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Predicting involvement in prison gang activity: Street gang membership, social and psychological factors.

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We thank the participants who took the time to meet with us, and to think about our questions. We are also extremely grateful to the prison staff who organized our visits and enthusiastically supported our research throughout.
Abstract

The aim of this study was to examine whether street gang membership, psychological factors, and social factors such as pre-prison experiences could predict young offenders’ involvement in prison gang activity. Data were collected via individual interviews with 188 young offenders held in a Young Offenders Institution in the United Kingdom. Results showed that psychological factors such as the value individuals attached to social status, a social dominance orientation, and anti authority attitudes were important in predicting young offenders’ involvement in prison gang activity. Further important predictors included pre-imprisonment events such as levels of threat, levels of individual delinquency, and levels of involvement in group crime. Longer current sentences also predicted involvement in prison gang activity. However, street gang membership was not an important predictor of involvement in prison gang activity. These findings have implications for identifying prisoners involved in prison gang activity, and for considering the role of psychological factors and group processes in gang research.

Keywords: predicting prison gangs, street gangs, psychology
Gang culture weighs heavily on safety and control in prisons. For example, prison gang activity leads to increases in offending in prisons in the USA (e.g. Drury & DeLisi, 2011; Gaes, Wallace, Gilman, Klein Saffran, & Suppa, 2002) and the UK (e.g. Wood & Adler, 2001; Wood, 2006; Wood, Moir & James, 2009; Wood, Williams & James, 2010). Research further shows that prison gangs severely undermine the ability of prison staff to maintain a safe and orderly environment (Griffin & Hepburn, 2006) leaving staff and prisoners believing that officials are not in full control of prisons (Wood & Adler, 2001; Wood, 2006).

Consequently, if the negative influence of prison gang activities are to be reduced there is a need to identify which prisoners are most likely to become involved. The current study examined the relevance of some of the key psychological and social factors that have been identified as relevant to gang activity, to involvement in prison gang activity and whether prisoners involved in prison gang activity had been members of street gangs before imprisonment.

**The Formation and Function of Prison Gangs**

Prison gangs have been defined as cohesive groups of prisoners, with a leader, whose criminal activities negatively impact on institutions holding them (e.g. Fong & Buentello, 1991; Huff, 1996). Others, however, contend that prison gangs are more flexible in construction, have inconsistent or nonexistent leadership and transient membership (e.g. Camp & Camp, 1985). Research shows how prison gangs in adult institutions function on the acquisition of money and power (Camp & Camp, 1985; Fong, 1990) using threats and violence to dominate staff and other prisoners (Huff, 1996; Irwin, 1980; Stevens, 1997). Whilst we cannot be certain that youth prison gangs share the same motives as their adult counterparts, evidence does show how the acquisition of status and power motivates youth to join community youth gangs (Anderson, 1999; Knox, 1994). Findings also show that youth see the potential for financial profit as a key benefit of gang membership (e.g. Decker & Van
Thus, it seems that many youth gang members, like their adult counterparts, will be motivated to join a gang by the prospect of gaining power and money and it seems feasible that this motivation will be just as prevalent in the sparse environment of a prison.

In the U.S. the most common activities of prison gangs are reported to be, [in descending order]: intimidation of prisoners and staff; drug trafficking; assaults on prisoners and staff; abuse of weaker prisoners; extortion; protection; contraband weapons; theft; “strong-arm robbery”; rackets; robbery; prostitution; rape; “sodomy for sale”; murder; bribery; arson; slavery and explosives (Camp & Camp, 1985). Stevens (1997) found that where prison gangs were active 73% of non-gang prisoners wanted to transfer to another prison and 87% wanted protective custody. Prison gang members generally serve longer sentences and have more convictions from a younger age than nongang prisoners, (Sheldon, 1991). Although they are uninterested in schemes to earn privileges and treatment programs to address offending behavior (Huff, 1996), prison gang members generally co-operate with prison staff and prison rules, but become violent if staff impede their goals (Camp & Camp 1985). Alternative findings suggest that prison gang members are often violent and are consistently involved in almost all forms of illicit behaviour (Gaes, et al., 2002). In the U.K., where little is known about prison gang activities, preliminary findings show that high levels of activities associated with prison gang presence (e.g. group drug possession; groups formed by race; group assaults; and groups formed by regional affiliations) occur across all categories of prison (Wood & Adler, 2001).

