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# **Criminal Social Identity and Suicide Ideation among Pakistani Young Prisoners**

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## **Abstract**

**Purpose:** Suicidal behaviour is a common in prisoners, yet little is known about the factors that may protect against thoughts of ending one's life. The main aim of the present study was to specify and test a structural model to examine the relationship between three criminal social identity dimensions (in-group affect, in-group ties, and Cognitive Centrality) and suicide ideation while controlling for period of confinement, age, and offense type (violent vs. non-violent).

**Design/methodology/approach:** Participants were 415 male juvenile offenders incarcerated in prisons in Khyber Pakhtunkhwa (KPK) Pakistan. A structural model was specified and tested using Mplus to examine the relationships between the three factors of criminal social identity and suicidal thoughts, while controlling for age, offender type, period of confinement, and substance dependence.

**Findings:** The model provided an adequate fit for the data explaining 22% of variance in suicidal thoughts. In-group affect (the level of personal bonding with other criminals) exerted a strong protective effect against suicide ideation.

**Originality/value:** The research contributes important information on suicide ideation in Pakistan, an Islamic country in which suicide is considered a sin and subsequently a criminal offence. Results indicate that Juvenile offenders' sense of shared identity may help to prevent the development of thoughts of death by suicide. Consequently, separating and isolating young prisoners may be ill advised.

**Keywords:** Criminal Social Identity; Suicide; Suicidal Thoughts; Pakistani Juvenile Offenders; Structural Equation Modelling

## Introduction

Suicidal behaviour and completed suicide are serious problems in prisons, leading to significant morbidity and mortality. It is estimated that suicide rates within prison are four to five times greater than age-standardised general population rates (Fazel, Grann, Kling, & Hawton, 2010). In Pakistan, suicide is considered a criminal offence, and punitive laws are imposed for attempted suicide. Consequently, there is considerable stigma and sensitivity surrounding suicidal behaviours, and suicide rates are neither known nor reported (WHO, 2008). As a result, greater understanding of the factors that might protect from the development of suicide ideation in prison is crucial. The present study, therefore, aims to investigate whether Criminal Social Identity (CSI) might play a potentially protective role against the development of suicide ideation (a cognitive occurrence separate from, but predictive of, suicidal behaviour) in prison using a sample of juvenile Pakistani prisoners.

Joiner (2005) suggested that the need to belong is fundamental; when met it can prevent suicide and when thwarted it can substantially increase the risk for suicide. Consistent with this, social isolation has been found to be one of the strongest and most reliable predictor of suicidal ideation, attempts, and lethal suicidal behaviour among samples varying in age, nationality, and clinical severity (Joiner & Van Orden, 2008). Durkheim (1897) also posited a central role for social connectedness. Specifically, according to Durkheim, too little social integration leads to an increase in suicide because individuals lack a connection to something that transcends themselves.

Social-identity reflects a particular component of an individual's overall self-concept that is derived primarily from group membership, and is generally regarded as arising from a need to belong (Baumeister & Leary, 1995; Tajfel, 1978; Tajfel & Turner, 1979). The development and significance of social-identity has received considerable attention in terms of religious, cultural, or demographic associations (e.g. Boatswain & Lalonde, 2000;

Cameron & Lalonde, 2001; Obst, Smith, & Zinkiewicz, 2002), but has only recently been explored in terms of criminal identity (Boduszek & Hyland, 2011). The theory of Criminal Social Identity (CSI) was developed by Boduszek and Hyland (2011) on the basis of Cameron's (2004) conceptual and empirical work to reflect three related aspects of criminal's identity: (a) cognitive centrality, (b) in-group affect, and (c) in-group ties. *Cognitive centrality* reflects the cognitive importance of belonging to a criminal group, *in-group affect* describes the emotional valence of belonging to a criminal group, and *in-group ties* relates to the psychological perception of resemblance and emotional connection with other members of a criminal group. Research indicates that the development and activation of a CSI increases an individual's likelihood of engagement in criminal behaviour (Boduszek & Hyland, 2011). Thus, CSI is generally considered to be a risk factor (Boduszek, Adamson, Shevlin, & Hyland, 2012; Boduszek, Adamson, Shevlin, Hyland, & Bourke, 2013; Boduszek, Hyland, Bourke, Shevlin, & Adamson, 2013). However, it is possible that CSI might also have a positive impact upon individuals.

