

**COPING WITH IMPRISONMENT: EXPLORING BULLYING,  
SAFETY AND SOCIAL SUPPORT WITHIN PRISON SETTINGS**

**by**

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## **ABSTRACT**

This thesis examines prisoners' experiences of imprisonment, focusing specifically on aspects of bullying, social support and safety within prisons. Initially, some of the challenges that prisoners face during imprisonment are considered, of which bullying represents a prominent feature. A systematic review of literature exploring bullying within prisons is presented, with emphasis on the nature and prevalence of bullying, characteristics of those involved and the psychological impact of bullying. High rates of bullying within prisons are reported, with prisoners tending to have experience in both perpetration and victimisation. The Hospital Anxiety and Depression Scale (HADS; Snaith & Zigmond, 1994) is suggested as a useful tool for measuring psychological wellbeing within prisoners. The measure is investigated in terms of its reliability and validity, with reference to its use within clinical and forensic settings. Finally, an empirical research study exploring the influence of perceived safety and social support on the psychological wellbeing of prisoners in open conditions is described. The study employed a mixed-method design, using both quantitative and qualitative approaches. Results revealed relatively low levels of anxiety and depression among prisoners with high levels of perceived safety. There were some significant differences in social support according to levels of anxiety and depression but prisoners' concerns about trust and fear of being moved back to closed conditions limited the degree to which they sought support from relationships within prison. The difficulties of drawing conclusions from studies of distinct prison groups are highlighted throughout the thesis. The utility of the findings are discussed in relation to theoretical and practical implications, with consideration of future research.

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## Table of Contents

Chapter 1:	Introduction	1 – 10
Chapter 2:	Bullying within prisons: A systematic review	11 – 65
Chapter 3:	A critique of the Hospital Anxiety and Depression Scale (HADS; Snaith & Zigmond, 1994)	66 – 82
Chapter 4:	Exploring the influence of perceived safety and social support on the psychological wellbeing of prisoners in open conditions	83 – 143
Chapter 5:	Discussion	144 – 153
References		155 – 171
Appendices		172 – 193

## **List of Appendices**

Appendix A:	Syntax used to search electronic databases	173
Appendix B:	Quality assessment form	174 – 175
Appendix C:	Data extraction form	176 – 177
Appendix D:	Participant information sheet (Questionnaires)	178 – 179
Appendix E:	Participant information sheet (Interviews)	180 – 181
Appendix F:	Consent form (Questionnaires)	182
Appendix G:	Consent form (Interviews)	183
Appendix H:	Interview schedule	184 – 185
Appendix I:	Modified version of the Significant Others Scale (SOS) – Actual support	186 – 187
Appendix J:	Modified version of the Significant Others Scale (SOS) – Ideal support	188 – 189
Appendix K:	Safety questionnaire	190
Appendix L:	Final coding template	191 – 193

## List of Tables

Table 1:	Inclusion/exclusion criteria	20
Table 2:	Summary of characteristics and principle findings of included studies	24 – 38
Table 3:	Populations of the studies included in the review	40
Table 4:	Proportions of prisoners reporting bullying/victimisation across studies and classification by DIPC category	43
Table 5:	Median HADS scores and percentage of prisoners at each clinical level	102
Table 6:	Relationships between HADS scores and prisoner demographics	103
Table 7:	Mean SOS scores for different relationships	104
Table 8:	Comparison of mean scores on SOS according to HADS Anxiety and Depression	106
Table 9:	Comparison of mean scores on SOS for different relationships according to HADS Anxiety	107
Table 10:	Comparison of mean scores on SOS for different relationships according to HADS Depression	108
Table 11:	Relationships between prison safety ratings and prisoner demographics	113
Table 12:	Correlations between prison safety ratings and HADS scores	113
Table 13:	Median prison safety ratings according to HADS Anxiety and Depression	114

## **List of Figures**

Figure 1:	Changes in prison population in England and Wales, 1950 – 2011	2
Figure 2:	Search terms	18
Figure 3:	Process of study selection	23
Figure 4:	Proposed model of the impact of bullying, safety and social support on prisoners' psychological wellbeing	150

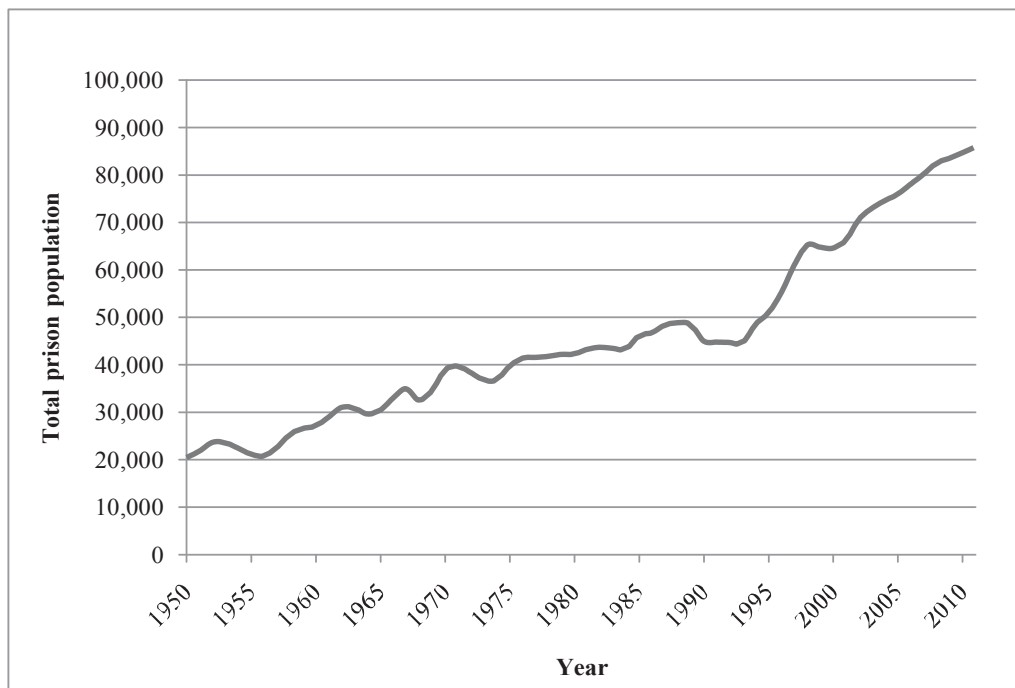


## **CHAPTER ONE**

### **INTRODUCTION**

## Prison populations

There are currently a total of 134 prisons in England and Wales (Ministry of Justice [MoJ], 2012a), with a further 16 located in Scotland (Scottish Prison Service, 2011). Within England and Wales, the number of people in prison has continued to steadily increase over the past century as illustrated in Figure 1. The total prison population demonstrated an average annual growth of 4% between 1993 and 2008 in England and Wales (MoJ, 2012b), reaching more than 85,000 in December 2011 (Berman, 2012). It has been suggested that this continued rise is, in part, due to increases in the average custodial sentence length and increased use of indeterminate sentences, resulting in offenders spending longer periods of time in prison (MoJ, 2012b). Indeed, in December 2011, one-third of the total sentenced prison population were serving determinate sentences of more than four years, with a further one-fifth serving indeterminate sentences (Berman, 2012).



**Figure 1.** *Changes in prison population in England and Wales, 1950 – 2011 (Sources: MoJ, 2010, 2012a)*

Adult male offenders (aged 21 or over) continue to constitute the largest proportion of the sentenced prison population (73%), with female offenders making up just 4%; this latter figure representing an increase of 10% over the last decade. Juvenile offenders (aged 15-17) and young offenders (aged 18-21) represent 1% and 7% of the prison population respectively (Berman, 2012).

Given the increasing prison population, there have been continued concerns about prison overcrowding, with 85 prisons in England and Wales deemed to be overcrowded at the beginning of 2012 (Berman, 2012). Prison has always presented a unique set of challenges to those individuals serving time in custody, often requiring them to develop adaptive skills in order to withstand the experience (Haney, 2001). Within the context of a physically and financially stretched Prison Service, the challenge to 'survive' the prison experience is likely to have intensified during recent years.

### **'Pains of imprisonment'**

Adjustment to prison life has long been conceptualised as the degree to which inmates can endure the 'pains of imprisonment' (Sykes, 1958), which have been defined as deprivations of autonomy, liberty, security, relationships and goods and services. The loss of liberty and autonomy are probably the most immediately obvious pains of being imprisoned, with prisoners' freedom of movement within the establishment also often greatly restricted by the prison regime. As well as physical restrictions imposed upon prisoners, being locked away from society may also lead to feelings of detachment and rejection (Sykes, 1958). However, as noted by Dye (2010), modern prisons do vary in the degree to which they 'cut off' prisoners from the outside world. For example, open prisons allow prisoners to maintain more freedom and contact with the community (Directgov, n.d.). Nevertheless, studies have

indicated that perceived lack of autonomy is associated with psychological distress in prisoners (Goodstein, MacKenzie & Shotland, 1984; Wright, 1993). Similarly, a greater deprivation in contact with friends or family outside of prison has been shown to be associated with poorer psychological health in prisons (Liebling, 1992; Wooldredge, 1999).

Although the extent of deprivation of goods and services in prisons is likely to have lessened since the 1950s, when Sykes (1958) first proposed his 'pains of imprisonment', there remains evidence that a lack of resources is a significant difficulty for prisoners. For example, studies have found that decreased access to educational, rehabilitation or other such programmes is associated with a higher risk of suicide amongst prisoners (Huey & McNulty, 2005). In their qualitative study, Nurse, Woodcock and Ormsby (2003) found that prisoners felt a lack of activity and mental stimulation had a significant negative impact upon their mental health. Overcrowding in prisons can also contribute to a lack of resources, as well as poor living conditions and stress for prisoners (Paulus, Cox, McCain & Chandler, 1975; Sharkey, 2010).

It appears counterintuitive to think of individuals as experiencing a lack of security within a prison, given the strict levels of security that characterise prison regimes; however, this deprivation refers to the lack of personal security often experienced by prisoners during their time inside prison (Sykes, 1958). High rates of inmate-inmate victimisation have frequently been reported by prison studies (Blitz, Wolff & Shi, 2008; Edgar, O'Donnell & Martin, 2003). In their US study, Chen and Shapiro (2007) found that 22% of maximum security inmates had been seriously injured whilst in prison. Most studies have investigated physical violence in prisons (e.g. Wolff, Blitz, Shi, Siegel, & Bachman, 2007); however, it is recognised that other types of victimisation also occur, including sexual assault (Wolff & Shi, 2011) and property theft (Lahm, 2009; Wooldredge, 1998). It should be noted that estimates

of victimisation can vary based on data collection methods and assessments used (Blitz et al, 2008; Davidson-Arad, 2005). Colvin (2000) also highlights the existence of indirect coercion, which includes witnessing others being victimised and living in a threatening environment, leading to fear and intimidation.

Research into bullying within prisons has also included more subtle victimisation behaviours in addition to physical violence, including social exclusion, verbal abuse, and gossiping (see Ireland, 2000; 2005a). Estimates of bullying within prison have reached figures of over 50% of prisoners in UK studies (Allison & Ireland, 2000; Archer & Southall, 2009; Ireland & Ireland, 2008; South & Wood, 2006). Ireland (2000) proposes that a number of the aforementioned deprivations associated with imprisonment contribute to the high rates of bullying within prisons, such as the closed environment, few activities, and limited resources. In addition to these factors, the emphasis on dominance within prison settings and the inmate subculture of not informing on fellow prisoners is thought to perpetuate the high levels of bullying (Connell & Farrington, 1996; Ireland, 2000).

However, in addition to focusing on the characteristics of the prison environment that contribute to prisoners' difficulties in managing prison life, it is important to recognise the impact of prisoners' individual characteristics. As Sykes (1958, p. 63) points out,

“each man brings to the custodial institution his own needs and his own background and each man takes away from the prison his own interpretation of life within the walls”.

The ‘importation model’ of prison adaptation (Irwin & Cressey, 1962) focuses on the importance of pre-existing individual characteristics and attitudes of inmates that are ‘imported’ with them to prison, including demographic factors, prior experience in prison and

family life. With regards to inmate victimisation, research studies have demonstrated that some intrinsic characteristics are associated with increased involvement in bullying, including previous experience in prison (Ireland, Archer & Power, 2007; South & Wood, 2006), personality traits (Ireland & Turner, 2010) and levels of aggression (Palmer & Thakordas, 2005). However, there appears to be considerable variation in the types of personal characteristics that have been studied, which makes it difficult to gain a clear picture of the factors that are most relevant to bullying. Some studies have found that imported factors, such as a history of childhood maltreatment, substance misuse and certain demographic characteristics, such as age and gender, increase the likelihood of depression and suicide within prisoners, much as they would do in non-incarcerated populations (McClellan, Farabee & Crouch, 1997; Way, Miraglia, Sawyer, Beer & Eddy, 2005).

Recent research suggests that the interaction between imported characteristics and deprivations of prison is probably the best way to conceptualise how well prisoners will cope with imprisonment (Davidson-Arad, 2005; Gover & MacKenzie, 2003).

### **Psychological impact of imprisonment**

There is a well-documented link between victimisation and poor psychological health (e.g. Kilpatrick, Saunders & Smith, 2003). Research studies specific to prisoners have found that they are likely to have higher levels of psychological problems, such as anxiety and depression (Cooper & Berwick, 2001; Cooper & Livingston, 1991; Zamble & Porporino, 1990). Wooldredge (1999) found that being a victim of assault during incarceration had a significant negative effect on prisoners' psychological wellbeing. Boxer, Middlemass and Delorenzo (2009) found that both direct and indirect experiences of violence in prison were significantly associated with emotional distress. Links have also been demonstrated between

exposure to violence within prison and rates of self-harm and suicide (Dye, 2010; Liebling, 1992).

However, there are a number of difficulties in exploring the psychological impact of imprisonment upon individuals. The main difficulty is establishing causality in the relationships between prison experience and poor psychological health. Studies suggest that a significant proportion of prisoners are likely to be suffering from some form of mental illness on arrival to prison (Gavin, Parson & Grubin, 2003); hence, it is difficult to establish to what degree prison experiences lead to psychological problems or whether these issues are pre-existing, or 'imported' into prison. Additional longitudinal studies are needed to further explore this relationship. It may also be difficult to assess the true psychological impact of prison using standardised self-report measures, such as those measuring anxiety and depression, as these explore only a distinct area of psychological health.

### **Coping with imprisonment**

There are limited studies directly exploring how prisoners cope with the 'pains of imprisonment'; although, as mentioned previously, factors are likely to include both personal characteristics and aspects of the prison environment. One aspect that has been found to impact upon how individuals respond to stressful events is the support available to them (Listwan, Colvin, Hanley & Flannery, 2010). It is suggested that social support can act as a buffer against stress and trauma through the supportive actions of others and even just the belief that such support is available (Lakey & Cohen, 2000). Studies within prisons have demonstrated that social support helps to diminish the impact of violence and other prison hardships upon prisoners' psychological wellbeing (Biggam & Power, 1997; Hochstetler, DeLisi & Pratt, 2010; Liebling, 1992; Wooldredge, 1999).

The Prison Service has recognised the importance of social support for prisoners, introducing Personal Officers to provide support to allocated prisoners and formalised peer-support schemes such as the Listener Scheme, where trained prisoners provide support for peers in distress (Davies, 1994). However, aspects of dominance and the inmate culture of not informing on other inmates may well impact upon how willing prisoners are to seek support from others (Ireland, 2000). It would be beneficial to explore which relationships are most likely to represent sources of social support for prisoners. It has recently been suggested that prisoners who cope poorly within prison may also have difficulties with the transition back into the community upon their release (Hochstetler et al., 2010); hence, prisoners' experiences inside may have additional outcomes for communities as a whole.

### **Justification of thesis**

Although exploring how people cope with imprisonment is not a new area of research, the evolving nature of prisons means there is a need for this type of research to remain a current focus. With prison populations continuing to rise, stressors within prisons, such as overcrowding, are likely to increase and resources are likely to be increasingly stretched. By improving our understanding of what factors help individuals to cope with life in prison, the more can be done to minimise levels of psychological distress among prisoners, thus helping to ease pressure on resources. It is proposed that this thesis will add to the literature in this area.

Bullying in prisons appears to be one of the significant 'pains of imprisonment' that many prisoners have to endure during their custodial sentence, and represents a growing area of empirical research. Although there have been a large number of recent studies exploring different aspects of bullying (Ireland & Turner, 2010; Ireland et al., 2007; Palmer &



Thakordas, 2005), these appear relatively heterogeneous in terms of the characteristics they have explored. The systematic review conducted as part of this thesis aims to consolidate what is currently known about bullying in prisons and identify areas of future research. Again, increased understanding of the factors that contribute to the high levels of bullying reported by prisoners will be helpful in developing effective anti-bullying intervention strategies.

Despite experiences within prison having emotive and personal qualities to them, this has not generally been reflected in the empirical literature, with studies mainly using quantitative approaches with large groups of prisoners. The use of qualitative studies is clearly needed if professionals hope to develop an insight into individuals' subjective experiences of prison life. The empirical research study described in Chapter 4 of this thesis aims to add to the literature in this way.

## **Overview**

This introductory chapter has outlined the literature related to some of the challenges that prisoners face inside prison. It has been acknowledged that understanding the impact of these experiences on individuals' psychological wellbeing is complicated by the heterogeneous nature of studies to-date and the difficulties of confounding pre-imprisonment characteristics.

Chapter 2 is a systematic literature review, which examines bullying within prisons, one of the many difficulties that prisoners can face during their incarceration. Specifically, the review explores the nature and prevalence of bullying among prisoners, and attempts to identify characteristics of those involved.

Chapter 3 examines the psychometric properties of the Hospital Anxiety and Depression Scale (HADS), which has the potential to be a useful tool to assess psychological wellbeing

within prison populations. The reliability and validity of the measure is discussed and evaluated, with reference to its use within prison settings.

Chapter 4 is an empirical research study that explores the influence of perceived safety and social support on the psychological wellbeing of prisoners in open conditions. By using a mixed-method of quantitative and qualitative approaches, this study provides further information on prisoners' subjective experiences of incarceration, which many previous studies have lacked. The findings are discussed in relation to methodological limitations, implications for practice and areas for future research.

Chapter 5 summarises the overall findings of the thesis in relation to previous literature. Theoretical and practical implications are discussed, with reference to theories of prison adaption and social support. Limitations of the thesis are explored and suggestions for future research made.

## **CHAPTER TWO**

### **BULLYING WITHIN PRISONS:**

### **A SYSTEMATIC REVIEW**

## **Abstract**

***Aims:*** To systematically review the research base that explores bullying within prison establishments. Specifically, the main objectives of the review were to examine the nature and prevalence of bullying within prisons, to identify personal and environmental characteristics associated with bullying, and to explore the psychological effects of bullying upon prisoners.

***Method:*** A search of electronic bibliographic databases was conducted using a systematic search strategy. Identified studies were subject to predefined inclusion/exclusion criteria and quality assessment measures. Data from included studies were extracted and analysed using both quantitative and qualitative approaches.

***Results:*** Nineteen studies met the inclusion criteria and were of adequate quality to be included in the review. Results suggested high rates of bullying within prison populations, with ‘bully/victims’ being the most common group found within the included studies. Indirect bullying was generally found to be more prevalent than direct bullying. A number of variables were found to be associated with bullying, including demographic factors, personality traits, aggression, attitudes toward victims, social factors and behaviour. Some studies showed bullying to be associated with psychological distress.

***Conclusions:*** The findings confirm that bullying is a common occurrence amongst prisoners. Although a number of personal characteristics were found to be associated with bullying, the ability to draw meaningful conclusions was restricted by the heterogeneous nature of the studies and a number of methodological limitations. Implications for practice and areas of future research are proposed.

## **Background**

Bullying has been of interest to researchers for over 30 years, with the majority of studies focusing on bullying amongst young people within the school environment (Smith & Brain, 2000). However, within the last decade increased academic attention has been given to the occurrence of bullying amongst adults in prisons (see Ireland, 2005a). Despite the recent interest in bullying amongst prison populations, the definition of 'bullying' continues to vary between researchers. For example, some researchers argue that an act must be repeated in order for it to constitute bullying whereas others argue that this is not always necessary or possible in secure settings (Ireland & Ireland, 2003). Ireland (2002a) has proposed the following definition of bullying:

“An individual is being bullied when they are the victim of direct and/or indirect aggression happening on a weekly basis, by the same or different perpetrators. Single incidences of aggression can be viewed as bullying, particularly when they are severe and when the individual either believes or fears that they are at risk of future victimisation by the same perpetrator or others.” (p. 26)

It is generally accepted that within forensic settings, such as prisons, bullying is likely to include both direct and indirect behaviours. Direct bullying involves overt negative behaviours by the bully directly towards the victim, such as physical or verbal aggression (Ireland & Archer, 1996). Indirect bullying involves more subtle bullying behaviours, such as gossiping or deliberate social exclusion, which are still likely to have a negative impact on the victim (Ireland, 2000). Studies have found indirect bullying to occur as much, if not more, than direct bullying in prison settings (Holland, Ireland & Muncer, 2009; Ireland & Ireland, 2000). The higher level of indirect bullying is presumed to reflect the fact that these types of

covert behaviours are more difficult for staff to detect than direct bullying, and therefore are favoured by bullies as they minimise the chance of getting caught (Ireland, 2005a).

Due to the stigma attached to being a victim of bullying, as well as the inmate subculture of not informing on but remaining loyal to others, prisoners are generally reluctant to disclose any victimisation to staff (Ireland, 2005b). In an attempt to overcome the difficulty of underreporting of bullying within prison settings, several research studies have used behavioural checklists, such as the Direct and Indirect Prisoner Checklist (DIPC; Ireland, 1998). Rather than being asked explicitly whether they have been bullied or not, participants are asked to select behaviours that they have experienced or engaged in from a list of behaviours that are deemed to be indicative of bullying, e.g. "I was hit or kicked". From individuals' responses, rates of bullying perpetration and victimisation can be deduced. The DIPC can also be used to categorise individuals into four distinct groups: those who only report bullying others ('pure bully' category); those who only report being victimised ('pure victim' category); those who report both bullying and victimisation ('bully/victim' category); and those who report no bullying or victimisation ('not involved' category). Generally the group that is found most frequently within secure settings is the 'bully/victim' group (Ireland, 2005a).

As well as studying the nature and extent of bullying in secure settings, researchers have also attempted to explore the characteristics of those involved in bullying. Studies appear to have produced inconsistent results as to which background characteristics are associated with bullying. For example, some studies have found that 'bully/victim' groups tend to have increased experience in secure settings (e.g. Connell & Farrington, 1996), whereas other studies have not supported this finding (Ireland & Archer, 2004). Some behavioural

characteristics have been linked more consistently with bullying, for example ‘bully/victim’ groups been found to be associated with increased negative behaviour in prison settings, such as drug use and conflict with prison staff (Ireland, 2001). Some studies have also examined various intrinsic characteristics associated with bullying, including empathy (Jolliffe & Farrington, 2006), emotional loneliness (Ireland & Power, 2004), and trait aggression and hostility (Palmer & Thakordas, 2005), with results tending to link bullying behaviour with lower levels of empathy and higher levels of emotional loneliness and aggression; although these results do vary across studies.

Researchers have proposed that it is the interaction of these individual characteristics with the environment in which they find themselves that leads to relatively high prevalence of bullying reported in prison settings (Ireland, 2005a). Ireland (2000) proposes a number of environmental factors that may contribute, including limited material goods, high turnover and/or density of prisoners, predictable and/or limited staff supervision, lack of stimulation, and prisoner social hierarchies, which are characterised by the use of physical strength and social manipulation to gain acceptance and social status (Connell & Farrington, 1996).

The occurrence of bullying within a prison can have a significant negative impact both on individuals involved and the organisation as a whole. Bullying has been found to be associated with poor psychological health (e.g. Biggam & Power, 1999; Grennan & Woodhams, 2007) as well as increased risk of self-harm or suicide (Blaauw, 2005). At an organisational level, increased aggression and negative behaviour by prisoners are likely to necessitate increased staff supervision and intervention (Monks et al., 2009). Given the potential negative impact that bullying can have on those involved, and the relatively high prevalence of bullying reported within prison settings, it is evident that decreasing the level of

bullying within such settings is important. The first step in achieving this is to further our understanding of the nature of bullying within prisons and the factors that contribute to its occurrence.

### **The current review**

An initial search of the Cochrane Library (all years, completed on 25<sup>th</sup> May 2011) was conducted to investigate whether there were any existing reviews on bullying within secure forensic settings. No existing systematic reviews were found. Although a narrative review of research on bullying amongst prisoners was found during a preliminary search of bibliographic databases (Ireland, 2000), it was felt that this was somewhat outdated given the increased interest in prison bullying over the last decade. It was therefore felt that that an up-to-date review of prison bullying research, following a systematic approach, would be a useful addition to the growing literature base in this area.

### **Aims and objectives**

The aim of the current review was to systematically explore bullying within prison establishments. Specifically, the main objectives of the review were:

1. To examine the prevalence of bullying within prisons.
2. To explore the nature of bullying behaviours within prisons.
3. To identify personal and environmental characteristics associated with bullying behaviours in prisons.
4. To explore the psychological effects of bullying upon those prisoners involved.



## **Method**

### **Sources of literature**

A search of the following electronic bibliographic databases was conducted in order to identify potential publications for the current review. The original searches were conducted in June 2011 but updated in April 2012 to ensure recently published studies were also included.

- y Ovid MEDLINE (R) [1946 to 2012 March Week 4]
- y EMBASE [1974 to 2012 Week 13]
- y PsycINFO [1967 to 2012 April Week 1]
- y Applied Social Sciences Index and Abstracts (ASSIA) [1987 to 2012 March Week 4]
- y Science Direct [1960 to 2012 April Week 1]
- y ISI Web of Science:
  - Science Citation Index Expanded (SCI-EXPANDED) [1899 to 2012 March Week 4]
  - Social Sciences Citation Index (SSCI) [1898 to 2012 March Week 4]
  - Arts & Humanities Citation Index (A&HCI) [1975 to 2012 March Week 4]

### **Search strategy**

A standardised search strategy was applied to each electronic database using the search terms shown in Figure 2. The search terms were slightly modified to match the requirements of the search fields of each database (see Appendix A for the syntax used in each search). Where applicable, keywords and ‘exploded’ search terms were used in order to minimise the number of studies that may be overlooked due to variations in coding. Although this approach has the

disadvantage of increasing the number of duplicates and irrelevant publications that are retrieved, it does increase the likelihood of identifying all relevant studies. The search was limited to English language publications as time constraints would not allow for translation. All references identified by the searches were saved using RefWorks.