Some authors contend that prison gangs can only be defined as such if they form in prison (i.e. indigenous - e.g. Buentello, Fong & Vogel 1991). Like most social groups, indigenous prison gangs form according to the shared similarities of members such as their race and region of origin (Camp & Camp, 1985) and previous incarceration experience (Stevens, 1997). Here the effects of imprisonment are likely to play an important part in
prisoners’ response to incarceration as they adapt to a new environment. Prisons are unique environments - even when compared to each other (e.g. Stevens, 1994). They are also environments of deprivation (Sykes, 1958), where prisoners face the everyday threat of danger from other prisoners (e.g. Duffee, 1989). Unsurprisingly, prisoners may respond by banding together to gain protection, a social identity and a sense of belonging during incarceration (Buentello et al., 1991). These adaptation strategies may also impact on the attitudes and values that prisoners hold. The concept of prisonization, first noted by Clemmer (1940), describes how prisoners may adopt new attitudes which are shaped by their association with other prisoners who possess leadership qualities and who are also integrated into the prison culture. Prisonization effects mean that prisoners are assimilated into the prison’s subculture and adopt the pro-prisoner, anti-authority attitudes consistent with that subculture (Clemmer, 1940). In young offender institutions, prisonization (known as juvenilization; Stevens, 1997) is fostered by the shared experiences that cement relations between young offenders and may even facilitate an individual’s later prison gang membership in an adult institution (Stevens, 1997). This supports Clemmer’s (1940) contention that prisonized prisoners are also likely to be involved in prisoner groups who engage in illicit or illegitimate behavior.

An alternative explanation to indigenous theory is importation theory where established street gang members are imported into prison following conviction. They then reform to create a prison gang with street gang roots (e.g. Jacobs, 1977). Jacobs’ (1977) argument was that much of the supposedly unique prisoner culture was not in fact a prison phenomenon. Rather, Jacobs maintains, it reflected the existing community culture. This concept was not new since Irwin and Cressey (1962) made the same point and, to some extent, Clemmer (1940) also argued that prisoners bring their own sets of values and behavior patterns into the prison. However, the indigenous theory/importation theoretical propositions are not
necessarily mutually exclusive since, as Knox (1994) argues, when one group threat arises (e.g. the importation of a community gang) its natural counterpart will also appear (e.g. the indigenous development of a prison gang). Thus, if street gang members are imported into prisons and re-group (importation), it is feasible that this will result in the formation of other gangs within the prison (indigenous).

However, the precise nature of the street/prison gang relationship has not yet been identified since, until now, research has neglected this specific question (Griffin, et al., 2012). Although it is intuitively appealing to consider that prison gangs form because incarcerated street gang members re-group following imprisonment (e.g. Jacobs, 1974) it is equally compelling to think that prison gangs form indigenously due to the deprivations that imprisonment imposes since:

When presented with an environment designed to highlight the deprivation of most social comforts and intended to house a population of individuals who value predatory behavior and use of force as a means of establishing status, the development of prison-based criminal groups seems inevitable. (Griffin, Pyrooz & Decker, 2012, p. 137).

Nonetheless, evidence suggests that distinctions between prison and street gangs are beginning to blur as prison gang members are released into the community, and well known street gangs in the U.S.A. (e.g. the Bloods and the Crips) become active in prisons following incarceration of members (McGloin, 2005). Since 46 out of 49 States in the U.S. agree that some prisoners become gang members during incarceration (Knox, 2005), prisons may also be used for the development of gangs as prison gangs capitalize on confinement and the close proximity of prisoners to solidify gang culture, and recruit new members (Sullivan, 2006). In
short, prisons can act as ‘schools’ for gang membership as members construct social networks, and hone their gang-related activities and skills (Sullivan, 2006).

Research in the U.S. further shows how imprisonment can modify existing gang membership. For example, findings show that although up to a third of prisoners were street gang members before imprisonment (Varano, Huebner & Bynum, 2011), many form alliances with prison gangs during imprisonment that differ from their street alliances (Fleisher & Decker, 2001, p. 21). Evidence also shows that over half the prisoners who join prison gangs have never belonged to a gang (e.g. Winterdyck, 2009) - and this supports propositions that prison gangs differ qualitatively and quantitatively from street gangs (e.g. Decker & Van Winkle, 1996; Fleisher & Decker, 2001).