Recent research has found that social identity: (a) is a determinant of stress appraisal (e.g., Haslam, O'Brien, & Jetten et al., 2005; Levine & Reicher, 1996), (b) is a basis for social support (e.g., Haslam, Jetten, Spostmes, & Haslam, 2009; Postmes & Branscombe, 2002), (c) offers protection against stress and burnout (e.g., Haslam, Waghorn, O'Sullivan, Jetten, & O'Brien, 2005; Haisser, Kattenstroth, van Dick, & Mojzisch, 2012), and (d) contributes to long-term well-being and group performance in a range of contexts (e.g., organisational, clinical, educational; Haslam, Powell, & Turner, 2000; Van Knippenberg & Ellemers, 2003; Wegge, Van Dick, Fisher, Wecking, & Moltzen, 2006). Of particular relevance to the current research is the idea that shared identity may provide the basis for giving, receiving, and benefiting from social support that provides individuals with the

necessary resources to cope with adversity (e.g., Levine, Prosser, Evans, & Reicher, 2005; Reicher, Cassidy, Wolpert, Hopkins, & Levine, 2005).

Rivlin, Hawton, Marzano, and Fazel (2013) suggested that the more socialised into the norms of the group or society that an individual is, the less likely they may be to pursue self-harming behaviours and suicide. They further suggest that feelings of connectedness may be even more important in prison than in the community since incarceration has already removed the individual from their primary support group. Consistent with this, research indicates that a disproportionate number of inmate suicides occur in single cells and that an important element in suicide prevention in correctional settings is meaningful social interactions (Kerkhof & Blaauw, 2009). Social support provided through the use of specially trained inmate “buddies” or “listeners”, also appears to have a good impact on the wellbeing of potential suicidal inmates, as they may not trust correctional officers but other inmates (Hall & Gabor, 2004; Junker, Beeler, & Bates, 2005).

Little research to date has examined the positive role of CSI. However, in their nine day examination of prisoners and guards in a simulated prison environment, Haslam and Reicher (2006) found that under conditions of high social identification, prisoners were more likely to work collectively to resist and confront stressors that they faced. Moreover, as prisoners developed a sense of shared social identity, their well-being was also observed to increase (as evidenced by lower scores on measures of burnout and depression) while their levels of cortisol remained stable. Conversely, when participants’ sense of shared social identity was low (as it was at the start of the research), participants’ preferred response to stressors was much more likely to be one of avoidance, whereby individuals tried to escape stressors. Thus, identity might help to buffer prisoners from the adverse consequences that arise from intergroup inequality (e.g., physical confinement, restricted space, and lack of autonomy and

control). More specifically, shared identity may lead prisoners to provide each other with social support that serves to protect individuals from the stressors that they face.

### **Current study**

Understanding suicide risk in prison requires a greater understanding of the factors that contribute to, and prevent, the development of suicidal thoughts. Consequently, the main purpose of the present study is to specify and test a structural model examining the relationships between the three factors of CSI and suicidal thoughts, while controlling for age, offender type (violent or non-violent), period of confinement, and substance dependence. As shared social identity might underpin the capacity for group members to work together to buffer themselves from the negative consequences of their circumstances, it is hypothesised that suicide ideation will be negatively associated with the three components of CSI. Moreover, consistent with previous research (Webb, Shaw, & Stevens, 2012), it is suggested that violent offence type will be positively associated with the presence of suicidal thoughts. Additionally, in light of prior research (Frottier, Fruehwald, & Ritter et al., 2002; Humber, Piper, Appleby, & Shaw, 2011; Konrad et al., 2007), it is predicted that substance dependence, greater age and period of confinement will be positively associated with suicide ideation. These hypotheses are tested within a sample of Pakistani juvenile offenders using data incorporated in a single structural model.