(offend* OR prison* OR inmate* OR jail* OR custod*)
AND
(bully* OR bullies OR victim*)

**Figure 2. Search terms**

In addition to the searches of electronic databases listed above, several key journals (*Aggressive Behavior*: 1974 – April 2012; *Criminal Justice and Behavior*: 1974 – April 2012; *International Journal of Offender Therapy and Comparative Criminology*: 1966 – April 2012; *Journal of Forensic Psychiatry and Psychology*; 1990 – April 2012) were hand-searched for additional relevant studies that may have been missed during the database searches. The reference lists of narrative reviews discussing prison bullying (e.g. Ireland, 2000) were also hand-searched for potentially relevant studies. One key author, who represents an expert in this field, was also contacted directly to enquire about any further references that could be considered for inclusion.

### **Study selection**

On completion of the database searches, the titles and abstracts of the identified papers were assessed by the author in order to eliminate obviously irrelevant studies. Duplicate studies were also removed from the search results. The remaining potential studies were screened

using the inclusion/exclusion criteria outlined in Table 1. The decision was made to exclude studies that explored bullying amongst juvenile offenders (under 18 years old) as it was felt that bullying amongst children may be qualitatively distinct to that seen in adults (Pepler, Craig, Connolly, Yuile, McMaster & Jiang, 2006) and thus may be best investigated in a separate review. It was also decided to exclude those studies that explore only violence and not bullying *per se*. It has been suggested that although the concepts of bullying and violence overlap, they remain distinct forms of behaviour that have their own unique characteristics (Olweus, 1996). Lastly, qualitative studies were also excluded from the review. Although it was considered that these would provide useful information on prisoners' experiences of bullying, it was felt that their lack of statistical data would make them difficult to synthesise and interpret within the context of a systematic review.

If there was insufficient information available in the abstract to determine the eligibility of a study then the full-text article was accessed. All studies that met the inclusion criteria were downloaded as full-text from the appropriate online journal where available. Papers not obtainable electronically were sourced from the University of Birmingham library or ordered using the interlibrary loan system of the British Library.

**Table 1. Inclusion / Exclusion criteria**

	Inclusion	Exclusion
Population	Aged 18 years or over (young offenders: 18-21 years; adult offenders: 21 years or over). Male or female offenders.	Juvenile or adolescent offenders (aged under 18 years) Individuals from a secure setting other than a prison.
Exposure	Bullying or victimisation (clear definition of what is being measured). The study uses an appropriate measure of bullying, which examines prisoners' experiences of bullying inside prison.	The study explores violence but not bullying / victimisation directly. The study uses only staff reports or official records of bullying. The study explores bullying experiences prior to incarceration.
Comparator	Participants with no experience of bullying / victimisation in their current setting (if applicable).	None
Outcomes	Personal or environmental characteristics associated with bullying. Psychological impact of bullying on individuals involved. Any other relevant outcomes.	None
Study design	Cross-sectional, case control	Qualitative studies. Case reports, narrative reviews, editorials, commentaries or any other type of opinion paper.

### Quality assessment

All studies that fulfilled the inclusion criteria were assessed for their methodological quality using a quality assessment form (see Appendix B). The devised quality assessment form was based around potential areas of bias outlined by the Cochrane Collaboration: selection,

performance, detection and attrition. However, individual items on the quality assessment form were selected to reflect the design of the studies in question.

Each item on the quality assessment form was rated as follows:

0 = condition not met

1 = condition partially met / limited information

2 = condition fully met

An overall quality score for each study was calculated by summing the scores given for each item. The maximum possible score was 34; the higher the score, the better the quality of the paper. All scores were transformed into percentages, giving a range of percentage quality scores from 47% to 94%. A cut-off score of 75% was selected to ensure that only studies of a high quality were included in the review. In addition to quality, the clarity of reporting in each paper was determined by summing the number of items scored as 'unclear'. The higher the score, the poorer the clarity of reporting.

### **Data extraction**

Relevant data from each study that met the quality criteria was extracted and recorded using a data extraction form (see Appendix C). This form allowed the author to record information on each study's design, aims, method of recruitment, population studied, inclusion criteria, methodology, statistical analyses, results and limitations. The quality score and clarity of reporting score were also recorded on this form.

## **Results**

Figure 3 shows the process of study selection. A total of 13,326 articles were identified using the systematic search strategy previously described, with two additional publications identified from the reference lists of relevant review articles. No additional studies were identified following contact with the key author. Four thousand and sixty five duplicate articles were excluded, followed by a further 9,263 that were judged irrelevant based on their title or abstract. Of the remaining 90 publications, 39 articles did not meet the inclusion criteria, 12 papers used the same data set as another published article and so were excluded (the most recent or comprehensive study was retained); and 4 articles were not accessible within the time-frame. Following quality assessment, 16 further papers were excluded due to their quality score falling below the cut-off value. The remaining 19 papers were included in the review. All studies were cross-sectional in nature.

### **Characteristics of included studies**

Table 2 summarises the characteristics and principal findings of the 19 studies included in the review.

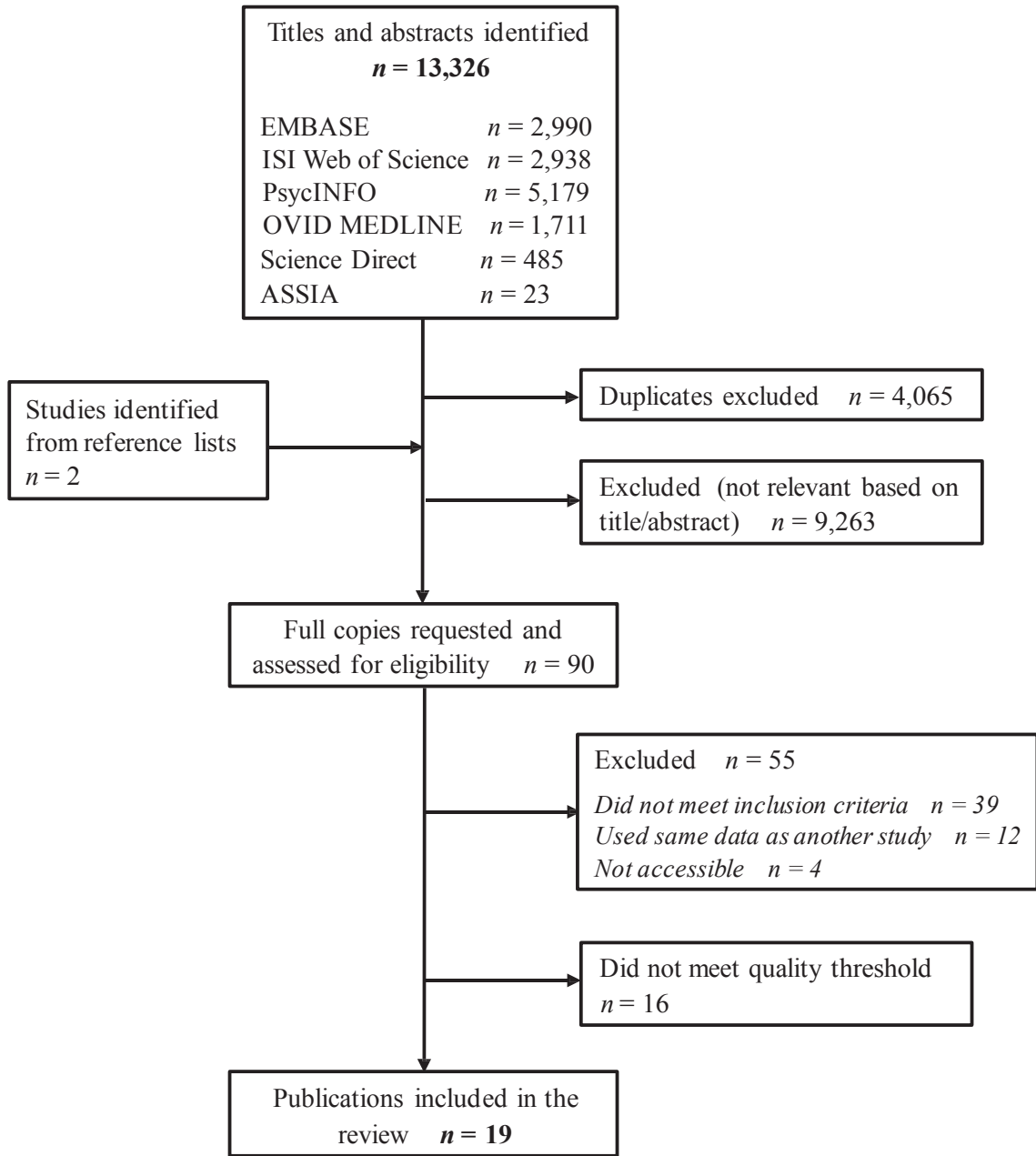


Figure 3. *Process of study selection*

**Table 2. Summary of characteristics and principle findings of included studies**

Authors & location	Aims of study	Population & setting	Bullying measure	Outcome measure(s)	Results	Limitations	Quality score (no. unclear)
<b>Allison &amp; Ireland (2010)</b>  <b>UK</b>	To explore the relationship between social and environmental factors supportive of bullying, levels of bullying and fear of bullying.	<b>n = 261</b>  Adult male prisoners in a Cat B prison	DIPC-SCALED-r (Ireland, 2007)	Prison Environment Scale (PES; Allison, 2007)  Brief Measure of Fear of Bullying Scale (BMFBS; Allison & Ireland, 2010)	68% of prisoners reported behaviour indicative of bullying perpetration (54% direct bullying; 46% indirect bullying). 84% reported behaviour indicative of victimisation (75% direct victimisation; 76% indirect victimisation).  High perception of environmental factors supportive of bullying was sig. associated with higher rates of self-reported direct bullying ( $p < .05$ ) and indirect bullying ( $p < .001$ ) (both perpetration and victimisation).  Greater fear of bullying were sig. associated with increased perception of environmental factors supportive of bullying ( $p < .05$ ).  Bullying behaviours (direct perpetration and indirect victimisation) predicted fear of bullying more than the presence of environmental factors.	The data collection procedure may have inadvertently excluded illiterate prisoners.  Some correlations were small in magnitude.	76% (1/17)
<b>Archer &amp; Southall (2009)</b>  <b>UK</b>	To explore whether lack of self-control or perceived costs and benefits of aggression provide the better predictors of bullying behaviour.  To assess whether bullying is associated with height and weight.	<b>n = 122</b>  Adult male prisoners in a Cat B prison	DIPC-SCALED (Ireland, 2005)	Self-Control Scale (Tangney et al., 2004)  Prison Aggression Consequences Questionnaire (PACQ; Archer & Southall, 2009)	72% of prisoners reported bullying perpetration; 86% reported bullying victimisation.  Perceived benefits of aggression and lack of self-control were best predictors of bullying perpetration (accounting for 24% of the variance).  Victimisation was weakly correlated with a lack of self-control ( $r = -.19, p < .05$ ).  No sig. associations were found between height or weight and bullying perpetration or victimisation.	Low response rate (18.5%).  The data collection procedure may have inadvertently excluded illiterate prisoners.	79% (1/17)



Authors & location	Aims of study	Population & setting	Bullying measure	Outcome measure(s)	Results	Limitations	Quality score (no. unclear)
Grennan & Woodhams (2007) UK	To examine the psychological health outcomes and coping strategies used by those involved in bullying in prison.	n = 99 Male young offenders (18-21 yrs) in a Young Offenders Institute (YOI)	DIPC (Ireland, 1998)	Depression Anxiety Stress Scales (DASS; Lovibond & Lovibond, 1995)  Coping Styles Questionnaire (CSQ; Roger et al., 1993)	16% of prisoners were classified as 'bullies', 16% as 'pure victims', 29% as 'bully/victims' and 38% as 'not involved'.  46% of prisoners reported behaviours indicative of being bullied and 46% reported behaviours indicative of bullying others.  Sig. correlations between total number of bullying behaviours experienced and levels of depression, anxiety and stress ( $p < .05$ ).  Bully/victims were found to be sig. more depressed than those not involved in bullying ( $p < .01$ ). Bully/victims reported higher levels of stress than those not involved in bullying ( $p < .01$ ).  There were no sig. differences between DIPC groups in terms of the coping strategies they used.	Moderate sample size.  Some correlations were weak in magnitude.	91% (1/17)
Holland et al (2009) UK	To explore bullying behaviours among adult male prisoners, examining the relationship with aggression attribution and impulsivity.	n = 102 Adult male prisoners in a medium-high secure prison	DIPC-R (Ireland, 2005)	Barratt Impulsivity Scale (BIS-12; Barratt, 1994)  Expressive Aggression Scale (EXPAGG; Campbell et al., 1999)	52% reported behaviours indicative of being bullied (28% direct victimisation; 42% indirect victimisation). 32% reported behaviours indicative of bullying others (11% direct perpetration; 28% indirect perpetration).  Of these, 12% were classified as 'pure bullies', 31% as 'pure victims', 21% as 'bully/victims' and 36% as 'not involved'.  Bullies were found to have sig. higher instrumental attribution scores than non-bullies ( $p < .05$ ) but there were no sig. differences for expressive attribution.  Victims were more impulsive than non-victims ( $p < .01$ ) (perpetration moderated this relationship)	The data collection procedure may have inadvertently excluded illiterate prisoners or those at work/education at the time of testing.  'Pure bully' category contained a small number of participants	91% (1/17)

Authors & location	Aims of study	Population & setting	Bullying measure	Outcome measure(s)	Results	Limitations	Quality score (no. unclear)
<b>Ireland (1999a)</b> <b>UK</b>	To assess the nature and the extent of bullying behaviour within a Young Offenders Institution (YOI).	<b>n = 358</b> Male young offenders from YOI	DIPC (Ireland, 1998)	None	<p>Bully/victims were sig. more impulsive compared to pure bullies (<math>p &lt; .05</math>)</p> <p>Differences between perpetrators and victims in relation to impulsivity and attribution were evident only when a combination of direct and indirect perpetration/victimisation was considered.</p> <p>45% of participants reported behaviours indicative of being bullied (34% direct victimisation; 32% indirect victimisation). 84% of these were victims of regular bullying.</p> <p>61% of participants reported behaviours indicative of bullying others (52% direct bullying; 39% indirect). 81% reported regular bullying.</p> <p>26% were classified as 'pure bullies', 10% as 'pure victims', 35% as 'bully/victims' and 29% as 'not involved'.</p> <p>Reactions to bullying included crying (34% of victims; 29% of bully/victims), defending themselves (14% of victims; 29% of bully/victims), staying in their cell (11% of victims; 11% of bully/victims), and trying to get moved (11% of victims; 27% bully/victims).</p>	(n = 12), which may have negatively impacted upon the categorical analysis.	80% (4/17)

Authors & location	Aims of study	Population & setting	Bullying measure	Outcome measure(s)	Results	Limitations	Quality score (no. unclear)
Ireland (1999b) UK	To investigate attitudes towards victims of bullying, and to explore the role of empathy in bullying others.	n = 309 74 women (53 adults and 21 young offenders) and 235 men (158 adults and 77 young offenders) from five prisons	DIPC (Ireland, 1998)	Pro-victim Scale (Rigby & Slee, 1991)  Interpersonal Reactivity Scale (IRI; Davis, 1980)	21% were classified as 'pure bullies', 15% as 'pure victims', 37% as 'bully/victims', and 28% as 'not involved'.  There were sig. differences across bully groups with regard to pro-victim scores ( $p < .001$ ) – not-involved group scored sig. higher than bully and bully/victim groups. The pure victim group scored sig. higher than the bully group.  With regards to the IRI, the bully group scored sig. lower on Perspective Taking and Empathetic Concern (subscales of the IRI) than the pure victim group. The bully group scored sig. lower on Perspective Taking than the not involved group, whereas the pure victim group scored sig. higher than the not-involved group on Perspective Taking ( $p < .01$ for all).	The data collection procedure may have inadvertently excluded those prisoners at work/education at the time of testing.  There were some differences in the proportion of prisoners within each bully category (by men, women, young and adult offenders) which could have been explored further.	83% (3/20)
Ireland (2001) UK	To explore prison-based behavioural and personal characteristics of the different groups involved in bullying behaviour.  In addition, to explore gender differences regarding these characteristics.	n = 406 Adult prisoners (196 women; 210 men) from four prisons	DIPC (Ireland, 1998)	None	49% of participants reported behaviour indicative of bullying others; 58% reported behaviours indicative of being bullied.  14% were classified as 'pure bullies', 23% as 'pure victims', 35% as 'bully/victims', and 28% as 'not involved'.  Only one sig. association between gender and group – men were more likely to fall into the 'pure bully' group than females ( $p < .05$ ).  No personal characteristics were found to predict male membership of any bullying groups. For the female sample, membership of the bully/victim group was predicted by longer current sentence	The data collection procedure may have inadvertently excluded those prisoners at work/education at the time of testing.  There were some large differences between male and female groups in terms of sentence length, total time spent in prison	83% (3/20)

Authors & location	Aims of study	Population & setting	Bullying measure	Outcome measure(s)	Results	Limitations	Quality score (no. unclear)
<b>Ireland (2002)</b> <b>UK</b>	To explore how assertiveness relates to bullying behaviour among adult prisoners.	<b>n = 502</b> Adult prisoners (285 men; 217 women) from six prisons	DIPC (Ireland, 1998)	Rathus Assertiveness Scale (RAS; Rathus, 1973)	<p>length, whereas membership of the not-involved group by shorter sentence length.</p> <p>For men, membership of the bully/victim group was predicted by higher rates of involvement in drug-related behaviour and increased proactive behaviour. Membership of the pure victim group was predicted by decreased proactive behaviour. Membership of the not-involved group was predicted by less involvement in drug-related behaviour.</p> <p>For women, membership of the bully/victim group was predicted by increased negative behaviour, whereas membership of the not-involved group was predicted by decreased negative behaviour.</p> <p>The most popular responses to victimisation were crying (men 9%; women 69%), staying in their cell (men 23%, women 27%), and trying to get moved (men 16%; women 16%). No male victims and only 14% of female victims reported they would tell an officer if they were being bullied.</p> <p>11% of participants were classified as 'pure bullies' (12% men; 10% women), 18% as 'pure victims' (16% men; 21% women), 35% as 'bully/victims' (34% men; 36% women), and 36% as 'not involved' (38% men; 34% women). There were no sig. sex differences.</p> <p>Pure victims reported lower assertiveness scores than other categories (<math>p &lt; .05</math>).</p>	throughout lifetime and nature of offence, which were not fully explored.	88% (2/17)

Authors & location	Aims of study	Population & setting	Bullying measure	Outcome measure(s)	Results	Limitations	Quality score (no. unclear)
<b>Ireland &amp; Ireland (2000)</b>  <b>UK</b>	To investigate the nature and extent of bullying in a maximum-security prison.  To assess prisoners' attitudes toward victims of bullying.	<b>n = 194</b>  Adult male prisoners from a maximum security prison	DIPC (Ireland, 1998)	Pro-victim Scale (Rigby & Slee, 1991)	<p>Bully/victims scored sig. higher on the argumentative and combative subscale in comparison to the overall mean (<math>p &lt; .01</math>). Those not involved in bullying reported sig. lower scores on this subscale (<math>p &lt; .01</math>).</p> <p>Those not involved in bullying also scored sig. higher on the social assertiveness subscale (<math>p &lt; .01</math>), with pure victims and bully/victims scoring lower on this subscale (both <math>p &lt; .05</math>).</p> <p>Sig. correlations were found between total RAS score and number of bully and victim behaviours reported (<math>p &lt; .01</math> for all).</p> <p>12% of participants were classified as 'pure bullies', 14% as 'pure victims', 43% as 'bully/victims' and 31% as 'not involved'.</p> <p>Descriptive factors (e.g. age, sentence length) did not predict bully category membership.</p> <p>57% reported at least one incident of being bullied in the previous week (36% reporting direct victimisation; 46% reporting indirect victimisation).</p> <p>55% reported at least one incident of bullying others (26% direct bullying; 49% indirect bullying).</p> <p>The most commonly reported bullying behaviour was psychological/verbal abuse (80% of victimisation; 96% of bullying).</p> <p>The most commonly reported reactions to</p>	<p>Although sig. correlations were reported, these were very small in magnitude (between .10 and .25).</p> <p>Inclusion criteria for participant selection were unclear.</p> <p>The data collection procedure may have inadvertently excluded illiterate prisoners.</p>	85% (3/17)

Authors & location	Aims of study	Population & setting	Bullying measure	Outcome measure(s)	Results	Limitations	Quality score (no. unclear)
Ireland & Ireland (2008) UK	To explore bullying behaviour using a frequency method of assessment in the form of a scaled version of the DIPC.	n = 605 Adult prisoners (487 men; 118 women) from three prisons	DIPC-SCALED (Ireland, 2005)	None	<p>bullying were staying in their cell (41% of victims), crying (24%), trying to get moved and defending themselves (15%).</p> <p>There were no sig. differences between bully categories with regards to pro-victim attitudes.</p> <p>81% of participants reported at least one behaviour indicative of being bullied in the past month (81% men; 82% women). 68% reported direct victimisation, 72% indirect victimisation, and 15% coercive victimisation.</p> <p>67% of participants reported at least one behaviour indicative of bullying others in the past month (68% men; 68% women). 43% reported direct bullying, 63% indirect bullying, and 9% coercive bullying.</p> <p>Using dichotomous classification method, 6% of participants were classed as 'pure bullies', 20% as 'pure victims', 61% as 'bully/victims' and 13% as 'not involved'.</p> <p>Using the frequency classification method, 15% of participants were classed as 'pure bullies', 12% as 'pure victims', 32% as 'bully/victims' and 41% as 'casual/low frequency' bullying.</p> <p>For victim groups, indirect / verbal-psychological victimisation was the most commonly reported (96-98%). For bully/victim groups, coercion was the most common victimisation type reported (45-100%).</p>	<p>The data collection procedure may have inadvertently excluded illiterate prisoners.</p> <p>The relatively small size of some bully categories limited the extent of the analysis that could be conducted.</p>	85% (2/17)

Authors & location	Aims of study	Population & setting	Bullying measure	Outcome measure(s)	Results	Limitations	Quality score (no. unclear)
Ireland & Power (2004)  UK	To explore whether or not offenders who bully others and/or are bullied themselves can be distinguished by their attachment styles and level of emotional loneliness.	n = 220  103 adult male offenders and 117 young male offenders from a prison and YOI.	DIPC (Ireland, 1998)	Three-Attachment Style Measure (Hazan & Shaver, 1987)  The Revised UCLA Loneliness Scale (Russell et al., 1980)	<p>45% of participants reported engaging in at least one incident of bullying others (35% indirect bullying, 30% direct bullying). Psychological/verbal bullying was the most commonly reported (26%).</p> <p>A sig. higher proportion of young offenders reported bullying others compared to adult offenders (<math>p &lt; .01</math>).</p> <p>40% of participants reported at least one incident of being bullied (33% indirect victimisation, 25% direct victimisation). Psychological/verbal victimisation was the most commonly reported (19%).</p> <p>18% were classified as 'pure bullies', 14% as 'pure victims', 26% as 'bully/victims' and 42% as 'not involved'. There were no sig. differences between young and adult offenders.</p> <p>With regards to attachment, bully/victims reported higher avoidant attachment scores than other bully categories (<math>p &lt; .01</math>). Pure bully and not involved groups reported lower avoidant scores (<math>p &lt; .05</math> and <math>p &lt; .01</math> respectively).</p> <p>A small but sig. correlation was found between avoidant attachment style and total number of victim items reported (<math>r = .16, p &lt; .05</math>).</p> <p>With regards to emotional loneliness, small but sig. correlations were found between UCLA score and number of victim items reported (for Total score, <math>r = .23, p &lt; .001</math>).</p>	<p>The data collection procedure may have inadvertently excluded those prisoners at work/education at the time of testing.</p> <p>The internal reliability of the attachment measure used was moderate at best.</p> <p>Although sig. correlations were reported, these were small in magnitude.</p>	85% (3/17)

Authors & location	Aims of study	Population & setting	Bullying measure	Outcome measure(s)	Results	Limitations	Quality score (no. unclear)
Ireland & Qualter (2008)  UK	To explore social and emotional loneliness, and victimisation among a sample of adult male prisoners.	n = 241  Adult male prisoners from two Cat C prisons	DIPC-R (Ireland, 2005)	Social and Emotional Loneliness Scale for Adults (SELSA; DiTommaso & Spinner, 1993)	<p>29% of participants reported engaging in behaviour indicative of bullying others (14% indirect bullying, 16% direct bullying, 3% coercive bullying).</p> <p>40% reported experiencing behaviour indicative of being bullied (38% indirect victimisation, 35% direct victimisation, 4% coercive victimisation).</p> <p>6% of participants were classified as 'pure bullies', 25% as 'pure victims', 23% as 'bully/victims' and 46% as 'not involved'.</p> <p>Pure victims and bully/victims presented with sig. higher levels of social loneliness than those not involved (<math>p &lt; .01</math> for both).</p> <p>Social and emotional loneliness were sig. correlated with victimisation. The largest correlation was found between social loneliness and indirect victimisation (<math>r = .31, p &lt; .01</math>), with increased indirect victimisation associated with increased social loneliness.</p>	<p>The data collection procedure may have inadvertently excluded illiterate prisoners.</p> <p>Small sample size of 'pure bully' category limits statistical analysis</p>	88% (2/17)



Authors & location	Aims of study	Population & setting	Bullying measure	Outcome measure(s)	Results	Limitations	Quality score (no. unclear)
Ireland et al (2007)	To explore the nature of prison bullying in relation to indirect and direct aggression.	n = 1,253	DIPC (Ireland, 1998)	None	42% reported bullying others (44% men, 39% women); 34% reported indirect bullying and 23% reported direct bullying.	The data collection procedure may have inadvertently excluded illiterate prisoners.	88% (2/20)
UK	To explore the predictors of bully-category membership with particular reference to behavioural characteristics.	Adult prisoners (728 men; 525 women) from 11 prisons			52% reported being the victim of bullying (50% men, 55% women); 39% reported indirect victimisation and 37% reported direct victimisation.  12% were classified as 'pure bullies', 23% as 'pure victims', 29% as 'bully/victims', and 36% as 'not-involved'  Pure bullies and bully/victims were sig. younger than those not-involved ( $p < .001$ ). Bully/victims reported sig. longer histories of time spent in secure care than pure victims and those not-involved ( $p < .001$ ). Women were more likely than men to be classified as pure victims ( $p < .01$ ).  Regression analysis revealed that pure bullies were younger and reported more incidences of positive, negative and drug-related behaviour. Bully/victims were more likely to be men, were younger, and reported more incidences of positive, negative and drug-related behaviour. Pure victims were more likely to be women, and also showed more incidences of negative and drug-related behaviour. Those not-involved were older, and reported fewer incidences of positive, negative and drug-related behaviour.		