**Psychological Factors and Prison Gang Membership**

Notwithstanding the potential differences between street and prison gangs, research has shown that there are certain psychological characteristics that they share. For example, both types of gang provide members with a sense of safety, security, and access to contraband (Kalinich & Stojkovic, 1985; Scott, 2001). In addition, street (e.g. Klein, 1995) and prison (e.g. Buentello et al., 1991) gangs protect members against threat. As Klein (1995) observes, “.....in the gang there is protection from attack...... It provides what he has not obtained from his family, in school, or elsewhere in his community” (p 78). Both street (e.g. Klein, Weerman & Thornberry, 2006) and prison gang (Fleisher & Decker, 2001) members are more violent than nongang offenders and both value status since an opportunity to gain respect and status is one of the main attractions of street gangs for youth (Anderson, 1999; Klein & Maxson, 2006; Alleyne & Wood, 2010) and prison gangs for prisoners (e.g. Camp & Camp, 1985; Gaes et al., 2002; Wood, Moir, & James, 2009). Evidence further shows that street (e.g. Alleyne & Wood, 2010) and prison gang members (Wood, et al., 2009) set aside their moral standards to engage in inhumane behavior (i.e. they morally disengage - Bandura,
Street (Alleyne & Wood, 2010) and prison gang members (Wood, 2006) also endorse anti-authority attitudes and hypermasculine ideals (ideals of toughness and ability to fight) have been found to thread through prison gangs (e.g. Wacquant, 2000) and to incite street gang violence as members protect their notions of honour (e.g. Short & Strodtbeck, 1965; Vigil, 1988; Hughes & Short, 2005).

A further psychological factor, much neglected in relation to gang membership, is Social Dominance Orientation (SDO). Derived from Social Dominance Theory (SDT - Sidanius & Pratto, 1999) SDO explains the extent to which people feel compelled to enhance, or reinforce, their place (and the place of their group) within a social hierarchy. Hierarchies are often arbitrarily constructed to respond to situational factors such as competition for valued resources. So, for example, street gangs may strive to enhance or reinforce their status in comparison to other street gangs in an arbitrary-set system where illegal resources (e.g. narcotics) are the valued resource. In a prison, under conditions of deprivation, it may be expected that arbitrary-set hierarchies will emerge as prisoners form groups to compete for scarce - and hence valuable - resources. Indeed, preliminary research has shown that prisoners high in SDO are more likely to compete for resources and territory (Graham-Kevan, 2011). Further, it is theorized that males with high levels of SDO will create coalitions against outgroup males to maximize resource access (Sidanius & Pratto, 1999) – and this may be directly relevant to the formation of prison gangs.

The Current Study

Currently we still know little about the psychology of gang membership - street or prison (Wood & Alleyne, 2010) and, as already noted, little about the links between street and prison gangs (Griffin et al., 2012). In the U.K. research examining prison gang activity is still in its infancy. The limited amount of research so far shows that gang-related activity predicts staff and prisoner beliefs that control of the prison is being lost and functions on
illicit trades inside (Wood & Adler, 2001; Wood, 2006) and outside prison (Wood, Williams & James, 2010). We also know that prison gang activity has strong links to prison bullying (Wood, Moir & James, 2009). At an individual level, research shows that prisoners involved in gang-related activity in the U.K. have high levels of moral disengagement (Wood et al., 2009), high levels of prisonization and form associations with people from their home area (e.g. Wood, 2006).

This study aimed to remedy the gaps in research by drawing primarily on research from the U.S. to examine the main predictors of involvement in prison gang activity. As there is no clear consensus regarding the minimum number of members required to be considered a gang for the purposes of this study, we adopted the definition used in preliminary research into prison gang activity in the U.K. (i.e. ‘a group of three or more prisoners whose negative behaviour has an adverse impact on the prison that holds them’ Wood & Adler, 2001; p. 168).

It is argued that prison gang presence is indicated by levels of key group activities associated with prison gangs (e.g. group affiliation, illicit trades and aggression to other prisoners and/or staff - Fong & Buentello, 1991). Consequently, we determined prisoners’ involvement in prison gang activity by assessing their levels of participation in the key activities associated with prison gangs. We aimed to identify whether certain psychological factors (i.e. moral disengagement, the value attached to status, hypermasculine attitudes, SDO) and demographic factors (age and ethnicity) could predict involvement in prison gang activity. We also aimed to identify the role of social factors such as pre-prison experiences as predictors of prison gang membership (e.g. age of offending onset, no. of violent offenses and levels of individual or group offending). Our final aim was to establish whether being a member of a street gang and factors associated with street gang membership (e.g. anti-
authority attitudes, school commitment, parental management and experience of threat - e.g. Weerman et al., 2009) would predict involvement in prison gang activity.

Based on previous findings (outlined above) we expected that, compared to prisoners not involved in prison gangs, those involved in prison gangs would have higher levels of moral disengagement, would attach more value to social status, would hold more anti-authority attitudes, and have higher levels of hypermasculinity and SDO. We also expected that, compared to those not involved in prison gangs, those involved would have been younger when they committed their first offense, would have committed more violent offenses and would be serving longer current sentences. However, in terms of ethnicity we made no predictions. This was due to conflicting research findings. For instance, whilst some US researchers note how prison gangs form along racial lines (e.g. Camp & Camp, 1985), others record that prisoners more often form groups according to regional origins (e.g. their home towns, Stevens, 1997), which has also been noted in many U.K. street gangs (e.g. Mares, 2001). Further, researchers (e.g. Freng & Esbensen, 2007) note that historically, research in the US has emphasized the involvement of ethnic minority youth, rather than White youth, in gangs - a concept that is now being challenged (Esbensen & Tusinski, 2007). Consequently, this study set out to explore rather than predict the role that ethnicity plays in gang membership. In terms of street gang membership and associated factors (e.g. school commitment, peer influence, pre-incarceration victimization) predicting involvement in prison gang activity - we made no predictions, since, given the lack of previous findings, this part of the study was purely exploratory.