## Method

### Participants and procedure

Participants were 415 male prisoners incarcerated in prisons in Khyber Pakhtunkhwa (KPK) Pakistan. The respondents ranged in age from 11-18 years ( $M = 16.53$ ,  $SD = 1.93$ ). Most offenders came from rural areas (69.6%), were brought up in a single-parent home (53.3%), and reported having been imprisoned for non-violent crimes (74.7%) reported non-violent crimes. The duration of imprisonment reported by juvenile offenders ranged from 1 to 36 months ( $M = 6.29$ ;  $SD = 5.93$ ). Just over 30 percent (30.8%) of respondents reported that they “have had thoughts of killing myself since entering prison”, while 31.6% reported that they “would kill myself if I had the chance”.

The measures were administered in groups of up to 40 individuals by the lead researcher, an assistant researcher or prison superintendent. The assistant researcher and prison superintendent were instructed by the lead researcher about the procedures involved in conducting this study. Each participant was provided with a brief description of the study including the general area of interest, how to complete the questionnaire, and the general expected completion time. Participants completed an anonymous, self-administered, paper and pencil questionnaire, which was compiled into a booklet along with an instruction sheet and a consent form attached to the front of the booklet. Participants were assured about the confidentiality of their participation and informed that they could withdraw from the study at any time. The participation was voluntary without any form of reward. On completion, participants were debriefed on the purpose of the study.

### Materials

*The Measure of Criminal Social identity* (MCSI; Boduszek et al., 2012) consists of eight items and is based on Cameron’s (2004) Three-dimensional Strength of Group Identification Scale. Each item is scored on a 5-point Likert scale (1= *strongly disagree* to 5 = *strongly*



*agree*). Scores range from 8 to 40, with higher scores reflecting higher levels of criminal social identity. The measure included three subscales: in-group ties (three items) subscale measures the level of personal bonding with other criminals; cognitive centrality (three items) subscale measures the psychological salience of a criminal's group identity; and in-group affect (two items) subscale measures a criminal's felt attitude toward other in-group criminals. Boduszek et al. (2012) reported excellent internal consistency for the three subscales:  $\alpha = .92$  (in-group affect),  $\alpha = .92$  (in-group ties), and  $\alpha = .96$  (centrality). In the present sample, Cronbach's alphas were all acceptable: .68 for cognitive centrality; .91 for in-group affect; .81 for in-group ties. Juvenile offenders in the present study reported high levels of in-group ties ( $M = 12.18, SD = 2.87$ ) and cognitive centrality ( $M = 11.03, SD = 2.08$ ), and moderate levels of in-group affect ( $M = 6.80, SD = 2.37$ ).

The MCSI was translated from English into Urdu by the principal researcher and then sent to a group of academics to translate the Urdu version back into English. The translation of the MCSI, along with the original English version, was then submitted to three experts who indicated appropriate changes.

**Demographic information** was collected including age (continuous), period of confinement (in months), and offender types (violent or nonviolent).

**Suicidal thoughts** were assessed using two items modified from The BDI-II (Beck et al., 1996):

1) "I have had thoughts of killing myself since entering prison"; 2) "I would kill myself if I had the chance".

**Substance dependence** was assessed using the single item, "are you addicted to any drug?"

### **Analysis**

The conceptual model (Figure 1) was specified and estimated in Mplus 6 with restricted maximum likelihood estimation (Muthén & Muthén, 1998–2010), using structural equation

modelling (SEM). SEM is a method for testing theoretical constructs through analysing multivariate data. It is a combination of path analysis (PA) and factor analysis (FA) (Boduszek, Adamson, Shevlin, Hyland & Dhingra, 2013). PA tests associations among observed variables which are displayed in a path diagram (Cohen & Cohen, 1983). The aim of FA, on the other hand, is to simplify a complex data set by combining related observed variables into latent factors. The benefit of SEM, therefore, is that it allows theory testing by verifying correlations between both observed and latent variables. For the purpose of the current research, four latent factors were identified: in-group affect, in-group ties, and Cognitive Centrality (as indicated by Boduszek et al., 2013; Cameron, 2004), and suicide ideation (measured by responses to two items). Observed covariates included in the model are: type of offence (violent or non-violent), duration of confinement, substance dependence, and age.

