Hostility.** The Quality of Parental Relationships Inventory (Conger, Ge, Elder, Lorenz, & Simons, 1994) was adapted for this study to assess the affective tone of the parental–adolescent relationship, asked separately with regard to mother and father separately. Forty-two items tap parental warmth (e.g., “How often does your mother let you know she really cares about you?”) and parental hostility (e.g., “How often does your mother get angry at you?”). For this study, we used the maternal warmth (\( \alpha = .92 \); 9 items) and maternal hostility (\( \alpha = .95 \); 12 items) subscales. There were too many missing values for the ratings of the parental warmth and hostility of the father to include these subscales.

Participants respond on a 4-point Likert scale ranging from “Never” to “Always,” with higher scores on each scale indicating more warmth or more hostility, respectively.

**Run Away from Home.** Participants were asked to respond to a single item which asked, “Have you ever run away from where you were living?” (Yes/no).

**Characteristics of Family.** Family characteristics were assessed using two binary coded (yes/no) items which asked “has anyone in your family been in jail or prison?” and, “did your parents have physical fights?”

**Demographics**

Respondents’ gender, ethnicity, and age were controlled to avoid model misspecification. Gender (0 = female, 1 = male [reference category]) and ethnicity were coded dichotomously (0 = Non-Hispanic, 1 = Hispanic [reference category]), and age was a continuous variable coded in years.
RESULTS

Descriptive Statistics

Table 1 presents the descriptive statistics for the variables measured continuously: number of arrested friends, violence exposure (victim and witness), gun access, maternal warmth and hostility, psychopathy (Factors 1 and 2), and moral disengagement, including means (M) and standard deviations (SD).

[Table 1 about here]

Multiple Regression Analysis

Standard multiple linear regression was employed to determine which of the predictor variables (gang membership, age, ethnicity, gender, having run away from home, parental physical fights, family member arrests, friend arrests, alcohol abuse, drug abuse, violence exposure (victimization and witnessing), maternal warmth and hostility, psychopathy (Factors 1 and 2) could be used to predict moral disengagement. Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity and homoscedasticity. A test of the full model containing all predictor variables against the constant-only model was statistically significant, $F(16, 389) = 4.86, p < .001$, and explained 13% of the variance in moral disengagement. As shown in Table 2 six independent variables made a unique statistically significant contribution to the model: gang membership, age, gender, having witnessed violence, psychopathy Factors 1 and 2. The strongest predictor of moral disengagement was Psychopathy Factor 1 ($\beta = .19$) which indexes the interpersonal-affective traits of psychopathy. This suggests that higher Factor 1 scores contribute to the presence of higher levels of moral disengagement within a sample of gang and non-gang involved youth offenders. Being a member of a gang, being male, having witnessed violence
and higher psychopathy Factor 2 scores were also significantly related to higher levels of moral disengagement, controlling for all other factors in the model, while increasing age was related to lower levels of moral disengagement.
DISCUSSION

The aim of the present study was to provide a statistically robust exploration of the determinants of moral disengagement among serious youth offenders. Six of the 16 independent variables tested made a unique statistically significant contribution to the model, and explained 16% of variance in moral disengagement. Consistent with prior research examining the relationship between psychopathy and moral disengagement in community samples (e.g., Seara-Cardoso, Dolberg, Neumann, Roiser, & Viding, 2013), psychopathy Factors 1 and 2 were related to greater moral disengagement. However, in the present research, psychopathy Factors 1 which indexes the interpersonal-affective traits (e.g., shallow affect, lack of empathy, manipulativeness) was the strongest predictor of moral disengagement, a finding consistent with recent research which indicates that empathy is the most robust predictor of moral disengagement (Hyde, Shaw, & Moilanen, 2010).

Replicating previous findings (e.g., Bandura et al., 1996; Pelton, Gound, Forehand, Brody, 2004; Sagone & De Caroli, 2013), males reported higher levels of moral disengagement than females. Furthermore, consistent with expectations, increasing age was associated with lower moral disengagement. Being a witness to violence was also related to higher moral disengagement in our sample of youth offenders. This suggests that exposure to episodes that directly model or expose children to attitudes or beliefs condoning the use of antisocial behaviour, particularly in ways that violate mainstream social norms (e.g., using violence to resolve conflict) may eventually lead violence-exposed youth to develop more morally disengaged reasoning (Hyde et al., 2010; Musher-Eizenman et al., 2004). Violence victimization was found to be not significantly related to moral disengagement in the present research. This finding supports prior research suggesting that the consequences violence victimization and witnessing of violence may differ significantly (Schwartz & Proctor, 2000). However, whether this reflects a genuine lack of relationship is unclear. It is plausible that for
some individuals violence victimization leads to a tendency towards self-blame (Graham & Juvonen, 1998) and the belief that violence is morally right (because they or others victims did something wrong), while for other individuals, violence victimization may lead to greater sensitivity towards norms of fairness and care, and consequently less morally disengaged reasoning (Turiel, 2002). Accordingly, a careful examination of the relationship between violence exposure and moral disengagement is an important direction for future research.