Authors & location	Aims of study	Population & setting	Bullying measure	Outcome measure(s)	Results	Limitations	Quality score (no. unclear)
<b>Listwan et al (2010)</b>  <b>USA</b>	To explore the psychological effect of victimisation and perceptions of threat and coercion arising from the prison environment.  To examine whether social support moderates the effect of victimisation and coercion.	<b>n = 1,616</b>  Recently released adult male prisoners	24-item 'coercion' scale measuring victimisation within prison	Post-traumatic Cognitions Inventory (PTCI; Foa et al., 1999)  Trauma Symptoms Checklist (TSC-40; Briere, 1996)  Social Support Questionnaire (Sarason et al., 1987)	Sig. positive correlations between Coercion and Trauma scores ( $r = .22, p < .01$ for PTCI; $r = .26, p < .01$ for TSC), suggesting a negative effect on psychological wellbeing.  social support did not appear to moderate the relationship between coercion and psychological well-being.	Relied on participants accurately recalling their experiences inside prison.  Although sig. correlations were reported, these were small in magnitude.	76% (1/17)
<b>Palmer &amp; Begum (2006)</b>  <b>UK</b>	To examine the relationship between moral reasoning, pro-victim attitudes and interpersonal aggression among imprisoned young offenders.	<b>n = 60</b>  Male young offenders in a YOI.	DIPC (Ireland, 1998)	Pro-victim Scale (Rigby & Slee, 1991)  Sociomoral Reflection Measure -Short Form (SRM-SF, Gibbs et al., 1992)	37% of participants were classified as 'pure bullies', 7% as 'pure victims', 43% as 'bully/victims' and 13% as 'not involved'.  there was a sig. difference between the DIPC groups in regard to pro-victim scores, with pure victim and not involved groups scoring sig. higher than the bully-victim group ( $p < .05$ ) on the pro-victim scale.  There were no sig. differences in level of sociomoral reasoning between the four DIPC groups.	Moderate sample size, which resulted in some of the DIPC groups being small in size.	82% (3/17)

Authors & location	Aims of study	Population & setting	Bullying measure	Outcome measure(s)	Results	Limitations	Quality score (no. unclear)
Palmer & Thakordas (2005) UK	To investigate the relationship between bullying and aggression among imprisoned male adult offenders.	n = 70 Adult male prisoners from a Cat C prison.	DIPC (Ireland, 1998)	Buss-Perry Aggression Questionnaire (Buss & Perry, 1992)	<p>13% of participants were classified as 'pure bullies', 16% as 'pure victims', 43% as 'bully/victims' and 29% as 'not involved' in bullying.</p> <p>Sig. differences between the DIPC groups were found for the Hostility scale and total Score on the Aggression questionnaire (<math>p &lt; .05</math> for both). In both cases, the 'bully/victim' group scored sig. higher than the 'not involved' group.</p> <p>There were sig. positive correlations between number of bullying items (direct and indirect) reported and scores for physical aggression, verbal aggression, anger and hostility.</p> <p>No sig. correlations were found for victim scores, except for the hostility scale, where direct victimisation positively correlated with hostility.</p>	<p>Although participants were randomly selected, it was unclear if this selection was made from the entire population.</p> <p>Moderate sample size.</p>	85% (4/17)

Authors & location	Aims of study	Population & setting	Bullying measure	Outcome measure(s)	Results	Limitations	Quality score (no. unclear)
South & Wood (2006) UK	To investigate whether the perceived importance of social status in prison motivates bullying. Also, to explore whether moral disengagement and prisonisation influence the relationship.	n = 132  Adult male prisoners from six prisons (Cat B, C & D)	DIPC (Ireland, 1998)	Organisational Structure and Prisonization Scale (OSPS; Thomas & Zingraff, 1974)  Mechanisms of Moral Disengagement Scale (Bandura et al., 1996)  Social Status Scale (designed for the study)  MacArthur Scale of Subjective Social Status (Adler et al., 2000)  Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960).	64% of participants reported bullying others and 80% reported being bullied in the last 6 months. The most prevalent type of direct bullying was verbal/psychological (46%).  7% were classified as 'pure bullies', 24% as 'pure victims', 57% as bully/victims and 12% as not involved'.  There was a sig. main effect of age at first conviction ( $p < .01$ ), with pure victims being older than bully/victims, and pure bullies being younger than pure victims.  There was a sig. main effect of total time spent in prison ( $p < .01$ ), with bully/victims having spent more time in prison than pure victims and those not involved.  Bullying was positively related to the perceived importance of social status in prison ( $p < .001$ ). Bully/victims valued social status more than pure victims and those not involved.  Subjective social status was related to being a victim of bullying ( $p < .001$ ); prisoners with more experience of bullying reported greater dissatisfaction with their position in the prison social hierarchy.  Total bullying scores were related to levels of moral disengagement ( $p < .001$ ); pure bullies and bully/victims had higher levels of moral disengagement than pure victims.  Prisonization was not found to be related to bullying or victimisation scores. However, pure bullies did appear to have higher levels of prisonization than pure victims.	Bullying was measured over a 6-month timeframe and therefore relied on prisoners accurately recalling bullying incidents.	94% (1/17)

Authors & location	Aims of study	Population & setting	Bullying measure	Outcome measure(s)	Results	Limitations	Quality score (no. unclear)
Turner & Ireland (2010) UK	To assess how beliefs about aggression and personality can predict engagement in intra-group bullying among prisoners.	n = 213  Adult male prisoners from a Cat B prison.	DIPC-SCALED (Ireland & Ireland, 2008)	International Personality Item Pool (IPIP; Goldberg, 1999)  EXPAGG (Archer & Haigh, 1997) (measuring beliefs toward aggression)	74% of participants reported at least one behaviour indicative of bullying others in the past month (70% indirect bullying; 49% direct bullying). 87% reported at least one incident of being bullied (81% indirect victimisation; 60% direct victimisation).  Using median split method, 13% were classified as 'pure bullies', 11% as 'pure victims', 39% as 'bully/victims' and 38% as 'low frequency/casual involvement'.  There was a sig. difference in scores for instrumental beliefs toward aggression ( $p < .03$ ), with bullies and bully/victims presenting with higher scores than victims.  There were no sig. differences in personality traits across DIPC groups.  Regression analysis showed that pure bully category was predicted by reduced levels of agreeableness and increased levels of neuroticism. Pure victims were predicted by decreased levels of instrumental beliefs, and bully/victims by decreased levels of neuroticism. There were no predictors for the low frequency/casual involvement group.	The data collection procedure may have inadvertently excluded illiterate prisoners.	85% (1/17)

Authors & location	Aims of study	Population & setting	Bullying measure	Outcome measure(s)	Results	Limitations	Quality score (no. unclear)
Wood et al (2009) UK	To establish if prisoners' involvement in bullying would predict their involvement in gang-related activity.	n = 141  Adult male prisoners from a Cat B prison.	DIPC-R (Ireland, 2002)	Mechanisms of Moral Disengagement Scale (Bandura et al., 2001)  Prisoner Gang Activities Questionnaire (Wood, 2002)	<p>39% of participants reported bullying others in the previous week, with 60% reporting they had been the victims of bullying.</p> <p>7% of prisoners were classified as 'pure bullies', 28% as 'pure victims', 33% as 'bully/victims' and 33% as 'not involved'.</p> <p>There was a sig. difference in gang-related activity across the DIPC groups (<math>p &lt; .001</math>); pure bullies and bully/victims had the highest level of gang-related activity, while pure victims and those not involved in bullying had the lowest levels.</p> <p>There was a sig. difference in use of moral disengagement (<math>p &lt; .001</math>); those with no involvement in bullying were sig. less likely to use moral disengagement strategies than either pure bullies or bully/victims.</p> <p>Mediation analysis revealed that moral disengagement partially mediated the relationship between bullying and gang-related activity.</p>	Exclusion of new inmates (those who had been in prison less than 4 weeks) means that bullying experiences of new prisoners are likely to have been overlooked.	85% (2/17)

## **Descriptive overview**

### *Setting*

Of the nineteen studies included in this review, all except one study was based within a prison setting. The exception was the study by Listwan et al. (2010), who recruited their sample of prisoners following their release from prison and questioned them retrospectively about their bullying experiences inside prison. As previously noted, the reliance on prisoners accurately recalling their prison experiences up to six months' after release is clearly a limitation to this study. This study was also the only reviewed study based within the USA; the remaining studies were all conducted within the UK.

Of the UK studies that were conducted within prisons, one study was based within a high security (or Category A) prison (Ireland & Ireland, 2000); five studies were based within a medium-high security (or Category B) prison (Allison & Ireland, 2010; Archer & Southall, 2009; Holland et al., 2009; Turner & Ireland, 2010; Wood et al., 2009); two studies were based within a medium security (Category C) prison (Ireland & Qualter, 2008; Palmer & Thakordas, 2005); and three studies were based within Young Offenders Institutions (or YOIs) (Grennan & Woodhams, 2007; Ireland, 1999a; Palmer & Begum, 2006). Seven of the studies recruited their sample of prisoners from more than one establishment and across more than one security level (Ireland, 1999b, 2001, 2002b; Ireland & Ireland, 2008; Ireland & Power, 2004; Ireland et al., 2007; South & Wood, 2006).

### *Population*

Given the variations in setting for the included studies, it is not surprising that the study populations also varied considerably, both in terms of prisoners' gender and age (young and

adult offenders). The studies are categorised according to their population in Table 3 below. The majority of studies ( $n = 10$ ) used adult male offenders as their sample population; however, others used mixed samples of young and adult, male and female offenders (e.g. Ireland, 1999b). The use of mixed samples clearly makes it more difficult to generalise results as it introduces a number of potential confounding variables, including age and gender.

The sample sizes recruited for each study also showed marked variation, ranging from 60 (Palmer & Begum, 2006) to 1,616 (Listwan et al., 2010). The median sample size across all nineteen studies was 220.

**Table 3. Populations of the studies included in the review**

♂ adult offenders	♂ young offenders	Mixed sample (♂ adult & young offenders)	Mixed sample (♂ & ♀ adult offenders)	Mixed sample (♂ & ♀ adult & young offenders)
Allison & Ireland (2010)	Grennan & Woodhams (2007)	Ireland & Power (2004)	Ireland (2001)	Ireland (1999b)
Archer & Southall (2009)	Ireland (1999a)		Ireland (2002b)	
Holland et al (2009)	Palmer & Begum (2006)		Ireland & Ireland (2008)	
Ireland & Ireland (2000)			Ireland et al (2007)	
Ireland & Qualter (2008)				
Listwan et al (2010)				
Palmer & Thakordas (2005)				
South & Wood (2006)				
Turner & Ireland (2010)				
Wood et al (2009)				

♂ = male; ♀ = female



### *Measures of bullying*

Eighteen of the nineteen studies included in this review utilised a behaviour checklist to measure bullying amongst prisoners. These included the Direct and Indirect Prisoner Checklist (DIPC), DIPC-R and DIPC-SCALED, all of which were developed by Prof. Jane Ireland (e.g. Ireland, 1998; Ireland, 2005c). Such checklists remove the difficulty of relying on participants' varying perceptions of what constitutes 'bullying' and instead record the occurrence of behaviours deemed to indicative of bullying as defined by the author. These checklists allow researchers to measure bullying within prisons in a standardised manner; although it is recognised that the removal of the more subjective element of bullying also has its disadvantages, an issue which will be further discussed later.

The one included study that did not employ a behavioural checklist was Listwan et al. (2010), which instead used a 24-item 'coercion' scale to measure victimisation within prison. However, it was felt that this scale explored similar aspects of victimisation as compared to the behavioural checklists, including direct victimisation, witnessing victimisation and perceptions of coerciveness and threats.

### **Quantitative data synthesis**

As the majority of studies used the DIPC (or a version of this) to measure bullying, an effort has been made to statistically combine the results to explore average levels of bullying reported across all eighteen studies. However, it must be acknowledged that the distinct populations used within each study limit the ability to draw robust conclusions from this data synthesis, and thus the resulting statistics should be interpreted with caution.

The proportions of prisoners reporting bullying and victimisation within each study are reported in Table 4 below. Missing data indicates that these figures were not available in that study. A breakdown of direct and indirect bullying/victimisation is also provided in cases where this data were available. The proportions of prisoners classified as ‘pure bullies’, ‘pure victims’, ‘bully/victims’ and ‘not involved’ are shown for studies that provided this information.

**Table 4. Proportions of prisoners reporting bullying/ victimisation across studies and classification by DIPC category**

Study authors	Percentage of prisoners (%)									
	Bullying perpetration	<i>Direct bullying</i>	<i>Indirect bullying</i>	Bullying victimisation	<i>Direct victimisation</i>	<i>Indirect victimisation</i>	Pure bullies	Pure victims	Bully / victims	Not involved
Allison & Ireland (2010)	68	54	46	84	75	76	-	-	-	-
Archer & Southall (2009)	72	-	-	86	-	-	-	-	-	-
Grennan & Woodhams (2007)	46	-	-	46	-	-	16	16	29	38
Holland et al (2009)	32	11	28	52	28	42	12	31	21	36
Ireland (1999a)	61	52	39	45	34	32	26	10	35	29
Ireland (1999b)	-	-	-	-	-	-	21	15	37	28
Ireland (2001)	49	-	-	58	-	-	14	23	35	28
Ireland (2002)	-	-	-	-	-	-	11	18	35	36
Ireland & Ireland (2000)	55	26	49	57	36	46	12	14	43	31
Ireland & Ireland (2008)	67	43	63	81	68	72	15	12	32	41
Ireland & Power (2004)	45	30	35	40	25	33	18	14	26	42
Ireland & Qualter (2008)	29	16	14	48	35	38	6	25	23	46
Ireland et al (2007)	42	23	34	52	37	39	12	23	29	36
Palmer & Begum (2006)	-	-	-	-	-	-	37	7	43	13
Palmer & Thakordas (2005)	-	-	-	-	-	-	13	16	43	13
South & Wood (2006)	64	-	-	80	-	-	7	24	57	13
Turner & Ireland (2010)	74	49	70	87	60	81	13	11	39	38
Wood et al (2009)	39	-	-	60	-	-	7	28	33	33
<b>Mean</b>	<b>53.1</b>	<b>33.8</b>	<b>42.0</b>	<b>62.6</b>	<b>44.2</b>	<b>51.0</b>	<b>15.0</b>	<b>17.9</b>	<b>35.0</b>	<b>31.3</b>
<b>Range</b>	<b>29 - 74</b>	<b>11 - 54</b>	<b>14 - 70</b>	<b>40 - 87</b>	<b>25 - 75</b>	<b>32 - 81</b>	<b>6 - 37</b>	<b>7 - 31</b>	<b>21 - 57</b>	<b>13 - 46</b>

### ***Prevalence of bullying within prisons***

Fourteen studies provided figures for bullying perpetration and victimisation within their sample. The mean percentage of prisoners reporting behaviours indicative of bullying others was 54%, with a large range of 29-74%. The mean percentage of prisoners reporting behaviours indicative of being bullied was 63%, again with a large range of 40-87%. For the majority of these studies ( $n = 11$ ), the proportion of prisoners reporting bullying victimisation was higher than the proportion reporting bullying perpetration. Interestingly, all three studies that did not follow this pattern included young offenders either solely or as part of their sample (Grennan & Woodhams, 2007; Ireland, 1999a; Ireland & Power, 2004), suggesting that young offenders may be more likely to report bullying others compared to adult offenders.

Sixteen studies used the DIPC to categorise their participants into the four associated groups: 'pure bully', 'pure victim', 'bully/victim' or 'not involved'. For those studies that used the DIPC-SCALED, the 'not involved' category was termed the 'low frequency/casual involvement' group to reflect that some of these participants did report being involved in bullying at a minimal level. Across all sixteen studies, the mean percentage of prisoners classified as 'pure bullies' was 15% (range: 6-37%); 'pure victims' 18% (range: 7-31%); 'bully/victims' 35% (range: 21-57%); and 'not involved' 31% (range: 13-46%). In all studies, either the 'bully/victim' or 'not involved' group (or both in the study by Wood et al., 2009) represented the group containing the highest proportion of prisoners.

The study by Palmer and Begum (2006) stands out due to the high percentage of prisoners (37%) classified as 'pure bullies' in comparison to other studies. This study had the smallest sample size, so it is possible that such results could be a product of sampling bias. However,

it is also noteworthy that the five studies that included young offenders within their sample produced the five highest percentages of prisoners classified as ‘pure bullies’ (Palmer & Begum, 2006 (37%); Ireland, 1999a (26%); Ireland, 1999b (21%); Ireland & Power, 2004 (18%); Grennan & Woodhams, 2007 (16%)). It could be hypothesised that young offenders are more likely to be involved in bullying others than adult offenders; indeed, there are also high percentages of ‘bully/victims’ in some of these studies, suggesting prevalent reciprocal bullying and victimisation.

### *Nature of bullying behaviour within prisons*

Table 4 shows that nine of the included studies reported additional figures for direct and indirect bullying and victimisation. With regards to bullying perpetration, the mean percentage of prisoners reporting engagement in direct bullying was 34% (range: 11-54%), with the mean percentage for indirect bullying being 42% (range: 14-70%). Despite the higher mean percentage of prisoners reporting indirect than direct bullying, this pattern was not consistent across all studies. In three of the nine studies, direct bullying was reported by a greater proportion of prisoners than indirect bullying (Allison & Ireland, 2010; Ireland, 1999a; Ireland & Qualter, 2008). Ireland’s (1999a) study in particular showed a large difference in rates of direct and indirect bullying (52% vs. 39%), which perhaps reflects the sample population of young offenders. With regards to bullying victimisation, the mean percentage of prisoners reporting direct victimisation across all nine studies was 44% (range: 25-75%), with the mean percentage for indirect victimisation being 51% (range: 32-81%). The higher proportion of prisoners experiencing indirect victimisation compared to direct victimisation was reported in eight of the nine studies, although some of these discrepancies were small.

Some of the included studies went further to explore the prevalence of specific types of bullying behaviours within prisons. Three studies found that the most commonly reported bullying behaviour was verbal/psychological bullying (Ireland & Ireland, 2000; Ireland & Power, 2004; South & Wood, 2006), both in terms of self-reported perpetration and victimisation. Although Ireland and Ireland (2008) found that indirect and verbal/psychological bullying were the most commonly reported by their 'pure victim' group, for their 'bully/victim' group, coercion was the most common victimisation type reported. In all four of these studies, sexual bullying was reported the least (between 1% and 6.5% of participants).

### ***Personal and environmental characteristics associated with bullying***

A wide variety of personal and environment factors were explored within the nineteen studies included in the review. Given the heterogeneous nature of these factors, it is difficult to combine these to any extent; however attempts have been made to group studies with similar themes to aid interpretation of results.

#### *Demographic / background characteristics*

Several studies noted some significant associations between prisoners' demographic details and their involvement in bullying. For example, Ireland (2001) found that men were more likely to be classified as 'pure bullies' than females ( $\lambda = -.48, z = -1.67, p < .05$ ) and Ireland et al. (2007) found that women were more likely to be classified as 'pure victims' than men ( $\lambda = .30, z = 3.3, p < .01$ ). However, other studies that used a mixed gender sample (e.g. Ireland, 2002) did not find any significant differences across sex.

South and Wood (2006) found a significant main effect of age at first conviction in their sample ( $F(3, 128) = 5.88, p < .01$ ), with 'pure victims' being older than 'bully/victims', and 'pure bullies' being younger than 'pure victims'. Ireland et al. (2007) found that 'pure bully' and 'bully/victim' groups were significantly younger at the time of testing than the 'not involved' group ( $F(3, 1241) = 12.9, p < .001$ ). Although Ireland and Power (2004) noted a significantly higher proportion of young offenders reporting bullying than adult offenders ( $\lambda = .58, z = 2.12, p < .01$ ), there were no significant differences between young offenders and adult offenders with regards to classification into the DIPC groups.

A further background characteristic that some studies found to be associated with bullying was time spent in prison. For example, South and Wood (2006) reported a significant main effect of total time spent in prison ( $F(3, 128) = 5.55, p < .01$ ), with 'bully/victims' having spent more time in prison than 'pure victims' and those 'not involved'. Similarly, Ireland et al. (2007) found that 'bully/victims' reported significantly longer histories of time spent in secure settings than 'pure victims' and those 'not-involved' ( $F(3, 1,160) = 6.13, p < .001$ ). Although Ireland (2001) found no personal characteristics that predicted group membership within their male participants, in their female sample, membership of the 'bully/victim' group was predicted by longer sentence length, with membership of the 'not involved' group by a shorter sentence length. However, despite reporting demographic factors such as sentence length and previous prison experience, many studies did not appear to explore the impact of these potential confounding variables upon the results.

### *Personality traits*

Turner and Ireland (2010) explored whether particular personality characteristics were associated with bullying behaviour. Although they found no significant differences in

personality traits across DIPC groups, regression analysis revealed that ‘pure bullies’ were predicted by increased levels of neuroticism and ‘bully/victims’ by decreased levels of neuroticism. Ireland (2002b) explored prisoners’ assertiveness and how this may relate to their involvement in bullying. She found that levels of assertiveness were positively correlated with numbers of bully behaviours reported and negatively correlated with numbers of victim behaviours reported ( $p < .01$  for all correlations); however it should be noted that all of the correlation coefficients were below 0.3 in magnitude, representing weak correlations (Field, 2005). It should also be noted that assertiveness was measured using a self-report measure, which relies on participants being able to accurately reflect on their behaviour, something which some may find difficult.

Ireland (1999b) explored other personality characteristics that may relate to bullying and found some significant differences in individuals’ perspective taking skills ( $F(3, 280) = 6.96$ ,  $p < .0001$ ) and levels of empathy ( $F(3, 280) = 3.93$ ,  $p < .009$ ). The ‘pure bully’ group in her mixed sample of prisoners had lower scores on measures of perspective taking and empathic concern than the ‘pure victim’ group, suggesting that bullies may be less able to understand the effect of their behaviour upon others. However, significant sex differences were found on these scales, with women scoring higher than men (Perspective taking:  $F(1, 280) = 6.44$ ,  $p < .01$ ; Empathic concern:  $F(1, 280) = 17.43$ ,  $p < .0001$ ), which may have confounded this result.

### *Aggression and impulsivity*

A number of studies explored how aggression may relate to prisoners’ involvement in bullying. Palmer and Thakordas (2005) studied prisoners’ feelings and behaviour related to aggression. They found significant differences between the DIPC groups with regards to total



aggression scores ( $F(3, 66) = 3.46, p < .05$ ), with the 'bully/victim' group scoring higher than the 'not involved' group. There were significant positive correlations of moderate size between number of bullying items (direct and indirect) reported and scores for physical aggression, verbal aggression, anger and hostility ( $p < .01$  for all correlations). However, no significant correlations were found for victim items, except on the Hostility scale ( $r = .27, p < .05$ ).

Two studies explored prisoners' beliefs about aggression and whether they were associated with bullying (Holland et al. 2009; Turner & Ireland, 2010). Both found that bullies were likely to have higher levels of instrumental beliefs toward aggression (i.e. that aggression is a necessary act rather than an emotive reaction) than non-bullies. Also exploring beliefs about aggression, Archer and Southall (2009) reported that greater perception of the benefits of aggression was associated with bullying; although the best predictor of bullying perpetration was a combination of perceived benefits of aggression and lack of self-control (accounting for 24% of the variance). Other studies have also explored the role of a lack of self-control in bullying. Holland et al. (2009) found that 'bully/victims' were significantly more impulsive than 'pure bullies' ( $F(3,198) = 2.77, p < .05$ ), with victims being more impulsive than non-victims ( $F(1,101) = 6.68, p < .01$ ). This is an interesting finding, given that one might intuitively expect victim groups to be least impulsive. However, on reflection perhaps bullying itself (and successful avoidance of bullying) involves a degree of control and planning, which victim groups may lack.

#### *Attitudes towards victims*

Three of the included studies explored how prisoners' attitudes towards victims may be related to bullying behaviour. In her study of young offenders, Ireland (1999b) noted

significant differences in pro-victim scores across bully groups ( $F(3,288) = 6.72, p < .0002$ ), with the 'not involved' group scoring higher than 'pure bully' and 'bully/victim' groups, and the 'pure victim' group scoring higher than the 'pure bully' group. Similarly, Palmer and Begum (2006) found that 'pure victim' and 'not involved' groups of young offenders had significantly higher scores for pro-victim attitudes than the 'bully/victim' group ( $F(3, 56) = 3.54, p < .05$ ). However, these results did not appear to be replicated within an adult male sample (Ireland & Ireland, 2000), suggesting that the importance of attitudes towards victims of bullying may vary across age groups.

### *Social factors*

Several studies explored how social factors may be associated with bullying behaviour in prisons. South and Wood (2006) found that bullying behaviour amongst their adult male sample was positively related to the perceived importance of social status in prison ( $r = .32, p < .001$ ), with 'bully/victims' appearing to value social status more than 'pure victims' and those not involved in bullying ( $F(3, 128) = 5.22, p < .01$ ). Perhaps a desire for positive social status may represent one of the reasons that some prisoners engage in bullying behaviour.

Three studies explored aspects of social and moral reasoning. Although one study found no significant differences in the level of moral reasoning between the four DIPC groups (Palmer & Begum, 2006), two studies suggested that prisoners may use moral disengagement (the act of disregarding the effects of one's actions) when involved in bullying others (South & Wood, 2006; Wood et al., 2009). South and Wood (2006) found that 'pure bullies' and 'bully/victims' had higher levels of moral disengagement than 'pure victims' ( $F(3, 128) = 6.01, p < .01$ ); Wood et al. (2009) found that those not involved in bullying were significantly

less likely to use moral disengagement than ‘pure bullies’ and ‘bully/victims’ ( $F(3, 140) = 7.32, p < .001$ ).