The following statistics were used to assess model fit: chi-square ( $\chi^2$ ), Standardized Root Mean Square Residual (SRMR), Root-Mean-Square Error of Approximation (RMSEA; Steiger, 1990) with 90 % confidence interval (90 % CI), Comparative Fit Index (CFI; Bentler, 1990), and Tucker Lewis Index (TLI; Tucker & Lewis, 1973). A non-significant chi-square (Kline, 2005) and values above 0.95 for the CFI and TLI are considered to reflect a good model fit (Hu & Bentler 1999; Vandenberg & Lance, 2000). However, for CFI and TLI, values above 0.90 indicate adequate fit (Bentler, 1990; Hu & Bentler, 1999). RMSEA and SRMR values less than 0.05 suggest good fit and values of up to 0.08 indicate reasonable errors of approximation in the population (Browne & Cudeck, 1993).

## Results

### Correlations between continuous variables

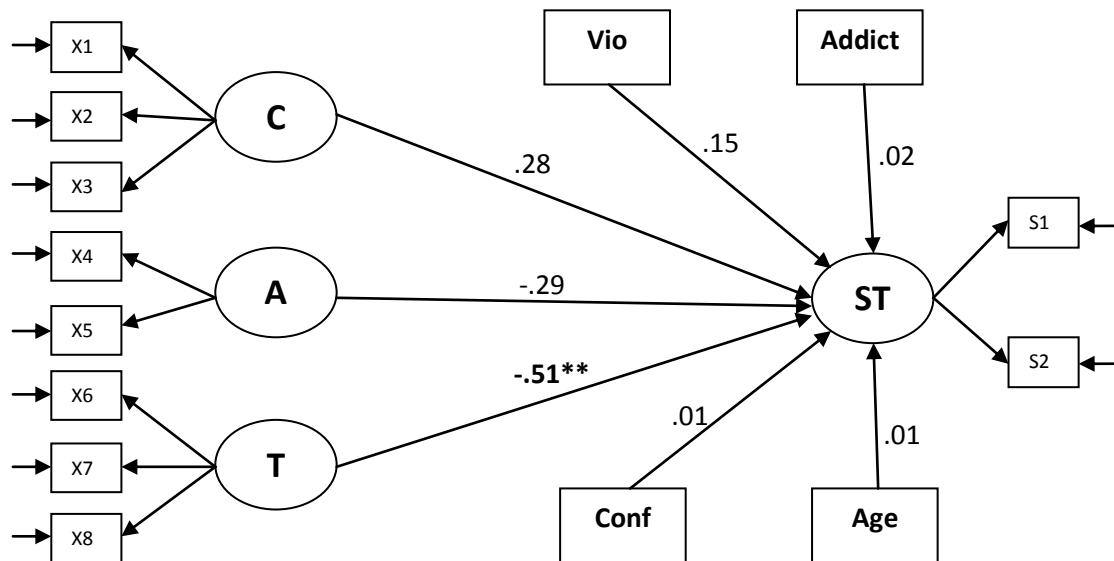
The relationships among all continuous variables were investigated using Pearson product–moment correlation coefficient. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. All correlations are presented in Table 1.