Despite some research suggesting the possibility that exposure to parental fighting might lead to the adoption of attitudes and beliefs consistent with moral disengagement, in the present research, this was not the case. This finding is interesting as witnessing violence in general was related to greater moral disengagement. However, as suggested by Hyde et al. (2010), parental conflict may not be directly related to moral disengagement because it may not be exhibited in front of the child, or it may not in itself be salient enough to influence a child’s moral engagement.

Although the relationship between psychopathy and moral disengagement was as expected, psychopath’s deficits in moral judgements, as indicated by higher moral disengagement, were much smaller than might be expected from their morally inappropriate behaviour (i.e., murder, sexual offending, fraud, and arson). However, results of recent imaging studies suggest that psychopaths may not reach moral judgments in the same way as non-psychopaths, even when they reach the same moral judgments (Glenn, Raine, and Schug, 2009; Glenn, Raine, Schg, Young, & Hauser, 2009; Harenski, Harenski, Shane, & Kiehl, 2010). Therefore, there is a need to further research examining the psychopathy-moral disengagement relationship.

Two distinct pathways for the development of morally disengaged attitudes have been proposed (Shulman et al., 2011). The first is through frequent instances of disengaging internal sanctions through justification of misbehaviour, and the second as a consequence of
callous-unemotional traits. These two processes are considered etiologically distinct, such that morally disengaged attitudes resulting from frequent instances of justification of misbehaviour are more likely to develop as a result of social and environmental factors, whereas callousness/psychopathy appears to have a biological basis (Blair et al., 2006; Bandura, 1991; Shulman et al., 2011). Our results lend support to both pathways, in that higher scores of psychopathy, gang membership, and witnessing violence predicted greater moral disengagement. Future research is required to assess these pathways in greater detail, as the cross-sectional nature of the current study does not allow causality to be established.

As moral disengagement is associated with and predictive of offending (e.g., Shulman et al., 2011), targeting the factors which increase individuals’ morally disengaged attitudes may enhance the effectiveness of interventions aimed at reducing repeat offending. As core psychopathic traits (i.e., those indexed by Factor 1) demonstrate stability over time (Harpur and Hare, 1994), it would make little sense to prioritise working to reduce the beliefs legitimizing violent and antisocial behaviour among young offenders displaying psychopathic traits their as an effective means of preventing reoffending. However, other drivers of moral disengagement may be more amenable to attenuation through targeted projects and interventions. Youth diversion programmes that steer youth away from gangs and boost their exposure to a wider range of lifestyles and role models, for instance, may have some success in increasing moral engagement (Alleyne, 2010). Indeed, Boduszek, Dhingra, and Hirschfield (under review) speculate that the moral disengagement of young offenders from society that might be preserved within a close-knit gang community may be challenged and potentially weakened, if youth gang members are exposed to the cultural norms, values and behaviour of non-gang members. Educational interventions, able to change beliefs legitimizing aggression (e.g., Guerra and Slaby, 1990), might also hold the potential to prevent violence and
antisocial behaviour, especially among those who have grown up in violent contexts (i.e., those who have witnessed violence).

There are some limitations of the study that need to be acknowledged. First, although self-nomination (i.e., *Do you belong to a gang?*) is considered by many US researchers to be a “particularly robust measure of gang membership, capable of distinguishing gang from non-gang youth (Esbensen et al., 2001, p. 124), this not considered a valid indicator of gang involvement among many European researchers (Gatti, Tremblay, Vitaro, and McDuff, 2011). Second, this was not a longitudinal study and, therefore, it was not possible to analyse the evolution of the variables or the direction of the relationships among them. Finally, we had to rely on total scores for many of the measures included in the present research as not all item responses are provided within the dataset. This prevented us from checking whether the two-factor solution to the PCL: SV was the most appropriate factorial solution, for instance.

Despite these limitations, the present research makes a strong contribution to the literature and indicates that gang membership, being male, witnessing violence, and higher psychopathy Factor 1 and 2 scores contribute to higher levels of moral disengagement, while older age leads to a decline in moral disengagement. Educational interventions and programmes that steer youth away from gangs may, therefore, hold promise for criminal justice and social work practitioners as a focus for their scarce resources in efforts to increase moral engagement.
REFERENCES


Menesini, E., Sanchez, V., Fonzi, A., Ortega, R., Costabile, A., & Lo Feudo, G. (2003),


Cambridge, UK: Cambridge University Press.

Cambridge, UK: Cambridge University Press.
Table 1. Descriptive statistics for continuous variables: number of arrested friends, violence exposure, gun access, maternal warmth and hostility, psychopathy, and moral disengagement

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<th>Scale</th>
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Table 2. Regression analysis predicting moral disengagement

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<td>.52</td>
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<tr>
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Note: * $p < .05$; ** $p < .01$; *** $p < .001$