Two studies investigated the links between bullying and levels of social loneliness amongst prisoners (Ireland & Power, 2004; Ireland & Qualter, 2008). Ireland and Power (2004) found a significant correlation between total emotional loneliness score and the number of victim items reported in their sample of young offenders ( $r = .23, p < .001$ ), suggesting that those individuals who experience bullying feel less intimacy within social relationships. Ireland and Qualter (2008) found a similar relationship amongst their adult sample, with the largest correlation noted between social loneliness and indirect victimisation ( $r = .31, p < .01$ ). However, it is worth mentioning that these correlations are relatively small in magnitude, and, as with all correlational relationships, one cannot infer a causal relationship between the two variables. Emotional and social loneliness could be hypothesised to increase the risk of experiencing bullying but could also be a result of experiencing bullying. A longitudinal study would be helpful in exploring the nature of this relationship.

Further exploring aspects of social relationships and bullying, Ireland and Power (2004) also found some significant differences in attachment styles between bully groups. ‘Bully/victims’ reported higher avoidant attachment scores than other groups ( $\lambda = 1.73, t = 3.66, p < .01$ ), with ‘pure bully’ and ‘not involved’ groups reporting lower avoidant scores ( $\lambda = -.93, t = -1.86, p < .05$  and  $\lambda = -.84, t = -2.09, p < .01$  respectively).

### *Behaviour*

In addition to providing information about the occurrence of bullying and victimisation experiences, the DIPC also contains items that measure positive/proactive behaviour, negative behaviour towards prison staff, and drug-related behaviour. Two studies explored these

behaviours within the context of bullying. Ireland et al. (2007) found that ‘pure bullies’ and ‘bully/victims’ reported more incidences of positive behaviour (e.g. helping another prisoner), negative behaviour (e.g. being abusive to a member of staff) and drug-related behaviour (i.e. buying, selling or using drugs) than other groups (Positive:  $F(3, 1253) = 528.8, p < .001$ ; Negative:  $F(3, 1253) = 569.4, p < .001$ ; Drug-related:  $F(3, 1253) = 556.7, p < .001$ ). ‘Pure victims’ also reported more incidences of negative and drug-related behaviour, whereas those ‘not involved’ reported fewer incidences of positive, negative and drug-related behaviour. Although Ireland (2001) described some similar results, there did appear to be some differences between men and women prisoners, for example male ‘bully/victims’ had higher rates of involvement in drug-related and proactive behaviour; whereas female ‘bully/victims’ showed increased negative behaviour.

Wood et al. (2009) explored the relationship between gang-related activity and bullying in an adult male prison and found significant differences across the DIPC groups ( $F(3, 140) = 7.142, p < .001$ ), with ‘pure bullies’ and ‘bully/victims’ reporting the highest levels of gang-related activity and ‘pure victims’ and ‘not involved’ showing the lowest levels.

### *Environment*

One study attempted to explore the impact of the prison environment upon bullying behaviour. Allison and Ireland (2010) found a positive association between prisoners’ perceptions of environmental factors thought to be supportive of bullying (e.g. lack of stimulation, material goods) and self-reported direct and indirect bullying behaviour (direct victimisation:  $r = .22, p < .01$ ; indirect victimisation:  $r = .27, p < .01$ ; direct perpetration:  $r = .19, p < .01$ ; indirect perpetration:  $r = .22, p < .01$ ). In particular, the environmental factors of rules, regulations and security were found to predict bullying perpetration ( $p = .04$ ).

### ***Psychological effects of bullying***

Several studies explored some of the psychological effects that bullying may have on those involved. Grennan and Woodhams (2007) found significant correlations between the total number of bullying behaviours experienced and levels of reported depression ( $r = .38$ ), anxiety ( $r = .38$ ) and stress ( $r = .35$ ) ( $p < .001$  for all correlations). The 'bully/victim' group was found to be significantly more depressed and stressed than those not involved in bullying ( $U = 289.50$ ,  $p = .001$  and  $p = .002$  respectively). However, there were no significant differences found for anxiety between the DIPC groups ( $\chi^2 (3, N = 99) = 13.53$ ;  $p = .004$ ). Listwan et al. (2010) found significant correlations between coercion and two measures of trauma ( $r = .22$ ,  $p < .01$  and  $r = .26$ ,  $p < .01$ ), suggesting a negative effect on psychological wellbeing. However, again, care must be taken not to assume a causal effect from such correlations.

Three studies reported how the victims of bullying in their samples responded to their experiences. In two of the studies, the most common reaction to bullying was crying, followed by staying in their cell, and lastly trying to get moved to a different location (Ireland, 1999a; 2001). However, these samples included young and female offenders, who may have different responses to adult male prisoners. For example, research on school bullying suggests that male and female children are likely to differ in their responses to bullying (Cowie, 2000). Ireland and Ireland (2000) found isolation was the most common reaction to bullying in their adult male sample, with crying still the second most common response (24%).

## Discussion

### Interpretation of findings

The current systematic review aimed to explore bullying within prison establishments. Nineteen cross-sectional studies were examined with the view to answering the following questions:

#### 1. What is the prevalence of bullying within prisons?

Across the fourteen studies that provided figures for the prevalence of bullying, an average of 54% of prisoners reported behaviours indicative of bullying perpetration and 63% reported behaviours indicative of bullying victimisation, as measured by the DIPC. However, there are such large ranges in these figures across studies (29-74% for bullying and 40-87% for victimisation) that it is difficult to draw meaningful conclusions from the mean percentages. Nevertheless, even if the lowest figure for bullying victimisation is considered, this still represents over one-third of prisoners reporting at least one experience of being bullied, which suggests a high level of bullying occurring within prisons.

The wide variation in bullying rates across studies could be due to a number of factors, including prison security level, population type, sample size and methodology. With regards to methodology, studies using the DIPC or DIPC-R (e.g. Ireland & Qualter, 2008) ask prisoners to rate whether or not they have engaged in or experienced bullying within the last *week*, whereas studies using the DIPC-SCALED (e.g. Turner & Ireland, 2010) ask prisoners to consider their experiences in the last *month*. Such differences in time periods studied are likely to impact upon the number of bullying behaviours reported. Indeed, the four studies

that employed the DIPC-SCALED (Allison & Ireland, 2010; Archer & Southall, 2009; Ireland & Ireland, 2008; Turner & Ireland, 2010) reported the highest figures of bullying perpetration and victimisation.

In the majority of studies, a higher proportion of prisoners reported bullying victimisation than perpetration. It could be hypothesised that this is due to a reluctance to report involvement in bullying others, perhaps due to the awareness that this behaviour is not generally socially acceptable. However, there are clearly a number of other factors that could influence the lower rates of bullying perpetration reported, for example a lack of awareness of how one's actions are perceived by others. Indeed, Ireland (1999b) found that bullies scored lower on measures of perspective taking and empathic concern compared to victims, suggesting they may have more limited insight into their behaviour.

It appears that there may be some important differences between young and adult offenders with regards to rates of victimisation and bullying reported. The three studies that found equivalent or higher rates of bullying perpetration than victimisation (Grennan & Woodhams, 2007; Ireland, 1999a; Ireland & Power, 2004) all employed samples containing young offenders, which might suggest that young offenders are more likely to engage in and/or be willing to report bullying others compared to adults. Both Ireland (1999a) and Ireland and Power (2004), who used a mixed sample of young and adult offenders, found that bullying and victimisation rates were higher among young offenders than adults. Ireland (1999a) suggests that this difference could be due to developmental differences in the use of aggression. It is also worth considering that, given bullying is commonplace within young age groups (e.g. within school settings) (Smith & Brain, 2000), perhaps young offenders may be more willing to disclose bullying others as it is somewhat normalised behaviour; whereas

amongst adult prisoners, bullying may be less socially accepted and therefore individuals may be more reluctant to admit their involvement. Clearly, further qualitative research would be beneficial in exploring differences in attitudes towards bullying between young and adult prisoners. Regardless of the underlying reasons for the differences found between age groups of prisoners, the findings highlight the potential confounding effect of combining young and adult offenders within the same study sample.

Sixteen studies used the DIPC to categorise their participants into the four associated groups, with an average of 15% of prisoners classified as 'pure bullies', 18% as 'pure victims', 35% as 'bully/victims' and 31% as 'not involved'. It has been proposed that the common occurrence of individuals reporting both bullying perpetration and victimisation could be due to the fact that admitting to being a 'bully/victim' is perceived as less stigmatising than being a 'pure victim', the latter of which is generally perceived as weak and vulnerable (Ireland, 1999a). By showing aggression towards those who attempt to bully them, 'bully/victims' may be attempting to assert their dominance and prevent future victimisation (Connell & Farrington, 1996). In support of this, Palmer and Thakordas (2005) found that their 'bully/victim' group scored highest on a measure of aggression. The categorisation of prisoners added further support to the proposition that young offenders are more likely to bully than adult offenders, with mixed age group studies finding that their 'bully/victim' groups were significantly younger than 'pure victim' and 'not-involved' groups (Ireland et al., 2007; South & Wood, 2006).

However, it is important to acknowledge that the definitions of bully categories vary slightly by study type. In those studies using the DIPC-SCALED as their measure of bullying, the 'not involved' group also included those prisoners who reported experience of low frequency



bullying. This does make it more difficult to draw meaningful conclusions from the combined data from all studies. It should also be recognised that categorisation into the DIPC categories is based purely on self-reported incidents of behaviour within a specific timeframe (one week for the DIPC and one month for the DIPC-SCALED). Thus category membership is likely to change over time, depending on what incidents have occurred during the specified period. Indeed, it appears that an individual's bully category membership may alter over the course of their prison sentence, with 'bully/victims' having spent more time in prison than 'pure victims' and those 'not involved' (Ireland et al., 2007; South & Wood, 2006). Some researchers have suggested that greater involvement in bullying with increased experience in prison is due to prisoners becoming increasingly desensitised to the prison culture of aggression and the impact of their behaviour upon others (O'Donnell & Edgar, 1998). A longitudinal study of group membership throughout prisoners' sentences would be helpful in further understanding the dynamic nature of bully categories.

## **2. What is the nature of bullying behaviour within prisons?**

Across the studies, higher rates of indirect bullying behaviours (e.g. gossiping, spreading rumours and ostracising) were reported by prisoners compared to direct bullying (e.g. physical, theft-related, psychological/verbal and sexual behaviours). This was the case for both bullying perpetration and victimisation. It has been suggested that the observed preference for indirect forms of bullying is due to its more subtle nature and thus it can be hidden from prison staff more so than direct acts of bullying (Ireland et al., 2007). Björkqvist (1994) proposed the 'effect/danger ratio' theory, which purports that individuals will attempt to maximise the impact of their aggression whilst minimising the cost to themselves. The

more subtle indirect bullying may therefore be perceived as less risky to the bully but with the desired negative impact upon the victim, hence its more frequent use.

However, it should be noted that several individual studies found higher levels of direct bullying (Allison & Ireland, 2010; Ireland, 1999a, Ireland & Qualter, 2008). Although Ireland (1999a) used a sample of young offenders, which may explain the higher rates of direct bullying in this study, there did not appear to be any clear explanation as to why higher rates of direct bullying were found within the other two studies. As with overall figures for bullying and victimisation, there were large discrepancies in figures for direct and indirect behaviours between studies, which should be considered when considering the interpretation of these results.

The most commonly reported bullying behaviour was verbal/psychological bullying, although this is only based on a small proportion of the studies as most did not report this level of analysis. Although verbal/psychological bullying represents a direct form of bullying behaviour, it is perhaps likely to be somewhat more subtle (and thus harder for staff to detect) than other forms of direct bullying, such as physical or theft-related. Sexual bullying was the least commonly reported form of bullying across all four studies that reported such figures. Despite general consensus on the type of bullying behaviours most commonly found in prisons, it should be noted that there may be some differences between bully categories (as seen in Ireland & Ireland, 2008) that have not been explored within most studies.

Our understanding of the nature of bullying in prisons is also limited by the measure of bullying used within the majority of studies. The use of behavioural checklists, such as the DIPC, means that participants are limited to choosing bullying behaviours listed on the questionnaire. There may be other forms of bullying experienced by participants that are not

covered by the predefined items and as such are overlooked. The use of qualitative research methods would be helpful in providing more information on the nature of bullying behaviours that are not covered by the standardised questionnaires.

### **3. What personal and environmental characteristics are associated with bullying behaviour in prisons?**

The studies included in this review explored a wide variety of personal characteristics and their relationship to bullying behaviour within prison. The heterogeneous nature of these characteristics makes it difficult to draw general conclusions. As previously discussed, demographic variables, such as age and time spent in prison, appear to have some effect on the bullying experiences of prisoners. Some studies using mixed-sex samples also suggested that there may be important differences in bullying across gender, for example women were less likely to be classed as ‘pure bullies’ (Ireland, 2001). Although, these differences were not consistently found across all studies, it raises the issue of validity in those studies that combine results from male and female prisoners. It also suggests that extrapolation of results from male to female prison populations and vice versa would not be appropriate.

Exploration of personal characteristics in this review suggests that bullies tend to be more assertive, less neurotic, poorer at perspective taking and less empathic, more aggressive, hold beliefs supportive of aggression, hold less positive attitudes toward victims, place greater importance on social status, and have higher levels of moral disengagement. Victims tend to also have higher levels of emotional loneliness. With regards to behaviour, although some studies suggested bully groups tended to show increased rates of positive, negative and drug-related behaviour, these results were not found consistently across studies. One study

suggested that bullies were likely to show higher rates of gang-related behaviour (Wood et al., 2009), although this was the only study included in the review that explored this area.

Only one study explored the impact of the prison environment upon bullying behaviour (Allison & Ireland, 2010) and found a positive association between bullying and perceived environmental factors thought to be supportive of bullying. It has been acknowledged that inmate subculture, which includes aspects of dominance and unwritten rules of not informing on one another, is likely to be a significant contributor to bullying within prisons (Ireland, 2000); however, this is difficult to measure and explore within the type of quantitative studies discussed in this review. As previously suggested, the use of qualitative research would be more useful to explore this area.

Although a better understanding of factors related to bullying is important to further our understanding of what may contribute to bullying within prisons, all the above mentioned relationships need to be interpreted with caution. Most of the associations have only been explored within one or two studies and therefore would need to be repeated in further studies in order to ensure such findings are valid. Also, a large number of the relationships between prisoner characteristics and bullying, although significant, were only weak in magnitude, often due to the relatively small sample sizes used.

#### **4. What are the psychological effects of bullying upon those prisoners involved?**

A small number of the included studies explored potential psychological effects of bullying. Grennan and Woodhams (2007) found significant correlations between experiences of bullying and levels of reported depression, anxiety and stress. Similarly, Listwan et al. (2010) found a relationship between coercion and trauma scores. However, although both these

studies suggest a relationship between bullying and psychological wellbeing, this does not imply causality. Without longitudinal studies exploring prisoners' psychological wellbeing prior to incarceration, it is unclear whether bullying has led to psychological stress or whether those experiencing greater psychological distress are more vulnerable to bullying, or even whether both psychological distress and bullying are influenced by another confounding variable.

Three of the studies included in this review did give a more descriptive insight into the effect of bullying on prisoners by using the DIPC to explore victims' reactions to being bullied. These found that crying, isolating themselves from others and attempting to get moved to a different location were the most common responses, suggesting that bullying does indeed have a significant negative emotional effect on those involved. However, it should be noted that two of the three studies used samples of mixed gender and age, which makes it more difficult to ascertain whether such responses would be seen within all types of prisoners. It is also noteworthy that the reactions to bullying were selected from predefined items; it may be that prisoners respond in ways other than those listed, which have not been explored. To complicate matters further, a recent qualitative study suggested that some of the coping strategies used by victims, such as deliberately ignoring others, could also be viewed as bullying behaviours themselves (Nelson, Woodhams & Hatcher, 2010).

### **Strengths and weaknesses of review**

The current systematic review has a number of strengths and limitations. With regards to the methodology of conducting the review, the use of strict inclusion/exclusion criteria meant that almost all included studies examined bullying in a similar way, which made it easier to

compare findings. However, this may have also introduced bias as relevant studies may have been inadvertently excluded. Similarly, due to time constraints only published English-language studies were included in the review, which again may have introduced a source of bias, particularly as studies with significant results are often more likely to be published in journals than those without (Cochrane Collaboration, 2002). It is noted that only one study included in the review was conducted outside of the UK, which clearly limits the ability to generalise the findings of the review to prisons in other countries.

Although the high quality threshold score used in this review ensured that only studies of good quality were included, this may have also led to the exclusion of potentially relevant studies. One of the criteria on the quality checklist was whether bullying was measured using a standardised tool. Given that there appears to be few standardised measures of bullying used in prison populations, this may have resulted in a biased proportion of studies that used the DIPC (or equivalent version) included in the review.

The main difficulty with researching bullying in any context is the variation in definitions of bullying, which can clearly have an impact upon a study's findings and interpretation. The advantage of the high number of studies using the DIPC within this review is that the concept of bullying was defined by the measure, and thus was relatively consistent across all studies; although even among different versions of the DIPC there were some variations in the timeframe over which bullying incidents were recorded. Such variations make it more difficult to draw overall conclusions. However, the greatest limitation of behavioural checklists, such as the DIPC, is that rates of bullying and victimisation are based on the researcher's perception of what behaviours are indicative of bullying others. There may not always be agreement between the researcher and the participants as to what behaviours are

perceived as bullying. In other words, if the victim does not perceive the behaviour as bullying, then it may not be appropriate for the researcher to label him as a victim. Similarly, the use of the DIPC could result in over-estimation of bullying within prisons as just one incident of bullying behaviour is counted as indicative of being bullied or bullying others; although this issue has been partly addressed within the DIPC-SCALED. Although the current review did not include qualitative studies as it was felt that the lack of statistical data would make it difficult to synthesise the findings alongside quantitative research, such studies would clearly be helpful in better understanding prisoners' subjective experiences and definitions of bullying.

With regards to the data collection methods used within the studies included in this review, the majority of studies distributed their measures to prisoners in their cells. Although this allowed a large proportion of the prisoners to be invited to participate (in some cases all prisoners), this strategy is also likely to have excluded those prisoners who had difficulties with reading and writing, or those who were out of their cells at the time of testing, perhaps working or attending education. The unintentional exclusion of these groups of prisoners may have introduced bias into a number of the studies. A further general limitation of using self-report questionnaires is that they rely on participants being accurate in their perception and reporting of their behaviour. Prisoners may have been reluctant to disclose victimisation and/or bullying for fear of stigmatisation or retribution, particularly in studies where participants completed questionnaires in the presence of researchers.

## **Conclusions and implications for practice**

In conclusion, the current review sought to systematically explore bullying within prison settings. The findings confirmed that bullying is commonplace amongst prisoners, with high rates of reciprocal bullying and victimisation. Indirect bullying was found to be more prevalent than direct bullying. However, although a strength of this review was the ability to statistically combine some of the findings of included studies to explore overall patterns of bullying amongst prisoners, the heterogeneous nature of the studies, such as variations in the age and gender of prison samples, means that the conclusions drawn should be interpreted with caution. Similarly, a number of personal characteristics were found to be associated with bullying, but again the ability to draw valid conclusions was restricted by the large variation in study populations and factors explored.

Despite its limitations, this review has some important practical implications. It reinforces the notion that bullying remains an important issue within prisons that requires intervention. The high rate of ‘bully/victims’ highlights the need to view bully status as dynamic and changeable; one cannot simply categorise prisoners into mutually exclusive groups of bullies or victims. The higher rates of indirect over direct bullying suggests that a large proportion of bullying behaviours amongst prisoners may go undetected by prison staff; hence it is important for prisons not to solely rely on official records of bullying to estimate the prevalence of its occurrence. Although behavioural checklists, such as the DIPC, represent useful tools to identify involvement in bullying and explore more subtle bullying behaviours that may be hidden from prison staff, they exclude the more emotive and subjective aspects of bullying, which are important to explore. Further qualitative research will be helpful in better understanding prisoners’ own perspectives of bullying and personal safety within prisons.



It is important that the trend in recent studies to explore the characteristics of bullies and victims continues in order to replicate and add strength to the associations already found. Additional longitudinal studies, exploring prisoners' psychological characteristics prior to and during incarceration will help to overcome the issues with causality noted in cross-sectional studies. The more that can be understood about potential risk factors and predictors of bullying behaviour amongst prisoners, the more this will aid prison services in developing effective anti-bullying intervention programmes.

The current chapter explored existing literature of bullying within prisons. The review suggests that prison bullying may have important psychological effects on those involved. The following chapter examines the psychometric properties of the Hospital Anxiety and Depression Scale (HADS), which has the potential to be a useful tool to assess psychological wellbeing within prison populations. The reliability and validity of the measure is discussed and evaluated, with reference to its use within prison settings.

## **CHAPTER THREE**

### **A CRITIQUE OF THE HOSPITAL ANXIETY AND DEPRESSION**

#### **SCALE (HADS; SNAITH & ZIGMOND, 1994)**

## **Introduction**

Anxiety and depression are two of the most common mental disorders found within the general population, with a 12-month prevalence of approximately 12% for anxiety disorders and 8% for major depression (Wittchen & Jacobi, 2005). These types of disorders represent considerable costs to public health services and the economy as a whole, given the number of lost work days (Greenberg, Stiglin, Finkelstein & Berndt, 1993). Clearly it is important for clinicians to be able to identify and treat anxiety and depression in their patients. However, research suggests that GPs tend to be rather poor at detecting such disorders (Lecrubier, 2007). To improve this, several psychometric tools have been developed to aid professionals to screen for depression and anxiety. One measure that examines both anxiety and depression is the Hospital Anxiety and Depression Scale (HADS; Snaith & Zigmond, 1994).

The aim of the current chapter is to review and critique the HADS. It begins with an introduction to the measure and its uses. It then examines the measure's psychometric properties and its comparability to other similar measures. Finally, conclusions are drawn as to its usefulness in clinical, forensic and research settings.

## **Overview of the HADS**

Developed by Zigmond and Snaith in 1983, the HADS was designed as a screening tool to help clinicians to identify and quantify anxiety and depressive states within outpatient populations. Although originally developed for use with non-psychiatric medical outpatients, it has since proved useful with other populations, including psychiatric patients and the general population (Crawford, Henry, Crombie & Taylor, 2001; Herrmann, 1997). The HADS is available in many different languages and in a Braille format (e.g. Mumford,

Tareen, Bajwa, Bhatti & Karim, 1991; Quintana, Padierna, Esteban, Arostegui, Bilbao & Ruiz, 2003).

The HADS is comprised of 14 items, seven of which relate to anxiety and seven relating to depression. The items selected for this measure were initially identified using item analysis of a list of items completed by hospital medical outpatients. Those items that correlated well with an independent assessment of anxiety or depression were included in the scale. Items that referred to somatic symptoms of psychological distress (e.g. insomnia, headaches) were excluded to avoid possible confusion with underlying medical illness.

To complete the HADS, patients are asked to read each item (e.g. "I feel tense or wound up") and to indicate which of four responses best describes to what extent they have experienced that feeling in the past week (e.g. "Most of the time", "A lot of the time", "From time to time, occasionally" or "Not at all"). Each item response corresponds to a numerical score from 0-3, which broadly reflects the severity of the feeling experienced by the participant. The test can be administered in 2-5 minutes. Once completed, the HADS is scored by summing the items that make up the Anxiety (HADS-A) subscale and those that make up the Depression (HADS-D) subscale. Scores can range from 0 to 21 for both the HADS-A and HADS-D subscales, with higher scores suggesting a higher level of state anxiety or depression respectively.

In terms of interpretation of the scores, Zigmond and Snaith (1983) initially proposed three ranges of scores indicating 'normal', 'possible' and 'probable' presence of a mood disorder. However, in their more recent manual (Snaith & Zigmond, 1994), they provide four score ranges – 'normal' (scores of 0-7), 'mild' (8-10), 'moderate' (11-14) and 'severe' (15-21) – which indicate the severity of anxiety and depressive states.

Since its development, the HADS has been used within clinical practice as well as in a large number of research studies. A review found over 700 research papers that had used the HADS as part of their study (Bjelland, Dahl, Haug & Neckelmann, 2002). In cross-sectional studies, the HADS has been used to compare levels of anxiety and depression among different patient populations (see Herrmann, 1997) and to investigate correlations between anxiety and depression and other relevant variables, such as physical health (e.g. Haug, Mykletun & Dahl, 2004) and quality of life (e.g. Smith, Gomm & Dickens, 2003). The HADS has also been employed in longitudinal studies, for example as an outcome measure following psychological intervention (e.g. Greer et al., 1992) or as a predictor of recovery from physical illness (e.g. Dahlén & Janson, 2002).

With regards to forensic applications, the HADS has been used within research studies to explore the psychological health of prisoners (Boothby, Cases, Carrington, Mulholland & Bolger, 2010; Lester, Hamilton-Kirkwood & Jones, 2003) and forensic inpatients within secure hospitals (Long, McLean, Boothby & Hollin, 2008). As Boothby et al. (2010) point out, self-report tools such as the HADS lend themselves well to densely populated prison settings, where psychiatrists may not have the time or resources to complete detailed assessment interviews with prisoners.

### **Psychometric properties of the HADS**

According to Kline (1986), a psychometric test can be described as a good test if it fulfils particular criteria. The measure should be at least an interval scale, be reliable, valid, discriminating, and have appropriate normative data (Kline, 1986). Each of these criteria will be discussed in relation to the HADS in the following sections.

### ***Scale***

The HADS scales can be described as interval scales, with scores on each item ranging from 0 to 3. These numbers indicate the magnitude of the difference between items. Although a score of 0 is possible, this does not represent a true zero point as it does not signify a complete absence of the construct, and therefore the scale cannot be termed a ratio scale. This is true of most psychometric tests. Nevertheless, the HADS's interval scale allows the quantification of anxiety and depression, which is an important aspect of a standardised measure. Numerical results are easier to report and compare than personal clinical opinions, and they also allow statistical analysis to be carried out, which is important when it comes to testing the reliability and validity of the psychometric test (Kline, 1986).

### ***Reliability***

The reliability of a test refers to its ability to measure something in a consistent manner (Kline, 1986). A score produced by a psychometric test, such as the HADS, is made up of the patient's true score plus an amount of measurement error. The more reliable the test, the smaller this measurement error, and thus the closer the estimate to the patient's true score. Reliability is clearly important in a test such as the HADS, as the clinician wants the observed HADS scores to be as close to the patient's true level of anxiety and depression as possible to allow appropriate decision making and intervention strategies.