Method

Participants

Participants were 188 young offenders recruited from a male young offender institution (YOI). The YOI, located in the U.K., cares for approximately 400 juveniles under
the age of 18, many of whom come from many gang affected cities from around the U.K. such as London, Birmingham, Bristol, etc. and so provides a diverse sample of youth who are likely to be involved in street gangs. Since we currently know little about prison gang activity in either adult or juvenile facilities in the U.K, we cannot be sure how representative this institution is in terms of prison gang activity. However, there is no reason to believe that this YOI differs in any meaningful way from any other YOI in the U.K. The mean age of the sample was 16.88 (SD = .57, range = 16-18). The majority of participants were White UK/Irish (58%), and the remainder were: Black/Black British (24%), Asian (5%), Mixed Ethnicity (12%), and Other (1%). As most participants indicated that they were White UK/Irish, and to test the concept that ethnic minority groups are more likely to be involved in gangs, we divided the sample into White British (58%) and Non White British (42%) for analyses. The mean sentence length in months reported by participants was 27.24 (SD = 39.73, range = 0-300). Participants who reported a sentence length of 0 were on remand pending the outcome of their criminal trial.

Measures

We developed an interview schedule to assess youth on: demographics (e.g. age and ethnicity), pre-prison experiences (e.g. experience of threats, street gang membership, commitment to school), criminal activity (e.g. age of first offense, no. of violent offenses, involvement in prison gang activity) and psychological characteristics (e.g. the value attached to social status, SDO & Hypermasculinity). Where possible all scales were assessed using a 7 point Likert style scale ranging from Totally disagree - Totally agree or Very unlikely - Very likely.

Pre-Prison Experiences

Street gang membership and pre-prison experiences were assessed using The youth survey: Eurogang program of research (Weerman et al., 2009) adapted to be appropriate
for an incarcerated population. Items included: demographics (e.g. age, ethnicity), parental management, (13 items, e.g. Your parents knew who you were with if you are not at home.), school commitment, (7 items, e.g. School marks were very important to you.) peer influence (3 items, e.g. If your group of friends was getting you into trouble at school, how likely was it that you would still hang out with them?), experience of threat (6 items, e.g. how many times in the 6 months before coming in to prison did you feel threatened by groups of youth?), peer group support (7 items, e.g. My group is like a family to me.), levels of involvement in group offending (15 items, e.g. group physical assaults, group selling drugs) and levels of individual offending (16 items, e.g. selling drugs). Street gang membership was assessed using the 4 Eurogang definition criteria of: (1) youthfulness – i.e., all group members must be under the age of 25; (2) durability – the group must have been together for more than three months; (3) street-orientation – responding “yes” to the item “Does this group spend a lot of time together in public places like the park, the street, shopping areas, or the neighborhood?”; (4) group criminality is integral to group identity – responding “yes” to the items “Is doing illegal things accepted by or okay for your group?” and “Do people in your group actually do illegal things together?”. Youth were identified as street gang members if they met all the above four criteria of the Eurogang definition.

**Criminal Activity**

Age of first offense, number of violent offenses committed and sentence length were assessed via the interview schedule and, where available, verified from prison records. Involvement in prison gang activity was assessed using the abridged Prisoner Group Formation scale (Wood, 2006). This 17 item scale consists of items assessing engagement in activities with 2 or more associates (e.g. Sometimes my friends and I are violent to other prisoners and My friends and I have our own rules that we stick to).

**Psychological Characteristics.**
Psychological characteristics we assessed using five scales: Mechanisms of moral disengagement scale (Bandura, Barabelli, Carpara, & Pastorelli, 1996) comprising of 32 items assessing moral disengagement strategies (e.g. *It is alright to fight to protect your mates* and *Some people deserve to be treated like animals*). The hypermasculine values questionnaire, short version (Archer, 2010) a 16-item scale measures hypermasculine attitudes and values (e.g. *Men who take part in yoga or ballet deserve to be ridiculed* and *Real men don’t back away from barroom confrontations*.) The social dominance orientation scale (Sidanius & Pratto, 1999) assesses levels of agreement with hierarchical group activity (e.g. *Some groups of people are simply inferior to other groups* and *To get ahead in life, it is sometimes necessary to step on other groups*.) Social status scale (South and Wood, 2006) is an 11 item scale measuring the value that individuals attach to social status, (e.g. *Other prisoners look up to you if you can sort out prisoners who are weak or disliked* and *If necessary I will use physical force to gain other prisoners' respect*). Attitude toward formal authority scale (Reicher and Emler, 1985), is a 17 item scale assessing attitudes toward authority figures, such as school officials and the police (e.g. *A lot of laws are not to help ordinary people but purely to restrict their freedom*).