### SEM model of relationship between CSI and suicidal thoughts

In order to test the model of rape myth acceptance proposed in the current research, a two-step procedure was adopted. The first step was to test the adequacy of the three-factor model in explaining the underlying factor of the MCSI. CFA analysis indicated satisfactory fit of the data, CFI = .96, TLI = .93, RMSEA = .07 and SRMR = .05. The adequacy of the three-factor model of CSI was further supported by the parameter estimates. As can be seen in Table 1 (measurement level), all items displayed statistically significant ( $p < .001$ ) factor loadings on their respective factors. Furthermore, all factor loadings were in the expected direction and all items displayed factor loadings above .5, thus generally satisfying the strict recommendations of Hair, Anderson, Tatham, and Black (1998). The second step was to analyse the overall model fit for the structural model which includes all direct paths from the three CSI factors and covariates to suicidal thoughts. The fit of the proposed SEM (Figure 1) was satisfactory ( $\chi^2 = 126.78$ ,  $df = 53$ ,  $p > .05$ ; RMSEA = .05 [90% CI = .04/.07]; SRMR = .04; CFI = .94; TLI = .91) and explained 22 % of the variance in suicidal thoughts.

Figure 1.

*SEM model of relationship between criminal social identity and suicidal thoughts*



*Note:* C = centrality; A = in-group affect; T = in-group ties; ST = suicidal thoughts; Addict = addiction, Vio = violent offending; Conf = confinement; x1- x8 = items included in the Measure of Criminal Social Identity; S1 and S2 = items included to measure suicidal thoughts.

Table 1

*Standardized and Unstandardized Factor Loadings (and Standard Errors) for the the measurement and structural level of proposed SEM model*

Item	B	$\beta$	SE
<b>MEASUREMENT LEVEL</b>			
Centrality (C) by			
1. Being a delinquent has little to do with how I feel about myself in general	1.00	.55***	.06
2. Being a delinquent is an important part of my self-image	1.31	.85***	.05
3. The fact I am a delinquent rarely enters my mind.	.94	.53***	.06
In-group Affect (A) by			
4. In general, I'm glad to be a part of delinquent group	1.00	.89***	.03
5. Generally, I feel good about myself when I think about being a delinquent	1.08	.93***	.03
In-group Ties (T) by			
6. I have a lot in common with other people who committed a crime	1.00	.85***	.03
7. I feel strong ties to other people who committed a crime	1.24	.88***	.03
8. I find it difficult to form a bond with other people who committed a crime	.86	.62***	.04
Suicidal thoughts (ST) by			
1. I would kill myself if I had the chance	1.00	.32**	.14
2. I have thoughts of killing myself	1.45	.44**	.17
<b>STRUCTURAL LEVEL</b>			
C → Suicidal thoughts	.13	.28	.15
A → Suicidal thoughts	-.06	-.29	.16
T → Suicidal thoughts	-.14	-.51***	.19
Violence → Suicidal thoughts	.08	.15	.14
Age → Suicidal thoughts	.01	.01	.11
Addiction → Suicidal thoughts	.01	.02	.13
Confinement → Suicidal thoughts	.01	.01	.10

*Note.* \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

Table 1 (structural level) presents the standardised and unstandardized path regression weights for the specified structural model of suicidal thoughts. As can be seen, a significant negative relationship exists between suicidal thoughts and in-group ties ( $\beta = -.51, p < .001$ ). None of the other variables included in the model yielded significant results.

## Discussion

The present study aimed to specify and test a structural model examining the relationship between the three factors of CSI (cognitive centrality, in-group affect, and in-group ties) and suicide ideation, while controlling for age, offender type, period of confinement, and substance dependence in a sample of young Pakistani prisoners. Of the variables included in the model, only in-group ties were significantly related with suicide ideation. This suggests that it is the psychological perception of resemblance and emotional connection with a criminal group (in-group ties) that confers a protective effect against the experience of suicide ideation. In other words, the in-group ties with other prisoners may provide a sense of belongingness that prevents the development of negative emotional and interpersonal states, including elevations in negative affect, pessimism, fear of negative evaluation, and shyness, as well lower levels of social support, agreeableness, and sociability, which have been found to be linked to both suicidality and loneliness (Cacioppo, Hawley, & Ernst et al., 2006; Joiner, 2005). This finding may also offer some explanation for the recurrent finding in the literature that former prison inmates are at higher risk for death after release from prison (e.g., Binswanger, Stern, & Deyo et al., 2007), and suggests that greater attention needs to be paid to helping released prisoners re-integrate into society and form more pro-social bonds.