There are two types of reliability that need to be considered. Firstly, one can examine a test to see whether the test items are measuring a similar construct, i.e. the test has internal consistency. In the HADS, all seven items of the HADS-D subscale should be closely related, as they are all intended to measure the construct of depression, and similarly all seven items of the HADS-A subscale should also be closely related. One widely used method of

measuring internal consistency is Cronbach's alpha ( $\alpha$ ; Cronbach, 1951), which calculates the average correlation of items in a test to see how closely related they are. Alpha coefficients can range from 0 to 1, with higher alpha coefficients representing higher internal consistency. Nunnally (1978, as cited in Kline, 1986) suggests that an alpha coefficient of 0.7 or above represents acceptable reliability.

Numerous studies have reported internal consistency statistics for the HADS-A and HADS-D scales. In their test manual, Snaith and Zigmond (1994) refer to a study by Moorey et al. (1991), who report a Cronbach's alpha of 0.93 for the HADS-A scale and 0.90 for the HADS-D scale. These alpha coefficients suggest very high reliability. However some researchers (e.g. Cattell & Kline, 1977) have argued that such high consistency between items may in fact be a disadvantage to a test. If all items on the test scale are highly correlated, then the test could be viewed as only measuring a narrow variable, with each item adding little new information to the test. Indeed, Moorey et al. (1991) point out that the HADS excludes a number of components of anxiety and depression, including somatic symptoms, which may result in only a narrow aspect of depression and anxiety being measured.

Other studies have reported slightly lower values of Cronbach's alpha. Bjelland et al. (2002) found 15 papers that reported on the internal consistency of the HADS. Across these studies, Cronbach's alpha varied from 0.68 to 0.93, with a mean of 0.83, for HADS-A and from 0.67 to 0.90, with a mean of 0.82, for the HADS-D. This supports the notion that the HADS subscales are internally consistent. However, it is important to note that some of the studies within the aforementioned review had relatively small sample sizes and used distinct populations compared to Zigmond and Snaith's (1983) original sample of non-psychiatric medical outpatients. Kline (1986) states that for reliability studies, sample sizes should ideally be at least 200 participants and they should reflect the population for whom the test

was designed. Eight of the 15 studies that reported reliability figures had sample sizes below 200, and some used samples from community settings (e.g. Dagnan, Chadwick & Trower, 2000) and samples containing psychiatric patients (e.g. Bedford, Pauw & Grant, 1997). Nevertheless, several large representative studies (Crawford et al., 2001; Herrmann, 1997) have found similar levels of high internal consistency as those reported in smaller studies. Overall the findings on internal consistency suggest that the HADS is indeed a reliable measure.

The second type of reliability that can be examined is test-retest reliability, which is a test's consistency over time. More specifically it refers to a test's ability to produce the same score for a participant on two separate occasions, given that the participant has not changed in between testing (Kline, 1986). One use of the HADS is to measure change in someone's levels of anxiety or depression following intervention; therefore it is important for clinicians to know that any change they do see is likely to represent a true change in the patient's psychological health and is not simply down to poor reliability of the measure. The test-retest reliability is calculated by measuring the correlation between participants' scores on two separate occasions. If the test is reliable, one would expect the correlation between the two scores to be high, i.e. above 0.7 (Field, 2005).

It could be argued that test-retest reliability is not appropriate for a measure such as the HADS because the scale's focus is on emotional states that can change from week-to-week, or even day-to-day. Test-retest reliability is likely to be more meaningful for psychometric tools that measure more stable constructs, such as intelligence. Nevertheless, Snaith and Zigmond (1994) state that test-retest reliability can be established in healthy participants, and they report correlations of 0.89 for the HADS-A and 0.92 for the HADS-D (unpublished study). They do not state, however, how long the period was between initial testing and later retest.



Herrmann (1997) reports the findings from a large study of the HADS German version where they found test-retest correlations of 0.84 (HADS-A) and 0.85 (HADS-D) after 2 weeks, which decreased over time to correlations of 0.70 for both scales after 6 weeks. This suggests that the HADS is able to produce consistent results across time, and therefore shows good levels of test-retest reliability.

Overall, research appears to suggest that the HADS is a reliable measure, both internally and over time. However, reliability does not necessarily mean that the test is an accurate measure of anxiety and depression. In order to ascertain whether the HADS is actually measuring what it claims to measure, its validity must be examined.

### ***Validity***

As stated above, validity refers to whether a test is measuring what it claims to measure (Kline, 1986). There are several ways of examining the validity of a test, which will be discussed below.

Firstly, it is important that the test superficially appears to be a good measure of the construct. This is referred to as *face validity* (Kline, 1986). If a participant does not feel that the test is a valid measure (e.g. if it appears to be asking irrelevant questions), then they are unlikely to be willing to complete it. The HADS appears clear in its approach, specifying to patients that ‘the questionnaire is designed to help [their] clinician to know how [they] feel’. All questions relate to either anxiety or depression and the questionnaire is short and quick to complete, therefore it is likely to be acceptable to most patients. Indeed, most studies report high response rates, for example in their large non-clinical sample, Crawford et al. (2001) had a response rate of 82%. Therefore it appears that the HADS does have good face validity.

A second way of assessing the validity of the HADS is to compare its scores to other tests that are known to be valid measures of depression or anxiety. This is called *concurrent validity* (Kline, 1986). There are a number of other tests that have been developed to assess anxiety or depression, such as the Beck Depression Inventory (BDI; Beck, Steer & Garbin, 1988) and the State Trait Anxiety Inventory (STAI; Spielberger, Gorsuch & Lushene, 1970), to which the HADS scales could be compared. However, before examining the correlations between HADS and other measures, it is worth considering why the HADS is needed if there are other valid tests of depression and anxiety. One benefit of the HADS over other measures is its brevity. It contains only 14 items (compared to BDI's 21 items and the STAI's 40 items) and is therefore quick to administer and score. Another benefit of the HADS is that it measures both depression and anxiety within the one test, thus reducing the number of questionnaires that a patient is required to complete. Furthermore, because the HADS excludes somatic symptoms associated with depression and anxiety, symptoms of physical illness cannot be misinterpreted as indicators of depression or anxiety (Herrmann, 1997).

Returning to the question of concurrent validity, several studies have reported good correlations (i.e. above 0.7) between the HADS and a wide variety of other measures of anxiety or depression, including the BDI (e.g. Savard, Laberge, Gauthier, Ivers & Bergeron, 1998) and the STAI (e.g. Elliot, 1993). In their review of studies, Bjelland et al. (2002) found correlations between the STAI and the HADS-A of 0.64 to 0.81, and between the BDI and the HADS-D of 0.62 to 0.73. The magnitudes of these correlation coefficients suggest good concurrent validity between the HADS and other accepted measures of anxiety and depression. However, it is noteworthy that moderate to high correlations have also been found between the BDI and the HADS-A (see Bjelland et al., 2002). This is surprising given that the BDI is designed to measure depression, whereas the HADS-A scale is designed to

measure anxiety. It may therefore be important to examine the HADS-A and HADS-D scales in more detail to assess whether they are actually measuring distinct constructs.

One way of examining the scales is to assess their *content validity*. This refers to the degree to which the items in the scale (i.e. the 'content') reflect all features of the construct being tested (Kline, 1986). With anxiety and depressive states, this is rather difficult to establish as the constructs are not clearly defined and definitions may vary between clinicians (Keedwell & Snaith, 1996; Kendler, Neale, Kessler, Heath & Eaves, 1992). However, the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association, 1994) does provide diagnostic criteria for anxiety and depressive disorders. In comparison to the DSM-IV criteria, it is apparent that both the HADS-A and HADS-D scales lack the somatic symptoms (e.g. changes in appetite and sleep) associated with depression and anxiety. The HADS-D scale focuses predominantly on anhedonia (or an inability to experience pleasure) rather than any of the other aspects of depression, such as feelings of worthlessness. The HADS-A scale appears to mainly assess feelings of worry, tension and restlessness, and does not explore difficulties with concentration, fatigue and irritability, which are included in the DSM-IV criteria for Generalised Anxiety Disorder. This suggests some lack of content validity as there is the potential for some important aspects of anxiety or depression to be missed when using the HADS. However, Zigmond and Snaith (1983) argue that the exclusion of somatic symptoms actually improves the validity of the HADS as it minimises the risk of symptoms of physical illness being inadvertently interpreted as signs of depression or anxiety.

By exploring the DSM-IV definitions of anxiety and depression, it is clear that there is some degree of overlap in symptoms of these disorders, for example both anxiety and depression are associated with fatigue and difficulties concentrating. Given that the HADS provides

separate scores for anxiety and depression, it is important that the HADS-A and HADS-D scales are measuring distinct constructs. Hence, this may also explain the exclusion of certain symptoms of anxiety and depression in the HADS, in order to avoid cross-over of symptoms and blurring of disorder types.

One way of assessing whether the HADS-A and HADS-D scales are likely to be measuring distinct areas is to examine the *factorial validity* of the measure. Factor analysis is used to reduce a large number of variables into a fewer number of factors based on underlying relationships between the variables (Field, 2005). If variables are measuring a similar construct, one would expect them to make up one factor, whereas variables measuring a different construct would be expected to fall into a separate factor. Most studies that have performed factor analyses on the HADS have confirmed the two-factor model originally proposed by Zigmond and Snaith (1983), i.e. that there are two distinct factors: the HADS-A and HADS-D scales (see Cosco, Doyle, Ward & McGee, 2012, for a recent review). This would suggest that the two subscales do indeed measure two independent dimensions of mood. However, there have been some studies which have produced three-factor (Dunbar, Ford, Hunt & Der, 2000) and even four-factor models (Lloyd-Williams, Friedman & Rudd, 2001), suggesting that the distinction between the anxiety and depression constructs may not always be clear cut. Although it is worth noting that factors such as the study population and statistical methodology used are likely to have an impact upon the factorial analysis. For example, in the review by Cosco et al. (2012), five of the seven studies that used cardiac patients as their sample found three-factor structures, whereas only one of the studies using cancer patients revealed a three-factor model. Nevertheless, despite such variations, it appears that the majority of studies support the bidimensional model of the HADS.

However, valid factorial structure of the HADS does not necessarily mean that the two HADS scales are able to discriminate between anxiety and depression. If the HADS scales are measuring distinct constructs (depression vs. anxiety), one would expect the HADS-A to be able to screen and identify patients with anxiety disorder more accurately than the HADS-D, and similarly the HADS-D scale to identify patients with depressive disorder more accurately than the HADS-A. Costantini et al. (1999) examined this by administering the HADS to patients and later following this up with a clinical interview and diagnosis using DSM-III criteria. The ability of the two HADS scales to accurately identify patients with anxious and depressive moods was then examined using ROC analysis. They found that the HADS-A was not statistically more accurate than the HADS-D at identifying anxiety, and the HADS-D was not statistically more accurate than the HADS-A at identifying depression. This suggests that the discriminant validity of the two HADS scales may be poor, although it is important to note that the sample was relatively small in this study ( $n = 132$ ).

The disappointing discriminant validity of the scales is consistent with other studies who have found moderate to high correlations between the HADS-A and HADS-D subscales (e.g. Crawford et al., 2001; Savard et al., 1998). In their review, Bjelland et al. (2002) calculated a mean correlation coefficient of 0.56. This relationship between the two factors suggests that there is a moderate degree of overlap between the concepts of anxiety and depression as measured by the HADS. Indeed, many studies have reported extensive comorbidity between anxiety and depression in both clinical settings and the general population (Kessler, Nelson, McGonagle, Liu, Swartz & Blazer, 1996; Sartorius, Ustun, Lecrubier & Wittchen, 1996). This conflicts with Snaith and Zigmond's (1983) intention for the HADS to clearly distinguish between the concepts of anxiety and depression. Kline (1986) proposed that the

ability to discriminate is an important aspect of a good psychometric test. It therefore seems that the HADS may be somewhat limited in this area.

Given the correlation between the HADS-A and HADS-D scales, some researchers have argued that it is appropriate to combine scores from both scales to produce a single measure of psychological distress (Crawford et al., 2001; Hermann, 1997). However, the HADS Total score appears to be a difficult construct to define, being a combination of both anxiety and depression variables. Nevertheless, many studies have shown the HADS Total score to be a good predictor of a subsequent diagnosis of anxiety or depressive disorders (Costantini et al., 1999; Wilkinson & Barczak, 1988). However, some studies have found poorer positive predictive value of the HADS Total score (Silverstone, 1994). It appears that further studies are needed to examine the validity and usefulness of using the HADS Total score in clinical settings and within research studies.

As well as predicting a future diagnosis of a psychiatric disorder, attempts have been made to make other predictions from patients' HADS scores. The degree to which a test is able to make useful predictions is termed its *predictive validity* (Kline, 1986). In order to measure predictive validity, correlations are made between the test score and a related variable measured at a later date. The one difficulty with this approach is determining what criterion to predict. For the HADS, some studies have attempted to predict physical outcomes for patients based on their HADS scores. For example, Graver et al. (1995) found that clinical outcomes of back surgery were significantly predicted by patients' HADS-A scores. Mayou et al. (2000) found that anxiety and depression, as measured by the HADS, significantly predicted quality-of-life scores in heart attack patients at one year follow-up. Some studies have attempted to use the HADS to predict mortality in patients with serious physical illness but these studies have not produced significant results (Jenkins, Lester, Alexander &

Whittaker, 1994). It is likely that there are a number of other variables that affect rates of mortality, such as coping style and social support (Hoodin & Weber, 2003), and therefore it is likely that the relationship with anxiety and depression will be moderate at best. Overall it appears that the HADS does have some predictive validity for certain criteria, but this area of validity clearly needs further investigation.

### *Normative data*

The final criterion that Kline (1986) proposed a good psychometric test should fulfil is having appropriate normative data. Normative data enables clinicians and researchers to compare their patients' HADS scores to those obtained by a standard group, thus enabling useful inferences to be drawn about the severity of their patients' disorders (Kline, 1986). Until relatively recently, normative data was not available for the HADS. Instead, cut-off values were used to decide whether an individual's score represented a 'true case' of anxiety disorder or depression.

Many studies have used statistical analysis to calculate the best cut-off score for the HADS scales to ensure the measure has the optimal balance of sensitivity and specificity (e.g. Abiodun, 1994; Silverstone, 1996). When used as a screening tool for anxiety and depression, clinicians need to be confident that the HADS will accurately identify those individuals with problematic levels of anxiety or depression (sensitivity) whilst not incorrectly identifying those without the disorders (specificity). In their review, Bjelland et al. (2002) found that the most frequently reported cut-off value was 8+ for both the HADS-A and HADS-D scales. In other words, those scoring 8 or more on the scale are likely to have a clinical level of mood disorder. This cut-off value corresponds reasonably well to the score ranges provided in the HADS manual (Snaith & Zigmond, 1994), which suggests scores of 8-

10 represent a mild state of anxiety or depression. Bjelland et al. (2002) found moderate to high levels of sensitivity and specificity of the HADS-A and HADS-D (AUCs of 0.70 to 0.90) when the cut-off value of 8 was used. This suggests that the HADS has good case-finding abilities when used as a screening tool for anxiety and depression. It is important to recognise, however, that the optimal cut-off value is likely to change depending on the setting in which the HADS is being used. For example, in a setting where it is important to identify almost all cases of mood disorder, such as within early intervention services, then a low cut-off score is more likely to be used (Herrmann, 1997).

Normative data has been produced for the English version of the HADS using a large non-clinical population (Crawford et al., 2001). This data can provide clinicians with additional information as to how common their patient's score is found in the general population. Interestingly, Crawford et al. (2001) found that one-third of their study sample scored 8 or more on the HADS, which could be suggestive of a lack of specificity for this population, i.e. a large number of individuals may be misidentified as clinically anxious and/or depressed. A cut-off score of 8 may not be as appropriate in the general population as it is in medical settings. Within the general population, clinicians, such as GPs, are likely to want to focus their resources only on those who require further investigation or treatment for the disorder, and as such a higher cut-off score may be more useful.

Although there have not been a large number of studies using the HADS within forensic settings, Boothby et al. (2010) explored the utility of the measure in detecting emotional distress in prisoners. They found that the HADS Total score was effective in identifying those prisoners who were emotionally distressed (with 89% sensitivity and 74% specificity); however, they did not explore the HADS-A and HADS-D scales separately. Nevertheless,



with further research, they suggest that the HADS could represent a useful screening measure for distress within prison populations.

## **Conclusions**

This chapter has examined the psychometric properties of the HADS in detail. Overall, the HADS appears to be a reliable and valid tool for screening patients for anxiety and depressive disorders. According to Kline (1986), in order to be described as a good test, a psychometric measure should be at least an interval scale, be reliable, valid, discriminating, and have appropriate normative data. The HADS has been shown to fulfil many of these requirements.

The measure appears to have high internal consistency as well as good test-retest reliability. It compares well to other instruments designed to measure anxiety and depression, although is somewhat narrower in the constructs it is measuring due to exclusion of somatic symptoms of mood disorder. Factorial validity has generally been confirmed, with most studies agreeing with the original two-factor structure. However, given the high correlations between the two subscales, one should be cautious when using these as separate measures of anxiety and depression. The HADS Total score may be a useful measure of psychological distress but further validation of this construct is needed. Cut-off scores are useful in determining cases of anxiety and depression but further population-specific normative data would be a useful addition to these.

The HADS has clear clinical benefits, enabling clinicians to identify those patients who may require further psychiatric diagnosis and intervention. Most studies to-date have focused on the use of the HADS within clinical settings, including hospitals and GP surgeries. However, more recent studies have explored the utility of the HADS within more diverse settings where

emotional distress is likely to be a concern, including prisons (Boothby et al., 2010). Further research is needed to ascertain whether such a measure would represent a useful and valid screening tool for anxiety and depression within prison populations.

The current chapter explored the validity and utility of the HADS to measure levels of anxiety and depression within clinical populations. There is recent research to suggest that this tool may also be useful with forensic populations. The following chapter of this thesis aims to explore the influence of perceived safety and social support on the psychological wellbeing of prisoners in open conditions, using the HADS as a measure of participants' levels of anxiety and depression.

## **CHAPTER FOUR**

# **EXPLORING THE INFLUENCE OF PERCEIVED SAFETY AND SOCIAL SUPPORT ON THE PSYCHOLOGICAL WELLBEING OF PRISONERS IN OPEN CONDITIONS**

## **Abstract**

**Background:** There is little doubt that being incarcerated is a stressful experience for many prisoners. Previous research has attempted to explore various environmental, social and psychological factors that affect individuals' ability to adjust to prison life, including personal support and perceived safety. By developing our understanding of these factors, the support offered to prisoners can continue to be improved.

**Aims:** The aim of this study was to better understand prisoners' perceptions of their safety and social support within an open establishment and explore how these experiences relate to their levels of psychological wellbeing.

**Method:** A mixed-method design of quantitative and qualitative approaches was employed. A sample of 43 adult male prisoners from a UK-based open prison completed measures of psychological wellbeing, social support and safety. Seven of these participants also completed an additional interview exploring these concepts in more depth.

**Results:** Quantitative analysis revealed low levels of anxiety and depression with high levels of perceived safety amongst prisoners. There were some significant differences in social support according to levels of anxiety and depression but only with certain personal relationships. Qualitative template analysis revealed a number of themes related to prisoners' experiences of relationships, support and safety.

**Conclusions:** Although the small sample size limited the extent to which conclusions could be drawn about the relationship between psychological wellbeing, social support and safety, the additional qualitative data helped to further our understanding of prisoners' experiences of

these factors within an open establishment. The findings are discussed in relation to methodological limitations, implications for practice and areas for future research.

## **Introduction**

### *Prison and psychological wellbeing*

There is little doubt that being incarcerated is a stressful experience for many prisoners. Research studies suggest that imprisonment is associated with an increased risk of suffering psychological problems, including anxiety and depression (Cooper & Berwick, 2001; Cooper & Livingston, 1991; Zamble & Porporino, 1990). In their systematic review of 62 prison studies, Fazel and Danesh (2002) found that an average of 3.7% of male prisoners had a psychotic illness, with 10% suffering from major depression. Lester, Hamilton-Kirkwood and Jones (2003) found that 65% of their male prisoner sample reported levels of anxiety and depression above the 'normal' level, as measured by the Hospital Anxiety and Depression Scale (HADS; Zigmond & Snaith, 1983). Such mental health disorders can have potentially fatal consequences. Fazel, Benning and Danesh (2005) calculated that between 1978 and 2003, suicide in male prisoners in England and Wales was approximately five times more common than in the general male population of similar ages. In 2010, there were 58 self-inflicted deaths recorded in prisons in England and Wales, with 26,983 incidents of self-harm recorded (MoJ, 2011).

However, not all research studies have found long-term negative effects associated with imprisonment (e.g. Bonta & Gendreau, 1990) and some have found that initial poor psychological health improved after several months of being in prison (Zamble & Porporino, 1990). This suggests that the negative psychological effects of imprisonment may lessen as the prisoner becomes more adjusted to prison life. Successful adaptation to prison may depend on a number of factors, including the prisoner's background, individual characteristics, situational factors and the environment (Power, McElroy & Swanson, 1997).

### *Importation versus deprivation*

Over the years, there have been two main theoretical models proposed to explain the difficulties some individuals face when attempting to adjust to prison life. The importation model (Irwin & Cressey, 1962) focuses on the importance of pre-existing individual characteristics and attitudes of inmates that are ‘imported’ with them to prison, including demographic factors, prior experience in prison and family life. Importation theory suggests that these characteristics are critical components in determining how well prisoners adapt emotionally to life behind bars. Within the context of this model, the higher frequency of suicide found within prison populations would be explained by the notion of a pre-existing link between criminal behaviour and mental health difficulties (e.g. Hodgins, Cree, Alderton & Mak, 2008), resulting in a disproportionate number of individuals with mental illness entering the prison system. However, the importation theory has been criticised for ignoring the importance of the prison context and failing to recognise the impact that the experience of being in prison can have on individuals’ mental health (Liebling, 2006).

In contrast, the deprivation model (Clemer, 1940, as cited in Dye, 2010) places emphasis on the psychological distress that is caused by the restrictive prison environment and associated losses. In their paper discussing the ‘strains’ of imprisonment, Blevins, Listwan, Cullen and Jonson (2010) focus on the loss that is experienced by the removal of positively valued stimuli in prison, including a lack of control, privacy and personal identity. Such deprivations are proposed to have a significant impact upon prisoners’ psychological wellbeing and adjustment. Studies have supported the proposition that low levels of perceived autonomy are associated with feelings of anxiety, depression and stress (Goodstein, MacKenzie & Shotland, 1984; Wright, 1993). It has been suggested that a perceived lack of control, for example

within high security prisons or strict regimes, may additionally cause increased misconduct from prisoners as they react negatively to feelings of restriction (Camp, Gaes, Langan & Saylor, 2003; Steiner & Wooldredge, 2008). Inadequate living conditions and overcrowding within prisons have also been found to contribute to poor psychological health of prisoners (Paulus, Cox, McCain & Chandler, 1975). A further significant loss or deprivation experienced by most prisoners is a reduction in contact with family and friends on the outside, which is likely to reduce their access to important sources of social support.

### *Social support in prison*

Research has long highlighted the positive effect of supportive relationships on psychological wellbeing (e.g. Cohen & Wills, 1985). It is suggested that social support can act as a buffer against stress and trauma, through the supportive actions of others and even just the belief that such support is available (Lakey & Cohen, 2000). Supportive actions, such as advice and reassurance, are seen as improving one's ability to cope with stress, whilst the perception of available support is thought to change our appraisal of challenging situations, helping us to view them as less stressful (Lakey & Cohen, 2000).

A number of research studies have found an association between levels of social support and psychological health within prisons. For example, Wooldredge (1999) found that prisoners who received fewer social visits each month tended to be more depressed and anxious than those who received a larger number of visits. In a study of UK prisons, Liebling (1992) found that prisoners who had attempted suicide while in custody reported lower levels of contact with family and others outside prison. In one recent study, social support was also found to mediate some of the negative effects of prison discomfort, which appeared to help lower levels of hostility among prisoners (Hochstetler, DeLisi & Pratt, 2010). Further studies have



also supported the association between higher levels of social support and lower levels of misconduct within prisons (e.g. Jiang, Fisher-Giolando & Mo, 2005).

In addition to actual social support provided by others, some researchers have also demonstrated the importance of the perception of available support. Biggam and Power (1997) studied important relationships (both inside and outside prison) of incarcerated young offenders and found that those prisoners who perceived a deficiency in social support (regardless of actual levels received) were more likely to be psychologically distressed.

Biggam and Power (1997) also noted that staff-prisoner relationships were important to successful adjustment to prison life. In their study, a perceived lack of support from prison officers in particular was an important predictor of anxiety, depression and hopelessness. The Prison Service has recognised the importance of social support for prisoners, introducing personal officers to provide support to allocated prisoners and formalised peer-support schemes such as the Listener Scheme, where trained prisoners provide support to peers in distress (Davies, 1994). It may be that some inmates attempt to compensate for the loss of contact and social support from those outside prison by establishing new relationships with their fellow prisoners. However, these relationships are likely to be complicated by challenging prison dynamics, including the frequent occurrence of coercion and bullying within prison environments (Listwan, Colvin, Hanley & Flannery, 2010).

#### *Victimisation within prison*

Bullying and violence within prisons has been well researched over the last decade (e.g. Edgar, O'Donnell & Martin, 2003; Ireland & Power, 2004), with pervasive high rates of victimisation reported. In their US study, Blitz, Wolff, and Shi (2008) found that 35% of male inmates and 24% of female inmates reported being subject to physical victimisation in

prison. However, when examining a wider range of bullying behaviours beyond solely physical violence, estimates of victimisation have reached figures of over 50% of prisoners in UK studies (see Chapter Two). Clearly, such figures are likely to vary depending on the definition and assessment of bullying or victimisation used. Ireland and Snowden (2002) propose a number of environmental factors that may contribute to high levels of bullying noted within prisons, including limited material goods, high turnover and/or density of inmates, predictable and/or limited staff supervision, lack of stimulation, and prisoner social hierarchies.

Unsurprisingly, research studies conducted in prisons have found significant relationships between victimisation experiences and psychological distress (Boxer, Middlemass & Delorenzo, 2009; Hochstetler, Murphy & Simons, 2004; Wooldredge, 1999). For example, in their study of young offenders, Grennan and Woodhams (2007) found that individuals who reported both bullying and victimisation were more depressed and stressed than those who reported being uninvolved in such behaviours. Bullying has also been associated with an increased risk of self-harm and suicide within prisons (Blaauw, 2005). It is also important to remember that those prisoners who do not experience direct victimisation during their custodial sentence are still likely to witness aggression or bullying of others, which may induce some degree of fear (Listwan et al., 2010). One would expect that fear of victimisation is likely to affect individuals' perceptions of safety within prison.