Procedure

Before data collection, the study was approved by a university Ethics Committee. All available young offenders who met the inclusion criterion (i.e., were over 16 years old and so could provide consent to participate) were approached by one of the researchers who is an academic researcher at a university, and who thus has no connections to the prison service or the police authorities. This was explained to each participant before interviews began and it was also made clear to them that aside from necessary caveats (outlined below) the interviewer has nothing to do with their sentencing or the conditions of their incarceration.

Each participant was interviewed individually and alone in a closed interview room - no other
people were allowed in the room during the interview and so each participant was able to speak freely and honestly to the interviewer. Before each interview the purpose of the study and its procedure were outlined to each participant who was given an information sheet (read aloud if necessary). Participants were told that the questionnaires evaluated the nature of their friendship groups - the word ‘gang’ was not used since it has an emotionally charged meaning (Esbensen & Weerman, 2005). Each participant was informed that participation was voluntary and that they could leave at any time without penalty. They were also told that responses were confidential - unless they revealed a breach of prison security, further identifiable offenses, a threat to harm themselves or others or if they breached a prison rule during interview. Each participant’s materials were given an individual code which the participant would need to provide to us if they wanted to withdraw their data from the study (within three months of the interview). However, consent forms, which were kept separate from all other materials were not given this code – and so it was impossible for anyone (including the researchers) to match an individual’s name to their interview materials. Thus anonymity and confidentiality were assured for all participants and this was fully explained to them before they consented to participate. Following this briefing, participants were given the opportunity to leave - if they were happy to continue they signed a consent form. Interviews took approximately 60 minutes to complete and participants were debriefed verbally and in writing. The written debrief contained the lead researcher’s contact details should they have any further questions - or wish to withdraw their data.

Results

Data were analyzed using SPSS and a $p < .05$ level of significance. Reliability analyses showed that all scales had reasonable to very good reliability (see Table 1).

INSERT TABLE 1 HERE
Involvement in Prison Gang Activity.

We established prisoners’ involvement in prison gang activity by assessing their levels of participation in the key activities associated with prison gangs using a two-cluster analysis with a k-means algorithm where each case was assigned to the cluster according to its smallest distance to the cluster mean (e.g. Norusis, 2009). Of the 188 participants 99 (53%) were identified as not involved in prison gang activity ($M = 37.97$) and 89 (47%) were identified as involved in prison gang activity ($M = 58.86$). Table 2 shows the descriptive statistics for demographic variables for each group.

Independent $t$ tests showed no significant differences between those most and those least involved in prison gang activity on age, age at first offense, no of violent offenses, and sentence length (all $p$ values > .05). A Chi Square analysis revealed, however, that Non White British prisoners were more involved in prison gang activity than were White British prisoners, $\chi^2 (1, N = 188) = 4.09, p = .043$.

Predicting Involvement in Prison Gang Activity.

To establish the best predictors of involvement in prison gang activity we conducted a discriminant function analysis. Predictor variables included: age, age at first offense, no. violent offenses committed, ethnicity, the value attached to social status, levels of moral disengagement, hypermasculinity, level of threat before imprisonment, street gang membership, group support on streets, involvement in group crime on streets, individual offending before prison, commitment to school, peer pressure before prison, parental management, sentence length (in months) and levels of SDO. Results showed a significant
discriminant function $\Lambda = .67, \chi^2 (17) = 51.14, p < .001, 95\% \text{ CI} [7.56, 30.19]$. The Canonical correlation of .58 shows that the model accounts for 34\% of the variance and the cross validated classification showed that overall 75\% of cases were correctly classified. Significant mean differences were observed for a number of predictors on the DV (see Table 3).

**INSERT TABLE 3 HERE**

Taking structure matrix loadings of above or nearing .3 as indicators of variable importance we identified the most and least important predictors of involvement in prison gang activity. Table 4 shows the six most important predictors and three (i.e. sentence length, moral disengagement and group support on the streets) marginally important predictors. As the table shows, ethnicity – i.e. White British/Non White British, with a matrix loading of .239 lost the importance that the Chi Sq result (see above) suggested. On the other hand, length of sentence gained an importance that the t test suggested it did not have. Least important variables (i.e. with correlations < .1) included: parental management, number of violent offenses, street gang membership, age of first offense, hypermasculinity and age.