Although problematic substance use has been associated with suicidal ideation in general population samples (Borges & Loera, 2010), in this juvenile offender sample, regular pre-incarceration illicit drug use was not associated with suicidal ideation in the structural model. At least one other study of suicidal ideation in prisoners has reported a lack of association with alcohol and drug use (Jenkins, Bhugra, & Meltzer et al., 2005; Larney, Toson, Burns, & Dolan, 2012). Although the reason why substance abuse and suicide ideation were not significantly related is not clear, it may be that the high prevalence of

problematic substance use among prisoners may mean that it is not a useful predictor of suicide ideation in this population. Also inconsistent with previous research, greater age was also unrelated to suicide ideation; however, this was not entirely unexpected given the limited age range of the present sample, and research indicating that those who attempt suicide in prison are generally between the ages of 30-35 years (Konrad, Daigle, & Daniel et al., 2007). Similarly, period of confinement was unrelated to suicide ideation. This is also not entirely unexpected given that offenders who attempt suicide have been found to do so after spending a considerably longer time in custody than they had been in the present research (often 4 or 5 years; Konrad et al., 2007).

### **Implications**

The results of the present study suggest there might be scope for the well-being and mental functioning of prisoners to be enhanced through interventions that aim to maintain or increase individuals' sense of shared social identity. Since the results of the present study suggests that juvenile offenders' sense of shared identity may help to prevent the development of thoughts of death by suicide, separating and isolating young prisoners through placing them into solitary confinement or segregation (i.e., confining people to a cell for 22 to 24 hours a day without meaningful human contact, programming, or therapy) as a form of punishment is perhaps inadvisable. Instead, prison authorities should consider alternatives such as transferring mentally ill juveniles to facilities for further help or promoting familial and social relationships through the encouragement of visitations which may help boost morale and the creation of social ties outside of prison life (Arringo & Bullock, 2008; Pizarro & Stenius, 2004).

### **Limitations**

As with all research, the present study has a number of limitations that need to be taken into consideration when interpreting these findings. First, it is important to note that there is the



potential for bias as a result of stigma and sensitivity surrounding suicide in Pakistan, and the self-report nature of the data. Although it is not possible to determine the extent to which this may have affected the results, under-reporting of suicide ideation would contribute to more conservative findings. Second, due to time limitations, suicide ideation was only measured using two items. Thus, future research will need to use a psychometrically validated measure of suicide ideation. Third, the sample was relatively homogenous. Research with more diverse samples (i.e., participants from other cultural and linguistic backgrounds, and more diverse and extensive prison samples) is, therefore, needed. Fourth, a number of variables associated with suicide ideation (including the components of Joiner's 2005 model) were not included within the present study. Consequently, further research is needed to explore how a wider range of psychological characteristics (e.g., depressive symptoms, hopelessness, self-esteem, impulsivity, aggression and hostility), life events (e.g. childhood trauma), and environmental and criminological factors (e.g., prior incarceration, extent and quality of prisoners' social networks) impact on suicide ideation within this population. Finally, data were collected with the assistance of the prison superintendent, which may have led some inmates to feel compelled to participate. However, it was made clear both in the consent form and verbally that participation was voluntary.

Despite these limitations, the present research contributes important information on suicide ideation in Pakistan, an Islamic country in which data collection poses considerable challenges, and provides a strong basis for further investigation of suicidal thoughts and behaviour in Pakistan. Importantly, the results indicate that only one of the components of CSI (in-group ties), may serve to protect Pakistani juvenile offenders from the development of suicide ideation. Understanding which prisoners among those with suicide ideation will transition to make a suicide plan and attempt is an important direction for future research due to its possible impact on clinical practice (Borges, Angst, & Nock et al., 2006).

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