### *Prison safety*

Few studies have specifically examined prisoners' fear or perceptions of safety, perhaps due to the difficulty in defining and measuring such concepts. Ireland (2005b) highlights the often overlooked distinction between fear and safety, suggesting that 'fear' is an emotional

response to a perceived stimulus whereas ‘safety’ is a judgement based on more cognitive processes, for example whether one can avoid or protect oneself from the fear-inducing stimulus. Edgar, O’Donnell and Martin (2003) suggest that prison settings provide three conditions that are likely to produce feelings of fear: exposure to high risk situations, a lack of control over one’s environment and the expectation of serious consequences (i.e. aggression or violence).

The few studies that have been conducted in this area suggest that prisoners with direct experience of victimisation are likely to experience higher levels of fear than those without (e.g. O’Donnell & Edgar, 1999). Ireland (2005b) suggests that fear may be further intensified by the inmate code of not informing on fellow prisoners, resulting in a reluctance to report victimisation to staff. However, despite the high levels of victimisation within prisons, and its apparent negative effects on those involved, research generally reports relatively high levels of perceived safety by prisoners (Edgar et al., 2003; O’Donnell & Edgar, 1999). Attempts have been made to explain this ‘safety paradox’ by exploring individual characteristics of prisoners, particularly their development of precautionary coping strategies (Ireland, 2005). McCorkle (1992) found that a high percentage of prisoners (78%) engaged in at least one type of behaviour that could be seen as attempts to increase their feelings of safety. McCorkle characterised these behaviours as either ‘passive precaution’, such as keeping to themselves or avoiding certain areas of the prison, or ‘aggressive precaution’, which included getting tough or carrying a weapon. The use of avoidance coping strategies has also been noted in other prison studies (Grennan & Woodhams, 2007; Gullone, Jones & Cummins, 2001; Nelson et al., 2010).

Ireland (2005b) explores coping strategies within the framework of the 'fight or flight' response (see Berkowitz, 1998), suggesting that immediate 'fight or flight' responses to victimisation are complicated by the prison setting. The restrictive prison environment offers little opportunity for inmates to physically escape from peers ('flight' response) and attempts to react with aggression ('fight' response) are likely to result in punishment. However, as Ireland (2005b) points out, a 'fight' response may be favoured as it could produce a delayed positive outcome, whereby the victim is moved to segregation away from their bullying peers for a period (delayed 'flight' response). Nevertheless, given the potential risks associated with challenging a fellow inmate, including injury, further victimisation, and negative impact upon sentence plan, it is understandable why many prisoners instead may choose to try to avoid potential conflict. Referring back to the importance of social support within prison, the ability to form allegiances with other inmates and gain acceptance is likely to play a significant role in helping to avoid victimisation (Biggam & Power, 1997).

In summary, it appears that successful adaptation to prison is likely to depend on many factors, both imported prisoner characteristics, such as personal histories and psychological vulnerabilities, and environmental factors, such as a lack of social support and the presence of a bullying culture. A combination of these factors is likely to go some way in explaining prisoners' psychological wellbeing; however it remains a complex interaction, which continues to require further exploration. Understandably, the main focus for prison-based research over the years has been the effectiveness of intervention programmes in reducing future reoffending (e.g. Tong & Farrington, 2006), rather than prisoners' psychological wellbeing. However, given the potential consequences of poor psychological health in prisoners, both at an individual level (e.g. increased risk of self-harm and suicide) and at an organisational level (e.g. increased need for support services and intervention) (Monks et al.,

2009), it is clear that furthering our understanding of the factors involved in ‘surviving’ the prison experience will be beneficial. Recent research has also highlighted that individuals’ psychological wellbeing within prison is likely to have implications upon their re-entry into the community and subsequent risk of reoffending (Drago, Galbiati & Vertova, 2011; Hochstetler et al, 2010).

#### *Rationale for current study*

Given the importance of safety and support in prisons, it is essential that these aspects be monitored and maintained. One method of achieving this is through regular inspections of prisons. Within the UK, these are conducted by Her Majesty’s Inspectorate of Prisons, who provides “independent scrutiny of the conditions for and treatment of prisoners and other detainees, promoting the concept of ‘healthy prisons’...” (HM Inspectorate of Prisons, 2008, p.1). The most recent inspection report of the prison in the current study suggested that prisoners’ perceptions of safety were worse than in other local establishments and that staff-prisoner relationships were also perceived to be poor (HM Chief Inspector of Prisons, 2009). The author was approached by the prison to explore these areas further in an attempt to better understand prisoners’ perceptions of their safety and social support within open conditions, with the eventual aim of addressing any identified needs in order to work towards maintaining a ‘healthy’ prison environment.

There are some limitations noted in the research studies conducted in this area to-date, which the current study aimed to address. Most studies of prisoner adjustment and psychological wellbeing have been conducted within closed conditions (referred to as Category A, B and C prisons within the UK) with little focus on open conditions (Category D prisons). The physical environment of open prisons is significantly different to closed prisons, with open

conditions generally offering more opportunities for vocational activities as well as periods of leave from prison to work or visit family (Directgov, n.d.). The blend of prisoners is also likely to be different within open conditions as individuals are only moved from closed conditions if it is felt that they present a low risk to others and they can be trusted not to escape (Directgov, n.d.). As such, research findings from studies conducted in closed conditions may not be easily extrapolated to open prisons and their inmates. Elements of safety and social support within open conditions clearly warrant further investigation.

A further difficulty of investigating safety and social support within prisons is that they are relatively complex concepts to measure due to their subjective nature. Objective measures of safety and support, such as number of assaults or family visits, fail to take into account the perception of the individual prisoner. What the researcher believes to be an acceptable level of support, for example, may in fact be very different to the participant's view. Biggam and Power (1997) acknowledged this in their study and used a measure of social support that required participants to rate both their actual levels of support received and the ideal levels of support they would like to receive. This allowed them to have a better understanding of whether participants themselves felt that they were deficient in social support, despite the levels of actual support reported. This type of measure was therefore used in the current study. A further way of gaining additional insight into inmates' perceptions of their prison experience is to employ qualitative research methods, something which few studies in this field have employed (see Ashkar & Kenny, 2008, as an example). Although qualitative approaches, such as interviews, are often more time-consuming to conduct and analyse than quantitative methods, when exploring a subjective area such as experiences of imprisonment, they are likely to add a large amount of information. For example, in their focus group study, Nurse, Woodcock and Ormsby (2003) identified a number of features highlighted by

prisoners that negatively impacted upon their mental wellbeing, including isolation, lack of mental stimulation, drug misuse, negative relationships with staff, bullying and lack of family contact. Such an array of information would be difficult to ascertain from quantitative approaches alone.

### *Aims*

The aim of this study was to better understand prisoners' perceptions of their safety and social support within an open establishment and explore how these experiences relate to their levels of psychological wellbeing. The study followed a similar methodology to Biggam and Power (1997) but aimed to extend this work by studying a population within open prison conditions and also using qualitative methods to explore prisoners' subjective experiences of their setting. A secondary objective was to better understand what aspects of prisoners' safety, social support and relationships could be improved within the custodial setting. A mixed-method design was employed, using structured questionnaires to produce quantitative results and a semi-structured interview with prisoners to produce additional qualitative data.

The specific research questions investigated by the study were:

- 1) Is there a significant association between levels of social support reported by prisoners and scores of anxiety and depression?
- 2) Is there a significant association between perceived levels of safety reported by prisoners and scores of anxiety and depression?
- 3) What themes will emerge from prisoners' experiences of their safety, support and relationships within the prison?
- 4) What do prisoners feel could be done to improve safety, support and relationships within the prison?

## **Methodology**

### **Participants**

Participants were sought from the population of male inmates (aged 21 years or over) held at a Category D prison in England. This open establishment houses 187 prisoners within dormitory-style accommodation. As part of a larger prison complex, approximately 60% of prisoners within this open prison had been transferred from the Category B or C establishments on the same site as part of their sentence plan.

An opportunistic sampling method was used to recruit participants over an 8-week period (approximately 60 hours in total) between May and June 2011. Recruitment took place over various days and times (including weekends and evenings) in order to seek a representative sample that included prisoners who were employed during the working week and/or had leave over the weekend. A total of 43 prisoners took part in the study, representing just under a quarter (23.0%) of the prison population. The median age of participants was 30 years (*IQR* = 26-37). White ethnic origin accounted for 72% of the sample ( $N = 31$ ), Mixed 14% ( $N = 6$ ), Black / Black British 7% ( $N = 3$ ) and Asian / Asian British 7% ( $N = 3$ ). These figures appear to reflect the latest published data on ethnicity in prison (Ministry of Justice, 2010), although the current study had a higher percentage of mixed race prisoners than the average prison population in England and Wales, perhaps reflecting the greater level of cultural diversity within the region.

The majority of participants (62.8%,  $N = 27$ ) had previously served time in prison; the median length of time served prior to their current sentence being 38.0 months (*IQR* = 17.2-66.0). Most prisoners were serving determinate sentences (86%,  $N = 37$ ) with the remaining 14% ( $N$



= 6) serving indeterminate sentences. The mean length of current custodial sentence was 54.4 months ( $SD = 28.8$ ), with the average length of time served at this prison being 4.8 months ( $SD = 5.6$ ). Those serving determinate sentences had, on average, less than one year remaining of their sentence ( $M = 9.7$  months,  $SD = 7.0$ ). In terms of the offence leading to their current custodial sentence, 42.9% ( $N = 18$ ) of participants had committed crimes of violence against the person; 28.6% ( $N = 12$ ) were serving sentences for drug-related offences; 16.7% ( $N = 7$ ) had committed theft or burglary offences; 7.1% ( $N = 3$ ) were serving sentences for fraud; and 4.8% ( $N = 2$ ) were convicted of miscellaneous offences.<sup>1</sup> Again, these percentages appear to correspond with the relative frequencies of offence type within the UK prison population (Ministry of Justice, 2012b).

## **Procedure**

Dormitory living meant that providing questionnaires for prisoners to complete in their own time would likely have compromised participant anonymity. Given the sensitive nature of some of the questionnaire items (e.g. their perception of prison safety), efforts were made to ensure confidentiality and anonymity were preserved as much as was practically possible. With this in mind, prisoners were approached individually by the researcher when moving about the prison in order to introduce the study to them. It was emphasised to individuals that participation was entirely voluntary and that the researcher was independent of the Prison Service.

If a prisoner expressed an interest in taking part, formal consent was sought and questionnaires were completed within a private room (see Appendices D-G for Participant Information Sheets and Consent Forms). The questionnaires typically took between 20 and

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<sup>1</sup> One participant chose not to disclose this information.

40 minutes to complete. In most cases the researcher read items aloud and the participant responded verbally.

Following administration of the questionnaires, a systematic sampling technique was used to select participants to take part in an additional interview to further discuss their perceptions of safety, support and relationships within the prison. Every third participant was invited to complete an individual interview at a mutually agreed date and time. Of the 13 participants who agreed to an interview, six did not attend their appointments and therefore a total of seven interviews were completed. Each interview followed a semi-structured interview schedule (see Appendix H) and lasted between 30 and 45 minutes. The interviews were recorded using a digital voice recorder and later transcribed verbatim in preparation for analysis.

## **Measures**

*Psychological wellbeing.* The Hospital Anxiety and Depression Scale (HADS; Zigmond & Snaith, 1983) was used to assess prisoners' psychological health. The HADS is a simple 14-item self-report questionnaire measuring depression and generalised anxiety. Participants are asked to rate each item (seven items relating to depression and seven relating to anxiety) on a 4-point scale, with higher scores representing possible presence of clinical disorder. The HADS has been shown to be valid in hospital, primary care, outpatient and community settings, as well as with the general population (Bjelland, Dahl, Haug & Neckelmann, 2002). It has also been found to be an effective tool for identifying emotional distress within a male prison population (Boothby, Cases, Carrington, Mulholland & Bolger, 2010).

*Support.* A modified version of the Significant Others Scale (SOS; Power, Champion & Aris, 1988) was used to assess prisoners' levels of perceived social support (see Appendices I-J for

copies of this measure). The SOS was used by Biggam and Power (1997) in their study of young offenders in custody. The SOS requires participants to rate the quality of support provided by their important social relationships. Two categories of support are examined – emotional and practical – using five items to describe each type of support. In order to make the relationships relevant to a prison setting, five key relationships were selected to be included in this questionnaire. These were chosen to reflect relationships both within and outside the prison environment. The relationships were a family member (e.g. parent or sibling) or partner/spouse, close friend (outside prison), fellow prisoner, personal officer<sup>2</sup>, and another prison staff member of the participant's choosing (e.g. teacher, prison officer). An 'Other' category was also included, where participants could record any other important relationship that had not previously been covered.

Participants were required to rate each applicable relationship based on the 'actual' level of support currently offered and also the 'ideal' level of support they would preferably like to receive. Ratings were made on a 7-point scale indicating the frequency of support (1 = never to 7 = always). Differences between scores for actual support and ideal support were then used to calculate a discrepancy score for each relationship. The higher the discrepancy score, the greater the difference between the level of support a participant feels that he is receiving and the level of support he would like to receive.

*Safety.* A brief questionnaire was used to gain information on participants' perceptions of safety within the prison. The questionnaire consisted of two statements about safety: "This prison is a safe place to be" and "I worry about my personal safety in this prison". Participants were asked to rate to what extent they agreed with each statement on a 7-point

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<sup>2</sup> A personal officer is an allocated prison officer, who acts as a source of help and advice for an inmate during his or her sentence. The personal officer also plays an important role in monitoring a prisoner's progress in terms of his or her sentence plan.

scale (1 = strongly disagree to 7 = strongly agree). (See Appendix K for a copy of this measure).

### **Ethical issues**

Ethical approval to collect and analyse the data for this study was granted by the National Offender Management Service and the STEM Ethics Committee of The University of Birmingham. The Governor of the prison also gave their consent for the study to be conducted. Each participant formally consented to taking part in the study and was aware that he could withdraw from the study at any time prior to submission of this thesis. Each participant was asked to generate their own memorable identification number, so that they would not need to retain any paperwork regarding the study if they did not wish to. This ensured that participants' data could still be located should they wish to withdraw from the study, whilst also maintaining their anonymity as much as possible. It was acknowledged that discussing issues such as personal safety and relationships could prove difficult for some participants. In order to minimise distress caused, participants were advised of sources of further support following participation in the study if they felt they needed this.

### **Analysis**

All quantitative data was analysed using PASW® Statistics 18. Choice of statistical tests and the formulae for calculations, such as effect sizes, were informed by guidance provided in Field (2005). As questionnaires were completed with participants, no responses were missing, except in one case where a participant declined to disclose the nature of their offence.

The transcribed interview data from seven participants was coded using the method of template analysis, as described in King (1998). This approach involves the development of a list of codes (called the ‘template’) that represent themes identified within the text through repeat reading of and familiarisation with the data. It is typical for codes to be organised in a hierarchical manner, with broad themes containing a number of more specific lower-order codes. Most templates contain between two and four levels of codes depending on the complexity of the data being analysed. The coding template is revised through successive reading of the texts, resulting in codes being inserted, deleted, redefined and reclassified into different subthemes in order to produce the final ‘best fit’ template.

Template analysis differs from some other qualitative approaches, as it allows the researcher to begin analysis with a number of predefined themes, often guided by the aims of the research project or the interview schedule itself. In the current study, three main *a priori* themes were included within the initial template: ‘relationships’, ‘support’ and ‘safety’, which relate to the broad areas focused on within the interviews. Interview questions and prompts were initially used as a guide for developing second level codes; however, a number of these were later redefined or deleted as the coding process continued. Further second, third and fourth level codes were gradually developed. The interviews generated a large volume of information regarding participants’ experiences in their current prison setting. It was challenging to produce a template that successfully captured the significant diversity of participants’ views but efforts were made to ensure it was as inclusive as practically possible. The final coding template is provided in Appendix L. A descriptive account of the main themes identified is provided in the Results section.

## Results

### *Psychological wellbeing*

The HADS was used as a broad measure of participants' psychological wellbeing. Both the Anxiety and the Depression subscales of this measure were found to have 'good' levels of reliability (Cronbach's  $\alpha = .81$  and  $.73$  respectively) based on coefficient ranges suggested by Kline (1999). These alpha coefficients are lower than those reported by Snaith and Zigmond (1994), which may be due to the distinct population studied within this study. The correlation between the Anxiety and Depression scales was found to be significant ( $p < .05$ ) and moderate in magnitude ( $r_s = .37$ ).

The HADS data was found to be non-normally distributed when a Kolmogorov-Smirnov test was conducted (Anxiety  $D(43) = .14$ ,  $p < .05$ ; Depression  $D(43) = .17$ ,  $p < .01$ ). Hence, median (rather than mean) scores on the HADS are reported in Table 5 below, alongside a breakdown of the percentage of participants meeting the clinical levels of anxiety and depression defined by Snaith and Zigmond (1994).

**Table 5. Median HADS scores and percentage of prisoners at each clinical level**

	Anxiety ( $N = 43$ )	Depression ( $N = 43$ )
Median score (IQR) ( <i>max.</i> 21)	5.0 (3.0-7.0)	4.0 (1.0-6.0)
Participants by clinical level of symptoms % ( $N$ )		
<i>Normal</i>	79.1 (34)	81.4 (35)
<i>Mild</i>	11.6 (5)	11.6 (5)
<i>Moderate</i>	7.0 (3)	7.0 (3)
<i>Severe</i>	2.3 (1)	0.0 (0)

Based on the normative cut-off scores provided for the HADS, 9 (20.9%) participants could be described as presenting with a clinical level of anxiety, with 8 (18.6%) participants presenting with a clinical level of depression.

Demographic variables were examined to explore their relationship with the HADS scores (see Table 6). No significant correlations were found between levels of anxiety or depression and age, length of time previously spent in prison, sentence length, months spent in the current prison and number of months remaining of their sentence. Kruskal-Wallis and two-sample Kolmogorov-Smirnov *Z* tests revealed no significant effect of offence type, ethnicity, sentence type, or prior experience in prison.

**Table 6. Relationships between HADS scores and prisoner demographics**

	Anxiety	Depression
Age	$r_s = -.05, p = .76$	$r_s = -.21, p = .18$
Months previously spent in prison	$r_s = .02, p = .89$	$r_s = .09, p = .57$
Sentence length	$r_s = -.02, p = .88$	$r_s = -.20, p = .19$
Months spent in current prison	$r_s = .05, p = .77$	$r_s = -.16, p = .30$
Months of sentence remaining	$r_s = -.11, p = .54$	$r_s = -.15, p = .38$
Offence type	$H(4) = 3.25, p = .52$	$H(4) = 5.79, p = .22$
Ethnicity	$H(3) = 2.47, p = .48$	$H(3) = .29, p = .96$
Sentence type	$Z = .42, p = .99$	$Z = .40, p = .99$
Prior experience in prison	$Z = .76, p = .61$	$Z = .97, p = .31$

### *Support*

The level of support received from relationships both within and outside of prison was measured using a modified version of the Significant Others Scale (SOS; Power, Champion & Aris, 1988). Initially, mean levels of actual and ideal support offered by each relationship were calculated for each participant. All participants rated their relationships with a family member or partner, friend, and fellow prisoner; 42 participants were able to rate their

relationship with their personal officer (one individual had not met his personal officer at the time of participation); and 19 participants rated another valued prison relationship, including a Prison Officer ( $N = 7$ ), Chaplain ( $N = 6$ ), Education Worker ( $N = 1$ ), Offender Manager ( $N = 1$ ), Careers advisor ( $N = 1$ ), Probation Officer ( $N = 1$ ), Governor ( $N = 1$ ), and Drugs Worker ( $N = 1$ ).

Subsequently, the differences between actual and ideal support were calculated, resulting in a series of discrepancy scores for each relationship and type of support. Any negative discrepancies, i.e. cases where the actual support was rated higher than the ideal support, were recorded as zero as this indicated an overprovision of support (a procedure used by Power et al., 1988, and Biggam & Power, 1997). The mean scores for actual and ideal support and corresponding mean discrepancy scores are displayed in Table 7.

**Table 7. Mean SOS scores for different relationships**

Relationship	Mean rating of support (SD) (max. 7)					
	Actual		Ideal		Discrepancy	
	Emotional	Practical	Emotional	Practical	Emotional	Practical
Family member ( $N = 43$ )	6.3 (1.1)	6.0 (1.3)	6.8 (.4)	6.9 (.3)	.5 (1.0)	.9 (1.3)
Friend ( $N = 43$ )	4.6 (1.5)	4.9 (1.5)	5.9 (1.2)	6.4 (1.2)	1.4 (1.3)	1.5 (1.5)
Prisoner ( $N = 43$ )	3.0 (1.4)	4.4 (1.4)	4.1 (1.8)	4.8 (2.0)	1.3 (1.2)	.8 (1.1)
Personal officer ( $N = 42$ )	2.5 (1.4)	3.1 (1.4)	4.4 (1.8)	4.4 (1.7)	2.1 (1.9)	1.4 (1.8)
Other ( $N = 19$ )	4.0 (1.4)	3.6 (1.4)	5.0 (1.5)	5.2 (1.5)	1.2 (1.3)	1.6 (1.6)

One can see that family members were generally rated as providing the highest level of emotional and practical support out of all the relationships examined. The low discrepancy between levels of actual and ideal support indicates that participants were generally satisfied



with the level of support they received from their families. Although close friends were rated as providing a moderate amount of emotional and practical support, the discrepancy scores for this type of relationship indicate that participants would like to receive additional support from their friends.

In terms of emotional support from fellow prisoners, participants rated this as low, although ideally would like more of this type of support. Although only moderate levels of practical support from prisoners were reported, participants were generally satisfied with this, as indicated by the low discrepancy score. The highest discrepancy score was found for the emotional support provided by participants' personal officers, suggesting that they would like a higher level of emotional support from this type of relationship. The scores indicate that additional practical support from personal officers would also be welcomed. The 'Other' category indicates that a proportion of participants also felt they gained additional social support from other relationships inside prison; however, again, participants' scores suggest that they would like the level of emotional and practical support to be greater.

In order to explore the relationship between the social support received and prisoners' psychological wellbeing, a comparison was made between the SOS scores of those participants who met a clinical level of anxiety or depression as defined by their HADS score ('case') and those participants who presented with 'normal' levels of anxiety or depression ('non-case'). Initially, overall mean scores for actual support, ideal support and discrepancies in support were calculated by averaging the support ratings across the five relationship types. Subsequently, comparisons were made using a series of independent t-tests between overall support ratings for those participants classified as 'cases' and those classified as 'non-cases' for anxiety and depression, as shown in Table 8.

**Table 8. Comparison of mean scores on SOS according to HADS Anxiety and Depression**

	Non-case M	Case M	<i>t</i> (df)	<i>p</i>	<i>r</i>
<u>HADS Anxiety</u>	( <i>n</i> = 34)	( <i>n</i> = 9)			
<i>Actual emotional</i>	4.2	3.9	1.03 (41)	.31	.15
<i>Actual practical</i>	4.7	4.1	1.36 (41)	.18	.21
<i>Ideal emotional</i>	5.4	5.1	.58 (10.0)	.50	.18
<i>Ideal practical</i>	5.9	5.5	.13 (41)	.90	.02
<i>Emotional discrepancy</i>	1.2	1.6	-.97 (41)	.34	.15
<i>Practical discrepancy</i>	1.0	1.6	-1.37 (41)	.18	.21
<u>HADS Depression</u>	( <i>n</i> = 35)	( <i>n</i> = 8)			
<b><i>Actual emotional</i></b>	<b>4.4</b>	<b>3.2</b>	<b>3.79 (41)</b>	<b>.00**</b>	<b>.51</b>
<b><i>Actual practical</i></b>	<b>4.9</b>	<b>3.4</b>	<b>3.79 (41)</b>	<b>.00**</b>	<b>.51</b>
<i>Ideal emotional</i>	5.4	4.8	1.65 (41)	.12	.25
<i>Ideal practical</i>	5.6	5.5	.11 (41)	.92	.02
<i>Emotional discrepancy</i>	1.2	1.9	-1.92 (41)	.06	.29
<i>Practical discrepancy</i>	.9	2.2	-2.19 (7.7)	.06	.62

\*\*  $p < .001$

With regards to both anxiety and depression, participants reporting high levels of these symptoms (i.e. ‘cases’) also reported receiving lower levels of emotional and practical support. However, independent samples t-tests revealed that only in the case of depression were these differences statistically significant (for both emotional and practical support,  $t(41) = 3.79$ ,  $p < .001$ ,  $r = .51$ ). Although in addition to this, the difference between mean discrepancy scores for practical support amongst ‘depressed’ and ‘non-depressed’ groups showed a large effect size ( $\pm 0.1$  = small effect size;  $\pm 0.3$  = medium effect size;  $\pm 0.5$  = large effect size (Field, 2005)) ( $t(7.7) = -2.19$ ,  $p = .06$ ,  $r = .62$ ), suggesting that the former group perceived a greater deficit in their levels of practical support. It is likely that the small sample size of the ‘depressed’ group contributed to the lack of statistical significance in this case.

In order to further examine the relationship between different sources of social support and participants’ psychological wellbeing, each relationship was taken in turn and SOS scores compared according to whether participants were classified as clinically anxious or depressed (see Table 9 for Anxiety scores and Table 10 for Depression scores).