**INSERT TABLE 4 HERE**

**Discussion**

The aim of this study was to identify psychological and social predictors of involvement in prison gang activity. We further aimed to examine the links between street gang membership and involvement in prison gang activity. Our expectations were that moral disengagement,
the value attached to social status, anti-authority attitudes, hypermasculinity and SDO would be important psychological predictors of involvement in prison gang activity. Our expectations were upheld in part. Important psychological predictors of involvement in prison gang activity included: value of social status, levels of SDO, anti authority attitudes and moral disengagement. However, hypermasculinity was not an important predictor. We further expected that age at first offense, levels of violent offending and longer current sentences, would be important predictors of involvement in prison gang activity. Of these, only longer sentences was important, age at first offense and levels of violent offending were not important predictors.

That the value attached to social status was an important predictor of prisoners’ involvement in prison gang activity is consistent with previous findings showing that prison gang members strive to achieve status in prison (e.g. Camp & Camp, 1985; Wood et al., 2009). Similarly, the importance of moral disengagement supports previous findings that prison gang members morally disengage to engage in inhumane behaviour (e.g. Wood et al., 2009). The importance of anti authority attitudes is also in line with previous findings (e.g. Wood, 2006) but the importance of SDO as a predictor of involvement in prison gang activity is relatively novel since SDO has had little attention in the prison gang literature (Graham-Kevan, 2011). Our findings show that prisoners involved in prison gang activity are supportive of group hierarchies and if this is considered together with the importance attached to social status; it seems fair to conclude that prisoners involved in prison gang activity construct an arbitrary hierarchy in prison in which they strive to enhance or reinforce their own and their group’s position. As noted earlier, this makes intuitive sense given that hierarchies are often arbitrarily constructed when there is competition for resources (Sidanius & Pratto, 1999 ) and in prison, material goods are scarce and financial profits are high (e.g. Stevens, 1997). So, those aiming to profit financially (e.g. prison gangs) may find
themselves in conflict with others who share similar aims. Certainly our findings support this proposition and indicate that SDO deserves greater attention in prison gang research. Quite why hypermasculinity was unimportant in our analyses is not clear since previous work has noted how hypermasculine ideals thread through prison gangs (e.g. Wacquant, 2000). However, research shows that young offender institutions foster dominant and uncontrolled cultures of masculinity (e.g. Sim, 1995) and that displays of masculine behavior are valued universally (e.g. Woodall, 2007). Therefore hypermasculine ideals are unlikely to be able to differentiate between those involved and those not involved in prison gang activity since, at least at this age, all young offenders seem to value them equally. Of course this may change over time as youth age and this is something that future research could examine in more detail.

Our expectations that the younger participants were at the time of their first offense and the more violent offenses they had committed would predict involvement in prison gang activity, were not upheld. This may be due to the small age range of our sample (16-18 years) not providing a broad enough sample for the effects of these variables to show. For instance, if this study were to be conducted with an older sample (e.g. over 21 years) then the age of first offense might become more important since those whose offending careers began later (e.g. over age 18) would influence findings. The same may apply to levels of violent offending. Our sample of offenders may reflect that those who are most violent are also those most likely to be incarcerated at a younger age. Again, an older sample may iron out this issue.

Our finding that longer sentences predicted involvement in prison gang activity was consistent with our predictions and suggests that those involved in prison gang activity are likely to be serious offenders. This supports previous work that shows how prison gang members generally serve longer sentences (e.g. Sheldon, 1991). However, our findings also
add to this previous work by putting factors such as longer sentences into context with psychological factors. The importance of considering factors in context is demonstrated by our finding that race lost the impact it had in the chi Square analysis once the discriminant analysis took other factors into consideration. Quite why this is the case is not clear. However, as they stand, our findings suggest that attaching importance to race when considering prison gang activity is not justified. Other factors, as outlined above, clearly play a much more important role in predicting involvement in prison gang activity.

A main finding of our study is the lack of a link between involvement in prison gang activity and street gang membership. As noted earlier, this is a neglected area of research and so we made no specific predictions about the role of street gang membership in involvement in prison gang activity. However, it is still rather surprising that street gang membership should be among the least important predictors of involvement in prison gang activity. Conversely, involvement in group crime on the streets was an important predictor of involvement in prison gang activity. When we assessed street gang membership we used the Eurogang criteria which include youthfulness, durability, street orientation and criminal orientation as essential elements of a street gang. So, it is possible that before imprisonment many of our participants, although sufficiently involved in a group to commit offenses as a part of that group, held only loose associations with the group (and perhaps they continue to do so with prison gangs). The suggestion here is that these youth, who are likely to be already criminally inclined, may become affiliated with a group solely to maximize their criminal opportunities for personal gain. However, our data suggest that their association with such a group - at least on the streets - is not sufficient for them to consider the group as friends with whom they associate regularly. It is also possible that these youth are peripheral street gang members who have been identified in previous work as not associating with any
specific group (e.g. Alleyne & Wood, 2010). Our current data cannot address this, but it is worth examining in future work.