**Table 9. Comparison of mean scores on SOS for different relationships according to HADS Anxiety**

Relationship	Non-case M	Case M	<i>t</i> (df) <sup>3</sup>	<i>p</i>	<i>r</i>
<b>Family member</b>	( <i>n</i> = 34)	( <i>n</i> = 9)			
<i>Actual emotional</i>	6.5	5.7	1.38 (8.9)	.20	.42
<i>Actual practical</i>	6.2	5.3	1.29 (9.4)	.23	.39
<b><i>Ideal emotional</i></b>	<b>6.8</b>	<b>7.1</b>	<b>-2.27 (37.5)</b>	<b>.03*</b>	<b>.35</b>
<b><i>Ideal practical</i></b>	<b>6.9</b>	<b>7.0</b>	<b>-2.21 (33)</b>	<b>.04*</b>	<b>.36</b>
<i>Emotional discrepancy</i>	.3	1.3	1.73 (8.5)	.12	.51
<i>Practical discrepancy</i>	.7	1.7	1.47 (9.2)	.17	.43
<b>Friend</b>	( <i>n</i> = 34)	( <i>n</i> = 9)			
<i>Actual emotional</i>	4.8	4.1	1.14 (41)	.26	.18
<i>Actual practical</i>	5.1	4.2	1.63 (41)	.11	.25
<i>Ideal emotional</i>	6.0	5.8	.42 (41)	.68	.07
<i>Ideal practical</i>	6.4	6.1	.65 (41)	.52	.10
<i>Emotional discrepancy</i>	1.3	1.9	1.39 (41)	.17	.21
<i>Practical discrepancy</i>	1.3	2.0	1.23 (41)	.23	.19
<b>Prisoner</b>	( <i>n</i> = 34)	( <i>n</i> = 9)			
<i>Actual emotional</i>	3.1	2.9	.39 (41)	.70	.06
<i>Actual practical</i>	4.6	3.8	1.53 (41)	.14	.23
<i>Ideal emotional</i>	4.4	2.9	1.85 (9.8)	.09	.51
<i>Ideal practical</i>	4.9	4.1	.90 (9.9)	.39	.28
<i>Emotional discrepancy</i>	1.4	.8	-1.62 (41)	.11	.25
<i>Practical discrepancy</i>	.8	.8	.02 (41)	.98	.00
<b>Personal officer</b>	( <i>n</i> = 33)	( <i>n</i> = 9)			
<i>Actual emotional</i>	2.5	2.3	.39 (40)	.70	.06
<i>Actual practical</i>	3.2	2.9	.39 (10.2)	.70	.12
<i>Ideal emotional</i>	4.4	4.5	-.12 (9.6)	.91	.04
<i>Ideal practical</i>	4.3	4.6	-.51 (40)	.61	.08
<i>Emotional discrepancy</i>	1.9	2.7	1.09 (40)	.28	.17
<i>Practical discrepancy</i>	1.3	2.0	1.06 (40)	.29	.17
<b>Other</b>	( <i>n</i> = 14)	( <i>n</i> = 5)			
<i>Actual emotional</i>	3.8	4.6	-1.07 (17)	.30	.25
<i>Actual practical</i>	3.4	4.3	-1.31 (17)	.21	.30
<b><i>Ideal emotional</i></b>	<b>4.6</b>	<b>6.3</b>	<b>-2.64 (17)</b>	<b>.02*</b>	<b>.54</b>
<b><i>Ideal practical</i></b>	<b>4.7</b>	<b>6.5</b>	<b>-3.77 (14)</b>	<b>.002**</b>	<b>.71</b>
<i>Emotional discrepancy</i>	1.0	1.7	.80 (4.9)	.46	.34
<i>Practical discrepancy</i>	1.4	2.2	1.03 (17)	.32	.24

\**p*<.05, \*\**p*<.01

<sup>3</sup> Differences in degrees of freedom (df) are a result of varying sample sizes across HADS Relationship categories (not all relationships were relevant to every participant) and occasionally due to statistical adjustment when unequal variances could not be assumed.

**Table 10. Comparison of mean scores on SOS for different relationships according to HADS Depression**

Relationship	Non-case M	Case M	<i>t</i> (df)	<i>p</i>	<i>r</i>
<u>Family</u>	( <i>n</i> = 35)	( <i>n</i> = 8)			
<i>Actual emotional</i>	<b>6.6</b>	<b>5.1</b>	<b>2.84 (7.7)</b>	<b>.02*</b>	<b>.72</b>
<i>Actual practical</i>	<b>6.3</b>	<b>4.8</b>	<b>3.05 (41)</b>	<b>.004**</b>	<b>.43</b>
<i>Ideal emotional</i>	6.9	6.6	1.02 (7.4)	.34	.35
<i>Ideal practical</i>	6.9	6.9	.29 (41)	.78	.05
<i>Emotional discrepancy</i>	.3	1.6	2.05 (7.3)	.08	.60
<i>Practical discrepancy</i>	.6	2.0	2.24 (8.2)	.05	.62
<u>Friend</u>	( <i>n</i> = 35)	( <i>n</i> = 8)			
<i>Actual emotional</i>	<b>4.9</b>	<b>3.9</b>	<b>2.29 (41)</b>	<b>.03*</b>	<b>.34</b>
<i>Actual practical</i>	<b>5.3</b>	<b>3.5</b>	<b>3.15 (41)</b>	<b>.003**</b>	<b>.44</b>
<i>Ideal emotional</i>	6.0	5.8	.52 (41)	.61	.08
<i>Ideal practical</i>	6.3	6.7	-.85 (41)	.40	.02
<i>Emotional discrepancy</i>	<b>1.2</b>	<b>2.4</b>	<b>2.72 (41)</b>	<b>.009**</b>	<b>.39</b>
<i>Practical discrepancy</i>	<b>1.1</b>	<b>3.2</b>	<b>3.03 (8.1)</b>	<b>.02*</b>	<b>.73</b>
<u>Prisoner</u>	( <i>n</i> = 35)	( <i>n</i> = 8)			
<i>Actual emotional</i>	3.2	2.4	1.56 (41)	.13	.24
<i>Actual practical</i>	<b>4.7</b>	<b>3.3</b>	<b>2.75 (41)</b>	<b>.009**</b>	<b>.39</b>
<i>Ideal emotional</i>	4.3	3.2	1.70 (41)	.10	.26
<i>Ideal practical</i>	4.9	4.3	.62 (8.4)	.56	.21
<i>Emotional discrepancy</i>	1.3	1.2	-.26 (41)	.80	.04
<i>Practical discrepancy</i>	.6	1.3	1.00 (7.5)	.35	.34
<u>Personal officer</u>	( <i>n</i> = 34)	( <i>n</i> = 8)			
<i>Actual emotional</i>	2.7	1.7	1.82 (40)	.08	.28
<i>Actual practical</i>	<b>3.4</b>	<b>2.1</b>	<b>2.44 (40)</b>	<b>.02*</b>	<b>.36</b>
<i>Ideal emotional</i>	4.6	3.7	.93 (8.4)	.38	.31
<i>Ideal practical</i>	4.4	4.5	-.21 (40)	.83	.03
<i>Emotional discrepancy</i>	2.0	2.3	.39 (40)	.70	.06
<i>Practical discrepancy</i>	1.2	2.4	1.85 (40)	.07	.28
<u>Other</u>	( <i>n</i> = 15)	( <i>n</i> = 4)			
<i>Actual emotional</i>	4.2	3.4	1.11 (17)	.28	.26
<i>Actual practical</i>	3.8	2.9	1.24 (17)	.23	.29
<i>Ideal emotional</i>	5.0	5.2	-.16 (17)	.87	.04
<i>Ideal practical</i>	5.1	5.4	-.27 (17)	.79	.07
<i>Emotional discrepancy</i>	.9	2.1	1.13 (3.5)	.33	.52
<i>Practical discrepancy</i>	1.3	2.5	1.34 (17)	.20	.31

\**p*<.05, \*\**p*<.01

With regards to HADS anxiety, ‘anxious’ participants reported lower levels of perceived support from both family and friends compared to their ‘non-anxious’ peers. Although these differences did not meet statistical significance, the differences in family support demonstrated moderate effect sizes ( $r = .42$  for emotional support;  $r = .39$  for ideal support), suggesting that with a larger sample size, statistical significance may have been reached. As shown in Table 5, there was a statistically significant difference between the ideal level of support that ‘anxious’ and ‘non-anxious’ participants would like to receive from their family (ideal emotional:  $t(37.5) = -2.27, p < .05, r = .35$ ; ideal practical:  $t(33) = -2.21, p < .05, r = .36$ ), with anxious prisoners wishing to receive a slightly higher level of support. Again, although  $p$ -values were not below .05, the differences in emotional and practical discrepancy scores for family support revealed moderate to large effect sizes ( $r = .51$  and  $.43$  respectively), suggesting a trend for ‘anxious’ prisoners to perceive a greater deficit in the level of support received from their family members.

Despite reporting slightly lower levels of perceived support from fellow prisoners, ‘anxious’ participants also reported lower levels of ideal support, particularly emotional support, from their peers in comparison to ‘non-anxious’ participants. Although these differences were not found to be statistically significant, the difference in ideal emotional support from prisoners was approaching statistical significance ( $t(9.8) = 1.85, p = .09, r = .51$ ) and did represent a large effect size. This would suggest that ‘anxious’ prisoners tend to desire less emotional support from their peers compared to ‘non-anxious’ prisoners.

Although both ‘anxious’ and ‘non-anxious’ participants reported a desire for more support from their personal officer, the discrepancy in emotional and practical support appears larger for the ‘anxious’ group. However, again this difference in scores was not found to be

statistically significant (emotional discrepancy:  $t(40) = 1.09, p = .28, r = .17$ ; practical discrepancy:  $t(40) = 1.06, p = .29, r = .17$ ).

With regards to support from ‘Other’ prison relationships, a greater proportion of ‘anxious’ participants reported receiving support from such relationships (55.6%;  $N = 5$ ) compared to the ‘non-anxious’ group (41.2%;  $N = 14$ ). Despite ‘anxious’ participants reporting marginally higher levels of support from these relationships, their ideal level of both emotional and practical support was significantly higher than their ‘non-anxious’ peers (ideal emotional:  $t(17) = -2.64, p < .05, r = .54$ ; ideal practical:  $t(14) = -3.77, p < .01, r = .71$ ).

With regards to HADS depression, ‘depressed’ prisoners generally reported lower levels of actual support received from their social relationships compared to their ‘non-depressed’ peers. When rating the support received by their family members, ‘depressed’ participants’ ratings of both practical and emotional support were significantly lower than in the ‘non-depressed’ group (actual emotional:  $t(7.7) = 2.84, p < .05, r = .72$ ; actual practical:  $t(41) = 3.05, p < .01, r = .43$ ). The mean discrepancies in emotional and practical support were larger for the ‘depressed’ group, although these did not quite meet statistical significance; however, large effect sizes were noted (emotional discrepancy:  $t(7.3) = 2.05, p = .08, r = .60$ ; practical discrepancy:  $t(8.2) = 2.24, p = .05, r = .62$ ), suggesting a trend for ‘depressed’ prisoners to perceive a greater deficit in their levels of family support compared to ‘non-depressed’ peers.

There were significant differences in the level of support received from friends outside of prison, with the ‘depressed’ group reporting lower levels of both perceived emotional ( $t(41) = 2.29, p < .05, r = .34$ ) and practical support ( $t(41) = 3.15, p < .01, r = .44$ ). The mean discrepancies between ideal and actual levels of support were also found to be statistically significant (emotional discrepancy:  $t(41) = 2.72, p < .01, r = .39$ ; practical discrepancy:  $t(8.1)$

= 3.03,  $p < .05$ ,  $r = .73$ ), with ‘depressed’ participants demonstrating larger discrepancies between their actual and ideal levels of support compared to their ‘non-depressed’ peers.

In terms of relationships inside prison, ‘depressed’ prisoners reported significantly lower levels of practical support from their fellow prisoners ( $t(41) = 2.75$ ,  $p < .01$ ,  $r = .39$ ) and their personal officer ( $t(40) = 2.44$ ,  $p < .05$ ,  $r = .36$ ). A comparison of levels of actual emotional support did not reveal statistically significant differences in these two relationship categories (prisoner:  $t(41) = 1.56$ ,  $p = .13$ ; personal officer:  $t(40) = 1.82$ ,  $p = .08$ ). Although ‘depressed’ participants reported lower levels of actual practical support from fellow prisoners and personal officer, they did not differ from the ‘non-depressed’ group in terms of their reported levels of ideal practical support, suggesting that they did not desire further practical support from these relationships.

With regards to support from ‘Other’ prison relationships, the proportion of ‘depressed’ participants reporting support from such relationships was nearly 1.5 times greater than for the ‘non-depressed’ group (50.0% and 34.9% respectively). Although no statistically significant differences were noted between these two groups in terms of their ratings of support, a large effect size was noted for emotional discrepancy ( $t(3.5) = 1.13$ ,  $p = .33$ ,  $r = .52$ ), with ‘depressed’ prisoners perceiving a greater deficit in their levels of emotional support.

### *Safety*

A brief two-item questionnaire was used to assess participants’ perceptions of safety within the prison. The questionnaire consisted of two statements about safety “This prison is a safe place to be” (referred to henceforth as the ‘prison safety’ scale) and “I worry about my

personal safety in this prison” (referred to henceforth as the ‘personal safety’ scale), to which participants rated their agreement on a 7-point scale. Responses on the ‘personal safety’ scale were reverse-scored so that higher scores indicated higher levels of perceived personal safety.

The safety questionnaire data was found to be non-normally distributed when a Kolmogorov-Smirnov test was conducted (‘Prison safety’  $D(43) = .19, p < .01$ ; ‘Personal safety’  $D(43) = .27, p < .001$ ), hence median scores are provided and non-parametric statistical tests were used. The median score on the ‘prison safety’ scale was 5.0 ( $IQR = 4.0-6.0$ ) out of a maximum of 7, with the median score on the ‘personal safety’ scale being higher at 7.0 ( $IQR = 6.0-7.0$ ), suggesting high levels of perceived personal safety within prison. A Wilcoxon Signed Ranks Test found the differences between the scores on the two subscales to be statistically significant ( $Z = -4.34, p < .01, r = .66$ ), suggesting that prisoners consistently rated their own personal safety as higher than the general feeling of safety within the prison.

As shown in Table 11, no significant correlations were found between perceptions of safety and age, length of time previously spent in prison, months spent in the current prison and number of months remaining of their sentence. One significant medium-sized correlation was found between perceived personal safety and sentence length ( $r_s = .43, p < .01$ ), suggesting that the longer the custodial sentence being served, the higher the participant’s rating of perceived personal safety. A series of Kruskal-Wallis and two-sample Kolmogorov-Smirnov  $Z$  tests revealed no significant effect of offence type, ethnicity, sentence type, or prior experience in prison.



**Table 11. Relationships between prison safety ratings and prisoner demographics**

Demographic	Prison safety	Personal safety
Age	$r_s = .06, p = .72$	$r_s = .07, p = .65$
Months previously spent in prison	$r_s = .17, p = .30$	$r_s = .19, p = .22$
Sentence length	$r_s = .28, p = .16$	<b><math>r_s = .43, p = .004^*</math></b>
Months spent in current prison	$r_s = .24, p = .12$	$r_s = .22, p = .15$
Months of sentence remaining	$r_s = .01, p = .96$	$r_s = .18, p = .30$
Offence type	$H(4) = 7.22, p = .13$	$H(4) = 5.66, p = .23$
Ethnicity	$H(3) = 1.08, p = .78$	$H(3) = 2.64, p = .45$
Sentence type	$Z = .55, p = .92$	$Z = .91, p = .38$
Prior experience in prison	$Z = .40, p = .99$	$Z = .21, p = .99$

\*  $p < .01$

A series of Spearman's correlation tests were used to examine the relationship between levels of reported safety and levels of reported anxiety or depression (as measured by the HADS). As shown in Table 12, no significant correlations were found between perceived safety and levels of anxiety or depression.

**Table 12. Correlations between prison safety ratings and HADS scores**

	Anxiety	Depression
Prison safety	$r_s = -.22, p = .08$	$r_s = -.16, p = .16$
Personal safety	$r_s = -.10, p = .26$	$r_s = -.22, p = .08$

Participants were also divided into 'cases' and non-cases' for anxiety and depression based on their HADS scores and comparisons made between the groups' average levels of reported safety (see Table 13). Two-sample Kolmogorov-Smirnov  $Z$  tests revealed no significant differences between the groups in terms of their perceived levels of safety.

**Table 13. Median prison safety ratings according to HADS Anxiety and Depression**

	Non-case Median	Case Median	Z	p
HADS Anxiety	(n = 34)	(n = 9)		
<i>Prison safety</i>	5.5	5.0	.74	.64
<i>Personal safety</i>	6.5	7.0	.81	.53
HADS Depression	(n = 35)	(n = 8)		
<i>Prison safety</i>	5.0	5.0	.60	.86
<i>Personal safety</i>	7.0	6.0	.49	.97

## **Qualitative results**

The final coding template produced following coding is provided in Appendix L. A descriptive account of the main themes identified is provided below.

### **Relationships**

This *a priori* theme focused on participants' relationships with fellow prisoners and staff, as well as how they manage difficulties within these relationships.

#### ***Relationships with prisoners***

All participants reported experiencing at least some positive relationships with other prisoners. Several participants emphasised that they had established good friendships during their sentence, with some recognising that having allegiances within prison can make prison life easier:

*"...you meet some really good people in here, really nice people...I've met some of the best people I've ever met in my whole life in prison." (Participant 2)*

*"We all get on because, like I say, 99% of people here know that that's the way to get on 'cause it makes your time a lot easier." (Participant 6)*

Some prisoners described how having a similar background to others or being from a notorious family can aid the development of such relationships.

*"You're gonna start relationship with other prisoners mainly based on where you're from." (Participant 3)*

*"My family's got a reputation...it sort of helped me sort of thing." (Participant 5)*

Other prisoners reported choosing to distance themselves more from those around them, often due to a fear of being associated with troublesome inmates:

*“I keep myself to myself most of the time, I only associate with certain prisoners.”*  
(Participant 4)

*“It can be easy to make friends but it’s just like I say, it’s just choosing the right people to be your friend.”* (Participant 5)

Two participants suggested that prisoners can appear to segregate themselves, choosing to associate more with peers of the same ethnicity or age. It was reported by one that some older prisoners serving longer sentences tend to associate less with younger prisoners serving short sentences:

*“...the older generation of prisoners don’t particularly get on with the younger generation ‘cause they’re always on about getting their tag and, ‘Oh I’m going home next week.’ People doing long sentences they don’t want to hear that.”* (Participant 3)

Several participants mentioned the difficulties of living within dormitory-style accommodation in this prison, including coping with others’ annoying personal habits and occasional personality clashes:

*“Well there’s a chap in the dorm who, who, when he’s asleep, he talks in his sleep.”*  
(Participant 1)

*“There’s certain dorms [where] some people don’t get along...you know, personality clashes, you never know.”* (Participant 4)

### ***Relationships with staff***

Four of the seven participants reported having positive relationships with prison officers, citing positive qualities of staff including familiarity, professionalism, respect and approachability:

*“...I always have a laugh and joke with certain officers...and yeah the relationship is to a professional standard.” (Participant 4)*

*“[the officers] are all pretty easy going, pretty easy going...if you’ve got any problems like, you can go to basically any one of them.” (Participant 3)*

However, three of the participants described independence from prison staff, resulting in a lack of relationships with officers. For some, this lack of contact appeared to be due to a low need for any support from staff members; others explained how as the prison regime runs fairly autonomously, prisoners do not come into contact with staff very often:

*“Cos it’s an open jail, you don’t really interact with the staff that much, so there’s no relationship is there? Unless you go to get your mail or ask for something quickly, other than that you don’t see ‘em.” (Participant 2)*

A number of themes emerged that related to difficulties in prisoners’ relationships with staff: mistrust, inconsistency from staff, and poor staff attitude. The theme of mistrust was apparent in a number of participants’ interviews, both when discussing relationships and also support-seeking behaviour. This difficulty trusting officers appeared to prevent some prisoners from forming positive relationships with them:

*“I’m not saying that I don’t trust anyone in prison really, but trusting officers, I don’t trust them 100%...You don’t know who they really are.” (Participant 4)*

*“...I think there’s a divide, that’s the prison officers and we’re the inmates.” (Participant 2)*

Some participants spoke about how lack of consistency from staff, in terms of adherence to rules or following the regime, can be a stressor within prisoner-staff relationships:

*“So, to go and get your VO (Visiting Order) sorted out, you want to go and get it sorted before you go to the gym at six o’clock, you want to get it sorted as 5:30pm ‘cause that’s the time. You go to the office at 5:30pm, nobody’s there. It’s locked. There should be two officers there at all times, locked, not there. That’s just aggravation.” (Participant 1)*

Other participants felt that certain prison officers displayed authoritarian or disrespectful attitudes towards them, which again places strain on the relationship:

*“They want respect from prisoners but they’re not giving respect.” (Participant 6)*

*“...their attitude is ‘Well you’re the bloody prisoner, you will do as you’re told, you do what I tell you to do.’ (Participant 1)*

### ***Managing difficulties***

A number of different ways of managing difficulties within prisoner relationships were identified from participant interviews, including acceptance (‘get on with it’) and avoidance (‘walk away’) of interpersonal difficulties:

*“Well you just deal with it, you’ve got to just deal with it in your own way.”*

*(Participant 3)*

*“I’d just try to avoid the situation, probably walk away...diffuse the situation.”*

*(Participant 4)*

A common theme was that of a reluctance to speak to staff about difficulties with other prisoners, either through fear of being labelled a ‘grass’ or fear of being associated with trouble and being returned to closed conditions:

*“If anyone had a problem with another inmate, they’d find it hard to deal with because they feel like they can’t approach the screws ‘cause it’s known as being a grass innit? And then, if they got found out, then obviously they’d make even more enemies, so they’d have to just suffer in silence.” (Participant 5)*

*“...you couldn’t make the officers know that there was something going on because in here it’s zero tolerance so they’ll just get rid of you. If they think there’s any trouble, you’re gone...so you’re better off trying to sort it out between yourselves.”*

*(Participant 2)*

### ***Ways to improve relationships***

There were mixed views on ways to improve prison relationships, resulting in a number of distinct themes, including a better orientation for prisoners when they first arrive, a clearer expectation of prisoner/staff roles, having a stricter regime, and improving communication amongst staff and prisoners, for example:

*“It would be helpful if everybody knew what was expected of them.” (Participant 1)*

*“There could be more correspondence and more talking amongst [staff] ‘cause they seem lackadaisical.” (Participant 7)*

*“I think they should have like a meeting where [prisoners] come down and sit down with like...senior officers, a couple of normal officers, for the prisoners to say like, cos we experience it from a different side to them.” (Participant 5)*

## **Support**

This *a priori* theme focused on the types of support that participants felt they needed in prison, who they could seek this support from and how available it was within the establishment.

### ***Types of support needed / sources of support***

Participants mainly focused on the practical support they felt they needed in prison, including help with housing, education, employment and finances. Prisoners identified prison officers and organisations, such as Probation and Education, as sources of practical support:

*“Me myself I needed support ‘cause I was renting some accommodation, I needed to be reassured that me housing would be OK.” (Participant 6)*

*“Courses, courses...getting out to work. ‘Cause you know you’re on the way out of here.” (Participant 3)*

Some participants also suggested that they might seek practical support from fellow inmates, for example if they needed help reading a letter from home:



*“You’d ask an inmate, you’d ask someone that you know, who you thought could help you. Say if I couldn’t read or write, I’d ask them to write a letter for me, I’d ask a mate.” (Participant 2)*

Some participants identified the importance of emotional support whilst in prison, for example:

*“...a lot of people break down emotionally, that’s what breaks them...” (Participant 4)*

However, most felt that prison officers would not be the people to go to for this type of support, instead citing family members or other prisoners as their main sources of emotional support.

*“The only way you’re gonna get emotional support is speaking to your family on the phone.” (Participant 5)*

*“You wouldn’t go to a prison officer, maybe someone would go to the Chaplaincy if they felt it was that bad. But as for prison officers, you wouldn’t do it ‘cause that’s not what they’re there for.” (Participant 2)*

*“If you’re feeling down you’d probably, you know, talk to [prisoners], they’d probably talk to you about their worries...you know, just have a chat and it’s off our chest really.” (Participant 4)*

However, some participants did feel that they could seek additional support from Chaplaincy, the Listener scheme and sometimes their personal officer.

*“They’ve got Listeners here, Insiders, they can give them help.” (Participant 7)*

*“I could either go to my personal officer, senior officer, or failing that if you didn’t want to talk to none of them, you could go to the Chaplaincy.” (Participant 3)*

### ***No need for support***

Three participants suggested that they did not feel they needed much support whilst in prison, one drawing on previous experience of prison to help him through, one suggesting that prisoners experience fewer stressors within open conditions, and one explaining that he feels able to cope alone:

*“Myself, I don’t need any support really; I’ve been to prison before.” (Participant 4)*

*“If you’ve really got a problem you wouldn’t come to this jail, you wouldn’t come to a Cat D.” (Participant 7)*

*“I’m strong-minded and I can find ways of dealing with it.” (Participant 5)*

### ***Availability of support***

There were mixed views on the availability and accessibility of support within the prison. Several participants felt that adequate levels of support were available, for example:

*“They can give you loads of help if you need it. If you’re prepared to go and ask them for it, they’ll give it to you.” (Participant 7)*

*“...everything that I’ve wanted to achieve up until this moment in time, I have.” (Participant 3)*

However, from other participants’ interviews there appeared to be a number of practical and interpersonal barriers to seeking support. Practical issues that arose included a lack of

awareness of support available, delays in accessing services, the need to be proactive in seeking support, and a lack of communication amongst staff:

*“I’m sure I could access [support], I just need to know what it is...” (Participant 2)*

*“I had toothache and that was the biggest difficulty. Nobody could do anything...I had to suffer for 8 weeks.” (Participant 1)*

*“[Support is available] if they’re willing to get off their backsides...if you don’t wanna learn, you ain’t gonna find out are you?” (Participant 3)*

*“...it’s like you’re talking to say Probation about your town visits, then you go up to get your dates for your town visits and Probation ain’t got in touch with them, so then the visit gets put back for another couple of weeks. There could be more correspondence and more talking amongst them.” (Participant 7)*

Interpersonal barriers to seeking support included a perception of staff as unapproachable or busy, that they do not care about prisoner issues, and that one needs to be favoured by staff in order to receive support:

*“[The officers] don’t really care, like, if you need to speak to one of them you just get told like, ‘Oh I’m busy’ or ‘Come back later’.” (Participant 5)*

*“As for support, if you’re lucky you might meet a good prison officer who will do that extra bit for you but it’s rare...and you have to be lucky enough for them to like you.” (Participant 2)*

The subtheme of mistrust also featured here, with participants raising concerns about not only whether they can trust staff members but also whether they can trust fellow prisoners. For

example, when describing the Listener scheme, one participant explained his concerns around confidentiality:

*“[A Listener] is not a professional person, he’s a prisoner, so he’s not gonna be like, ‘Right, I’m gonna treat that as confidential what you just told me’, he’s like ‘You’ll never guess what thingy come and told me, he was only saying that he’s been crying himself to sleep.’ Word’s like wildfire in the prison and then everyone’s laughing at him, then he’s gone from being down to being rock bottom.” (Participant 5)*

### ***Ways to improve support***

In terms of improving practical support available, participants suggested greater promotion of services available, improved access to support services and improved communication amongst staff. Several prisoners commented that there should be a greater focus on encouraging prisoners to develop skills associated with positive rehabilitation:

*“I think the main one is...you know just before you’re getting released, if you’ve done a long time like me, I think more support needs to be focused on that area because at the moment people are just getting released and being thrown into the deep end and expecting to swim. You know, if you can’t swim, you’re gonna sink.” (Participant 2)*

With regards to improving emotional support in the prison, some suggestions made by participants were to have further opportunities for family contact and for prison officers to have a better understanding of prisoners’ emotional needs. One prisoner went as far as to suggest that prison officers spend time behind bars themselves:

*“...so that you can think like a prisoner...because if you can think like a prisoner, you can relate to them.” (Participant 5)*

## **Safety**

This final *a priori* theme focused on participants' perceptions of safety within the prison, including their experiences of bullying.