Despite street gang membership not being an important predictor of involvement in prison gang activity, some of the key variables that predict street gang membership were important predictors of involvement in prison gang activity. For example, the levels of threat experienced before incarceration was an important predictor of involvement in prison gang activity. This is interesting since prison gang research suggests that prisoners who feel threatened by imprisonment are likely to join a prison gang (e.g. Buentello, et al., 1991). So, it may be that pre-prison threats cause some youth to have a heightened sensitivity to threat and when faced with the danger that prisons emit (e.g. Duffee, 1989) they seek group affiliation for protection.

Our findings that both group and individual levels of criminal activity were important predictors show that those who are most criminally active before imprisonment become involved in prison gang activity. They may associate with a group in prison because the group offers opportunities for profit and gain. However, if considered with our finding that threats and group support on the streets predict involvement in prison gang activity, it seems that they may expect to receive more from their group membership than just access to criminal opportunities - they may also expect levels of protection and group support that they experienced before imprisonment. This is consistent with indigenous theoretical propositions explaining why prisoners join gangs (e.g. Buentello, et al., 1991). However, it is odd that this same concept does not seem to also apply to those who were members of street gangs before incarceration. Although the current data cannot address this issue, future work could certainly explore this in more depth.

This study is not without limitations. First, our sample is young (16 - 18 years old) which prevents a generalization of our findings to all age groups’ involvement in prison gang
activity. As the ages for gang membership have been identified as between 12-18 (e.g. Rizzo, 2003) the inclusion of younger children would have been ideal and as such our findings are constrained by its sample age range. However, YOI institutions in the U.K. only house youth aged 15-18 and so this study was limited in its scope for a wider age group.

Second, any study of this kind will be limited in the number of variables it is able to examine. In this study we examined just a few of the psychological factors that are potentially relevant to involvement in prison gang activity - and these we derived from findings specific to gangs. There are undoubtedly many additional/alternative variables that could be examined and this is perhaps an avenue for future research. Another clear limitation with this study is whether the findings, which derive from one institution and U.S. research, are unlikely to be generalizable. Undoubtedly, the generalizability of our findings is limited as is most gang research, given the variability in gangs. However, what this study does provide is an initial examination of the link between street and prison gangs which can be used as a foundation to examine gang activity within broader contexts in the U.K. and elsewhere. Further, although all participants were interviewed individually and in private, and where possible, all facts were verified using prison records, we cannot be certain that all the information that they provided was accurate. When asking about pre-prison experiences, memory deficits and the caveats that we had to include regarding disclosure of further offenses may have impacted the quality of information offered by participants - particularly regarding violent offenses. Nonetheless, we have no reason to believe that our participants offered anything other than the truth and certainly the private conditions of their interviews encouraged this.

Future work could include a younger and an older age group to examine the developmental process of involvement in prison gang activity. This would provide a clearer idea of how involvement in prison gang activity evolves across age groups and offending histories of prisoners. For example, do some who have been involved in prison gangs avoid
becoming involved during subsequent sentences - and if so, what are the pivotal factors that contribute to this? Alternatively, the effects of prisonization (Clemmer, 1940) and the process of juvenilization (Stevens, 1997) need to be explored more fully to understand more of the role that criminal predispositions, imprisonment and the justice system have on prisoners’ involvement in prison gang activity. This is a crucial issue since the aims of imprisonment to help offenders rehabilitate may be seriously undermined by the development of prisonized attitudes in prisoners who fear for their safety, and who feel deprived and isolated following incarceration. Clearly, if a juvenilization effect occurs in young offender institutions due to the above factors, then we run the risk that youth will become more criminally inclined following incarceration. It would also be useful to understand more of why those who have been street gang members do not seem particularly inclined to become prison gang members. Certainly the role of SDO in involvement in prison gang activity warrants further investigation since the significance of this psychological variable in the current findings flags up issues of group processes in prison gangs that have not yet been examined. Indeed, the importance of group processes in prison gang research has received little attention and yet our findings indicate that there are a number of important group processes that underpin prison gang activity. Further, our findings do not support the idea that gang membership means an abiding loyalty to a specific group. Perhaps those involved in prison gang activity are those who are most opportunistic and/or perhaps they are those who, before imprisonment, were peripheral street gang members. We cannot yet be sure of the exact relationship between individuals and their groups - but further examination should be able to shed some light on this issue.

This study has shown the importance of key psychological and criminal factors in predicting which prisoners are likely to become involved in prison gang activity. It has also shown that many of the key factors that underpin street gang membership - also predict
involvement in prison gang activity. However, most importantly our findings show that
being a member of a street gang is not a predictor of becoming involved in a prison gang.
This is an important finding since it would be all too easy to assume that street gang members
will be those most vulnerable to becoming prison gang members - our data show that this is
simply not the case.
References


and Popular Culture, 14, 21-38.


Table 1

*Reliability of scales included in interview schedule*

<table>
<thead>
<tr>
<th>Scale</th>
<th>Cronbach’s α</th>
<th>Scale</th>
<th>Cronbach’s α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental management</td>
<td>.81</td>
<td>Prisoner group formation</td>
<td>.74</td>
</tr>
<tr>
<td>School commitment</td>
<td>.77</td>
<td>Moral disengagement</td>
<td>.87</td>
</tr>
<tr>
<td>Peer influence</td>
<td>.83</td>
<td>Hypermasculine values</td>
<td>.58</td>
</tr>
<tr>
<td>Victimization</td>
<td>.75</td>
<td>Social Dominance Orientation</td>
<td>.81</td>
</tr>
<tr>
<td>Group support</td>
<td>.86</td>
<td>Social status</td>
<td>.76</td>
</tr>
<tr>
<td>Group offending</td>
<td>.90</td>
<td>Attitudes to Authority</td>
<td>.77</td>
</tr>
<tr>
<td>Individual offending</td>
<td>.60</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2

*Demographic and offense history characteristics; involved and not involved in prison gang activity*

<table>
<thead>
<tr>
<th></th>
<th>Involved $N = 89$</th>
<th>Not involved $N = 99$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean age</td>
<td>16.88 ($SD = .60$)</td>
<td>16.88 ($SD = .54$)</td>
</tr>
<tr>
<td>Mean age at first offense</td>
<td>14.31 ($SD = 1.34$)</td>
<td>14.27 ($SD = 1.23$)</td>
</tr>
<tr>
<td>Mean no violent offenses</td>
<td>2.5 ($SD = 2.67$)</td>
<td>2.71 ($SD = 3.96$)</td>
</tr>
<tr>
<td>Mean sentence length</td>
<td>32.16 ($SD = 43.74$)</td>
<td>22.87 ($SD = 35.43$)</td>
</tr>
<tr>
<td>No. White British</td>
<td>39 (44%)</td>
<td>58 (59%)</td>
</tr>
<tr>
<td>No. Non White British</td>
<td>50 (56%)</td>
<td>41 (41%)</td>
</tr>
<tr>
<td>Variable</td>
<td>Involved M (SD)</td>
<td>95% CI</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>-----------------</td>
<td>---------</td>
</tr>
<tr>
<td>Importance social status</td>
<td>43.16 (9.18)</td>
<td>41.04-45.28</td>
</tr>
<tr>
<td>Moral Disengagement</td>
<td>130.25 (27.48)</td>
<td>123.90-136.59</td>
</tr>
<tr>
<td>Threats before prison</td>
<td>7.33 (4.76)</td>
<td>6.23-8.43</td>
</tr>
<tr>
<td>Group support on streets</td>
<td>26.39 (7.09)</td>
<td>24.52-28.03</td>
</tr>
<tr>
<td>Involvement in group crime on streets</td>
<td>36.17 (10.17)</td>
<td>33.82-38.52</td>
</tr>
<tr>
<td>Individual delinquency on streets</td>
<td>59.72 (14.25)</td>
<td>56.43-63.01</td>
</tr>
<tr>
<td>SDO</td>
<td>70.91 (16.42)</td>
<td>67.12-74.70</td>
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<tr>
<td>Anti-authority attitudes</td>
<td>75.04 (16.02)</td>
<td>71.34-78.74</td>
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<tr>
<td>Current sentence length</td>
<td>36.17 (47.74)</td>
<td>25.14-47.19</td>
</tr>
</tbody>
</table>
### Table 4

*Importance of variables predicting involvement in prison gang activity.*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Discriminant loading</th>
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<tbody>
<tr>
<td>Importance of social status</td>
<td>.630</td>
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<tr>
<td>Involvement in group crime before prison</td>
<td>.585</td>
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<tr>
<td>SDO</td>
<td>.523</td>
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<tr>
<td>Individual delinquency before prison</td>
<td>.475</td>
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<tr>
<td>Threats before prison</td>
<td>.449</td>
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<tr>
<td>Anti-authority attitudes</td>
<td>.339</td>
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<tr>
<td>Sentence length</td>
<td>.286</td>
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<tr>
<td>Group support on streets</td>
<td>.282</td>
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<tr>
<td>Moral disengagement</td>
<td>.263</td>
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</tbody>
</table>