### ***Factors helping to maintain feelings of safety***

A number of factors were identified by participants that helped to maintain feelings of safety within the prison: for some their own self-confidence meant they felt safe, whereas others felt that elements of the prison regime and environment helped them to feel safe. Prison regime factors included a lack of boredom in prison, strict rules, and the ability to maintain contact with family members, which prisoners felt helped to ease frustration amongst inmates.

*"I can't think of...apart from the activities...I mean most guys go down the gym, you've got snooker tables, pool tables upstairs." (Participant 3)*

*"I'm doing a longer time so I get town visits. That's a big help because like you're looking forward to your next town visit and your time goes quick." (Participant 7)*

The risk of being returned to closed conditions if associated with trouble was cited by several prisoners as a factor that helps to maintain a safe feel within the prison:

*"people want to get to a Cat D [open prison] 'cause of the privileges that come with it...and once in a Cat D, they're not gonna want to go back to a C or B [closed conditions] or whatever, so they behave themselves." (Participant 6)*

*"...you've always for the chance of getting chucked out, back into lock up sort of thing, so that's always on your mind. Even though the majority of guys down here*

*ain't up to anything, that's beside the point, you've always got it running though your mind."* (Participant 3)

In terms of environmental factors that also help prisoners to feel safe, these included a relaxed atmosphere, more personal space and freedom, prisoner demographics and the fact that violence is rarely witnessed:

*"...when you come here you feel like there's a burden being lifted 'cause you've got that much freedom"* (Participant 7)

*"All the people here are in a trusted position...see you can get your odd nutter or loose cannon in here though, but on the whole it's safe."* (Participant 2)

*"I've lived here for about 4 months and I've not seen one bit of violence."*  
(Participant 6)

### ***Factors contributing to lack of perceived safety***

Participants identified both environmental and personal factors that contributed to a perceived lack of safety within prison. With regards to environmental factors, prisoners spoke about the large size of the building, the presence of contraband items, such as drugs, and the minimal presence of officers on the wings:

*"Well people dealing drugs and that...obviously you're gonna feel unsafe. I've done a long time and if you get caught up with that you're gonna be shipped out of here."*  
(Participant 4).

*"There's not a lot of officers...they don't patrol around or nothing like that. So see whereas you're safer [in closed conditions] from like other prisoners but here you're*

*not because if a fight kicked off here, by the time the officers got to the fight, it could end up pretty bad sort of thing.” (Participant 5).*

Several prisoners mentioned their concerns around health and safety within the prison, particularly around its poor cleanliness:

*“The level of cleanliness here is just disgusting...it’s terrible, you wouldn’t even want...if you’ve seen the showers you’d be shocked, they’re just vile.” (Participant 5)*

With regards to personal factors affecting perceptions of safety, participants suggested that boredom can lead to risky behaviours, as well as feeling aggravated by prison staff and the regime:

*“You just have to keep busy, sometimes you get bored and fall into the trap, that’s when the drugs and the drink and temptation, loads of temptation in here.” (Participant 2)*

*“The only safety [issue] is...where people are moody and they lose their temper or go and sulk in the dorm or whatever. And that’s caused by the attitude of the officers...” (Participant 1)*

Two participants also spoke about how unfamiliarity with open conditions can lead to increased feelings of being unsafe upon first arriving at the prison:

*“You couldn’t get used to where you could walk. Because you was used to being banged up 24-7, going from that into an open environment where you could walk around like basically 24 hours a day...that was er, that was just shocking.” (Participant 3)*

## ***Bullying***

There were mixed views around bullying within the establishment. Three participants denied there being any bullying in the prison, suggesting that prisoners are deterred from this type of behaviour by the risk of being returned to closed conditions and by the fact that it is somewhat policed by prisoners themselves:

*“People would step in and say ‘Eh!’ Someone bigger than the bully would say, ‘Eh! What you doing bullying him for? Leave him alone...blah blah.’ ‘Cause a lot of people are adults, are adult about it and think, ‘You know I’ve been there, that lad’s got to do his time’ and you’d have other prisoners doing something about it.”*  
*(Participant 6)*

*“...well most prisoners don’t like bullying anyway. If you see somebody that’s vulnerable or you hear somebody else saying that prisoner’s vulnerable, then you try your best to help them out.”* *(Participant 3)*

Those participants that felt bullying did occur within the prison advised that they tended to see verbal bullying rather than physical bullying, which included the testing of new inmates, dormitory bullying and coercion:

*“When you’re first here like people can like, they try and sort of test you to see like whether they can...I wouldn’t say bully ya but like, they’ll say, ‘Give me your burn’ or whatever, but you have to stand up for yourself and you just have to say, ‘No I’m not giving it ya’.”* *(Participant 5)*



*“Sometimes you’ve got to clean the dorm and you got a rota...and say I just say to you, ‘You’re cleaning my area today’ or ‘You’re doing my shift today’, that goes on a lot.” (Participant 7)*

Some participants felt that bullying was an inevitable part of prison life:

*“It definitely goes on, I don’t think you can stop that, this goes on everywhere...”  
(Participant 2)*

### ***Ways to improve safety***

There were a number of different ideas suggested by participants with regards to improving feelings of safety with the prison. Three subthemes emerged: changes to the environment, staffing and regime. Changes to the prison environment included more cameras inside the building and improved cleanliness of communal areas, such as toilets and showers.

*“Cameras is obviously always a deterrent.” (Participant 2)*

Changes to staffing included having a greater presence of officers on the prison wings, as well as making staff more approachable for new prisoners:

*“I felt less safe when I first came in...the first 2 weeks is the hardest, that’s when you need the most support and that’s when it’s just not there. They should let you settle in for a few days and just say to you, ‘Look I’m your personal officer, if there’s anything you need just come and ask me’...rather than, the first day you come in it’s like, ‘This is where that is, that’s where this is, this is when you’re allowed to do that...’. And you just sit there and your mind’s just gone and you can’t remember over half of it.”  
(Participant 5)*

With regards to changes to the prison regime, some participants suggested increased activities to alleviate boredom, whereas others suggested making the regime tougher in order to discourage unsafe behaviours:

*“It’s too easy this prison...that’s not what prison is for, you [should] get punished, you’re locked up in the cell, no TV, nothing.” (Participant 4)*

One participant suggested that there should be additional searches for prisoners returning from leave to try to tackle drug issues in the prison, as well as having a stricter selection criteria for deciding which prisoners are suitable for open conditions:

*“If before [prisoners] came over here, [staff] looked at the record properly, see how many times they’ve been in prison before...if it’s their first time in prison, then fair enough, you know what I mean, but if someone’s got say a drug issue and they’ve been to prison numerous times, then obviously keep them over there [in closed conditions].” (Participant 3)*

## **Discussion**

The purpose of this study was to better understand prisoners' perceptions of their safety and social support within an open establishment and explore how these experiences might relate to their levels of psychological wellbeing.

### **Summary of results**

#### *Psychological wellbeing*

Participants' levels of anxiety and depression, as measured by the Hospital Anxiety and Depression Scale (HADS), were used as an indication of their levels of psychological wellbeing. Based on the cut-off scores provided for the HADS, 21% of prisoners who took part in this study could be described as presenting with clinical levels of anxiety, with 19% presenting with clinical levels of depression. The proportion of prisoners reporting high levels of anxiety was smaller than that found within a UK population study (see Crawford, Henry, Crombie & Taylor, 2001); however, the latter sample also included females, whose average levels of anxiety were found to be higher than in males. Conversely, the percentage of prisoners meeting 'caseness' for depression within the current study was higher than figures provided by Crawford et al. (2001).

In comparison to other prison-based studies of male offenders (Biggam & Power, 1997; Lester et al., 2003), the current study found considerably lower levels of anxiety and depression among prisoners. One possible explanation for this is the difference in security levels of the prisons studied. Previous studies have been conducted within closed prisons whereas the current study drew its sample from an open prison, where conditions are likely to be very different. Qualitative data analysis in the current study revealed themes around a

relaxed atmosphere, personal space and independence from staff. Previous research suggests that deprivation from these types of stimuli is associated with poor psychological health amongst prisoners (Goodstein et al., 1984; Wright, 1993); therefore the fact that the open prison allows inmates to maintain higher levels of personal control and autonomy may explain the lower rates of anxiety and depression found within the current study.

In addition to environmental factors, previous research has suggested that prisoner adjustment may be influenced by a number of personal characteristics, such as offence type and previous prison experience (Wooldredge, 1999). However, no significant relationships between prisoner demographics and psychological wellbeing were found within the current study. This could be due to the relatively small sample size, or may reflect the fact that the majority of participants had either served custodial sentences previously or had at least served several months at the current prison, so most may have felt adjusted to prison life at the time of testing.

### *Social support*

Prisoners generally rated their family or partner as the greatest source of social support, with friends outside of prison also providing a moderate level of support. Lower levels of social support were received from fellow prisoners, with the lowest levels of perceived support from Personal Officers. Despite reporting lower levels of actual support from relationships inside prison compared to outside, participants' ratings of ideal support remained at a lower level for prisoners and personal officers, suggesting they did not wish for high levels of support from these people. The qualitative data may provide some explanations for this. When discussing relationships with staff, themes of independence and mistrust emerged, suggesting that some prisoners are likely to avoid seeking close relationships with their Personal Officer.

Participants also made reference to their fear of being labelled a ‘grass’ if they were to seek support from prison staff in dealing with conflict or bullying. With regards to relationships with fellow prisoners, several participants spoke of their tendency to distance themselves from others due to their fear of being associated with trouble and being returned to closed conditions. This may be reflected in prisoners’ lower ratings of ideal social support from their peers. Concerns were also raised by participants during interviews about a lack of confidentiality and potential to be seen as vulnerable if seeking support from fellow prisoners, including through services such as the Listener Scheme.

Across prison relationships, practical support was seen as more available than emotional support. This was also reflected in participant interviews, with prisoners generally focusing on the help they needed with housing, education, employment and finances whilst inside. However, the mean discrepancies in SOS scores demonstrated that prisoners would value increased emotional support to a level similar to that of practical support, perhaps in an ideal world where the challenges of prison relationships could be minimised.

*1) Is there a significant association between levels of social support reported by prisoners and scores of anxiety and depression?*

Participants who reported above average levels of anxiety and depression (described as ‘cases’) also reported lower levels of actual emotional and practical support compared to ‘non-cases’. However, these differences were only found to be statistically significant with regards to depression. The small size of the ‘caseness’ groups (9 for Anxiety and 8 for Depression) is unfortunately likely to have increased the risk of Type II errors. Nevertheless, the finding that those prisoners who reported clinical levels of depression perceived themselves to have lower levels of social support has been supported by previous research

studies (Biggam & Power, 1997; Wooldredge, 1999). It has been suggested that both practical and emotional support can act as a buffer against stressful events, such as that of imprisonment, thus helping to reduce the risk of poor psychological health (Lahey & Cohen, 2000). However, it is difficult to ascertain from this study the nature of the relationship between social support and depression. It may be that prisoners lacking in social support subsequently feel more depressed; or it may be that depressed prisoners subsequently perceive their levels of social support as low.

Further examination of the different relationship roles revealed that for both family and friends, depressed prisoners rated lower levels of practical and emotional social support than non-depressed prisoners. The depressed group also had higher discrepancy ratings in their level of support from these relationships, suggesting they did perceive a deficit in their support from outside prison. From the qualitative data, it was clear that prisoners highly valued the ability to maintain contact with family and friends, sometimes through home visits. Those without such support may well be affected in mood and mental state.

With regards to support from relationships inside prison (personal officer and fellow prisoners), practical but not emotional support was rated as significantly lower by depressed prisoners. This is in contrast to Biggam and Power's (1997) study, who found that a perceived deficit in *emotional* support from prison staff was the best predictor of depression. This difference could be due to the distinct samples used in these studies, with Biggam and Power sampling young offenders, who may be more likely to seek emotional support from adults around them. The adult offenders in the current study appeared less keen to seek emotional support, perhaps due to the perception that adults should cope more independently. A lack of practical support may be linked to depression within the current study due to the

nature of open conditions. It has been suggested that practical support in prisons is important for adjusting to the regimes and procedures (Zamble & Porporino, 1990). As the prison regime in this study ran fairly independently, those prisoners who do not feel well supported practically are likely to feel somewhat isolated from the whole system, which could impact upon their psychological health. Alternatively, those participants with pre-existing high levels of depression may feel overwhelmed by the demands of the prison regime and therefore less supported. Further work would be needed to explore this relationship in more detail.

Although no overall significant relationship was found between social support and anxiety, there were some significant differences when the relationships were examined in turn. Anxious participants had significantly higher levels of ideal emotional and practical support from their family members and 'other' individuals in the prison, suggesting that they wished to have greater support from these people compared to their non-anxious peers. It is not surprising that prisoners feeling anxious are likely to wish for additional support. The fact that the chosen sources of this support are family or other prison professionals, such as Chaplaincy, suggests that the desire for independence from prison officers and fellow inmates remains a concern for anxious prisoners.

### *Safety*

High rates of perceived safety were reported by prisoners in the study, which supports previous research in this area (Edgar et al., 2003; O'Donnell & Edgar, 1999). Interviews with prisoners revealed a number of factors that helped to maintain feelings of safety in the prison, including the relaxed atmosphere, the scarcity of violence, and presence of incentives for good behaviour. Previous prison research has demonstrated a relationship between victimisation experiences and psychological distress (Boxer, Middlemass & Delorenzo, 2009;

Hochstetler, Murphy & Simons, 2004), so perhaps the minimal levels of prison bullying reported in the current study also helps to maintain feelings of safety and low levels of anxiety and depression. However, it should be noted that a direct measure of bullying behaviours was not employed during this study, and therefore the occurrence of bullying is based purely on participants' own definitions of what constitutes bullying behaviour, which may underestimate the true degree to which victimisation behaviours occur.

Interestingly, participants consistently rated their own feeling of personal safety as higher than the general feeling of safety within the prison. It has been suggested that the use of precautionary strategies can help prisoners to maintain their own feelings of safety, even if they see victimisation occurring within the prison system (Ireland, 2005b; McCorkle, 1992). From the interviews with prisoners in this study, it appears that they did employ a number of precautionary strategies to maintain their safety, including being selective in who they associate with by choosing only sensible peers with whom to form relationships. Avoidance coping styles have been shown to be positively associated with psychological wellbeing amongst prisoners (Gullone et al., 2001), and therefore may contribute to the low levels of anxiety and depression found in this study.

A significant positive relationship was found between prisoners' sentence length and their perceptions of personal safety, suggesting that the longer the custodial sentence being served, the higher the individual's perceived personal safety. This is an interesting finding and one that requires further investigation. A longer sentence may represent a more serious crime (e.g. violence), and such offenders may have intrinsic characteristics that make them less vulnerable to victimisation. However, if this were the case, one might expect to see a significant difference in ratings of safety according to offence type, which was not found.



Although, it should be noted that small group sizes limit the statistical power of this analysis. It could be hypothesised that someone serving a lengthier sentence is more likely to have already served longer in prison and therefore may feel safer as they are familiar with the regime and may have developed effective coping strategies. Although this was not supported by statistical analysis, interview data did hint at the suggestion that feelings of safety increased over time, for example participants mentioned unfamiliarity with the prison regime and being 'tested' by inmates when they first arrived.

*2) Is there a significant association between perceived levels of safety reported by prisoners and scores of anxiety and depression?*

Correlation analysis revealed no significant relationships between participants' safety ratings and their scores of anxiety and depression. Similarly, when levels of perceived safety were compared according to 'caseness' for anxiety and depression, no significant differences were found. Given that average levels of perceived safety were high amongst all participants, this result is not surprising. A larger sample size may have resulted in a wider range of safety scores, which could provide more information about the possible relationship between safety and psychological wellbeing. Given that prisoners' perceptions of safety are likely to change over the course of their prison sentence, it would be interesting to measure prisoners' ratings of safety and psychological wellbeing at their arrival to prison in order to explore whether the relationship between these variables is more pronounced at the start of their sentence.

*3) What themes emerged from prisoners' experiences of their safety, support and relationships within the prison?*

Despite the small number of interviews conducted, the qualitative data in this study provided useful additional information about prisoners' experiences of life inside prison. The process

of template analysis resulted in the identification of numerous themes and subthemes around relationships, support and safety, which have added to the interpretation of the quantitative measures. Two themes were noted to appear across several categories and as such could be seen to represent integrative themes. These were themes of mistrust and fear of being returned to closed conditions. Mistrust appears to impact upon prisoner relationships with both staff and peers, limiting support-seeking behaviour from these sources. The fear of being returned to closed conditions and losing the privileges offered by open conditions also appeared to be significant factor in determining prisoners' behaviour and social interactions. Prisoners were worried that they might get involved with troublesome peers and face punishment for this, and therefore they try to avoid interaction with certain peers. Fear of being transferred was also cited as one of the reasons they tended to avoid informing staff if facing conflict or difficulties with others.

From her studies of closed prisons, Ireland (2005b) suggested that prisoners may choose a 'fight' response in reaction to victimisation as this could facilitate a move away from their aggressor for a period of time. However, from the current study it appears that such a strategy would be unlikely to be used within open conditions due to loss of perceived privileges that would be experienced by moving back to closed conditions. It appears that individuals in open prisons are more willing to accept and tolerate some difficulties with others in order to maintain highly valued positive stimuli, such as more freedom and independence.

*4) What did prisoners feel could be done to improve safety, support and relationships within the prison?*

A wide variety of suggestions were made by prisoners to improve aspects of safety, support and relationships. One theme that appeared to dominate the suggestions was that of improved

communication between staff and prisoners. There was a sense that prisoners felt that their needs were not fully understood or appreciated by prison staff, which subsequently led to difficulties within the relationships. Clearly, improved communication between prisoners and staff is likely to be hindered to some degree by prisoners' self-reported reluctance to share their difficulties with prison officers. The officers also have a complicated balance to maintain between a custodian role and a source of personal support for their inmates (Biggam & Power, 1997). Nevertheless, it appears that attempts to improve communication amongst both parties may represent a helpful way of addressing some of the unhelpful barriers currently perceived between prisoners and staff.

### **Limitations**

There are a number of limitations to this research study, which are mainly associated with the population being studied and associated restrictions. Firstly, in order to maximise anonymity for participants, opportunistic sampling rather than a randomised method had to be used to recruit participants. Unfortunately, this method introduces the possibility of sampling bias. It is possible that those prisoners who chose to take part, especially those who agreed to complete an interview, did so because they had particular issues about the prison that they wished to raise, or they were particularly confident at interacting with others. Those who declined to participate, or were never seen within the prison, may have presented with different characteristics to those who volunteered to take part. However, demographic information was not collected from these prisoners, so the extent of any differences is not clear.

The relatively small sample size ( $N = 43$ ) in this study increases the risk of making Type II errors during data analysis, particularly given the even smaller sizes of the Anxiety and Depression ‘case’ groups. In their study, Biggam and Power (1997) employed regression analysis to explore the predictors of psychological distress; however this was not appropriate in the current study due to the small, uneven sample sizes. Ideally, a larger sample size would have been recruited if time constraints had allowed, although the balance of study promotion and participant anonymity is likely to remain a challenge in terms of recruitment. Most previous prison studies have been conducted in closed prisons, where questionnaires can be administered to individuals in their cells. However, in open conditions, dormitory living creates an environment where this is not feasible.

The main limitation of the questionnaires used in the current study is that they were all self-report in nature. Although the subjective nature of these was helpful in terms of understanding prisoners’ own perceptions of their psychological wellbeing, support and safety, they require a considerable amount of insight into one’s own feelings and behaviour. The questionnaires are also at risk of some level of distortion due to social desirability effects, particularly as most participants completed the questionnaires verbally with the researcher. Prisoners may have been reluctant to disclose feelings of being unsafe or unsupported within prison, for fear that they may be perceived as weak or vulnerable.

A further limitation of the quantitative measure of psychological wellbeing is that only anxiety and depression were investigated. Different aspects of psychological functioning, such as hopelessness or self-esteem, may also play a role in prisoner adjustment and would be useful to investigate further. Safety within prison is a particularly difficult concept to define and measure, and the scale employed in this study was somewhat crude. In future studies it

would be beneficial to find or develop a more complex measurement of safety, perhaps exploring different aspects of personal and environmental safety.

With regards to the qualitative data, the use of *a priori* themes as part of template analysis has been criticised as it is felt that these can bias the researcher during the coding process to pay closer attention to themes that relate to the initial template (King, 1998). One method of minimising this risk is to use a second researcher to code the interviews independently to ensure inter-rater reliability. Although this was not possible in the current study, it would be recommended for future qualitative research studies into prisoner experiences.

Lastly, given the apparent differences in open prison conditions to closed conditions, it is unlikely that results of this single-site study could be extrapolated to other prison populations. Further studies within other open prisons would be needed to explore whether the results of this study could be seen as representative of prisoners' experiences of open prisons in general.

## **Conclusions**

The results of this study have added to the growing research base into individuals' experiences of imprisonment and how they cope with the challenges they face during a custodial sentence. Although the small sample size limited the extent to which conclusions could be drawn about the relationship between psychological wellbeing, social support and safety, the additional qualitative data helped to further our understanding of prisoners' experiences of these factors. It is clear that successful adaptation to prison is likely to depend on a complex interaction of psychological, social and environmental factors. Further qualitative studies exploring different prisoner groups would be beneficial in continuing to improve our knowledge and understanding of the impact of custodial sentences on people's

psychological wellbeing. Further research should also incorporate the perceptions of prison staff, as they play a vital role in prisoners' experiences whilst inside.

This research study represents one of the first studies exploring prisoners' perceptions of an open prison in the UK. It is clear that prisoners are likely to have different experiences depending on the conditions in which they are placed. Future research is needed to compare prisoners' psychological wellbeing and perceptions of safety and social support across prisons of different security levels, as well as throughout the course of an individual's custodial sentence. This may eventually help to guide service provision within the Prison Service, for example identifying which types of establishments most require particular types of support, and during what times in their sentence plan are prisoners most likely to require such support. Recent research (Drago, Galbiati & Vertova, 2011; Hochstetler et al, 2010) has suggested that prisoners' wellbeing in prison may have particular implications for their success upon release into the community. This link between wellbeing inside prison and future rehabilitation is one that certainly requires further exploration.

In terms of the practical implication of this specific research study, it is hoped that the results will be helpful in considering how to improve prisoners' feelings of safety and support within the study prison. Given the potential consequences of poor psychological health at an individual and organisational level (Monks et al., 2009), the more we understand about how to support people in prison, the better the outcomes will be for all.

The current chapter explored the influence of perceived safety and social support on the psychological wellbeing of prisoners. By using a mixed-method of quantitative and qualitative approaches, this study provides further information on prisoners' subjective experiences of incarceration, which many previous studies have lacked. The subsequent

chapter links together findings from previous chapters and places these within the context of previous literature. Practical implications of the findings are discussed, alongside suggestions for future research in the area.

## **CHAPTER FIVE**

### **DISCUSSION**



## **Aim of thesis**

This thesis aimed to explore how prisoners cope with imprisonment by investigating aspects of bullying, safety and social support within prison settings. It intended to overcome some of the limitations of previous prison research, which include a tendency to overlook important subjective elements of imprisonment, by employing both quantitative and qualitative research methods. Each chapter and its findings are summarised below.

## **Summary of findings**

The introductory chapter outlined some of the challenges that prisoners face inside prison, which have been termed ‘pains of imprisonment’ (Sykes, 1958), and the psychological impact that these appear to have on individuals. It was noted that social support has been recognised as one aspect that may help individuals to cope inside prison.

The literature review presented in Chapter 2 aimed to systematically examine existing research into prison bullying. The nineteen studies included in the review revealed high average levels of bullying within prison populations (54% perpetration; 63% victimisation); although the large ranges in these figures highlighted the need to consider different prison populations as distinct entities. By categorising prisoners using behavioural checklists, studies demonstrated that a large proportion of prisoners both engage in bullying behaviours and experience victimisation themselves (‘bully/victims’), highlighting the struggle to maintain and assert one’s dominance within a prison setting. Indirect bullying behaviours (e.g. gossiping and social exclusion) and verbal/psychological bullying were the most common types of behaviours reported, presumably as these behaviours are the most difficult for prison staff to pick up on and address, hence the risk of reprimand for the bully remains low. Attempts were made to explore the characteristics of prisoners involved in bullying,

including background factors, personality traits and attitudes, although the heterogeneous nature of the studies made it difficult to draw firm conclusions. Additional longitudinal studies are needed to further understand the direction of these relationships and identify predictors of bullying in prisons. The review suggested that prison bullying may have negative psychological effects on those involved, although the issue of identifying causality remains a problem. Further research is required into how the prison environment can impact upon prisoners' psychological wellbeing, an issue that was addressed by the study described in Chapter 4.

The systematic review highlighted that the definition of bullying remains one of the main difficulties of research in this area. Ireland (e.g. 2000), whose research dominates this field, has overcome the problem of individual differences in people's definitions of bullying by using behavioural checklists. However, it is argued that this method removes the more subjective element of bullying. It was suggested that further qualitative research will be helpful in better understanding prisoners' own perspectives of bullying and personal safety within prisons, again something that the research presented in Chapter 4 aimed to address.

Chapter 3 examined the psychometric properties of the Hospital Anxiety and Depression Scale (HADS) on the premise that it may represent a useful tool for measuring psychological wellbeing among prisoners. This self-report assessment tool measures levels of anxiety and depression and can be used to identify whether individuals report 'normal' or 'clinical' levels of symptoms, thus screening individuals for the presence of a mood disorder. The critique suggested that the HADS is generally a reliable and valid tool. It has high internal consistency and test-retest reliability, and compared well to other measures of anxiety and depression. Although most studies did support the two-factor structure, this did vary amongst

studies of different populations, with some suggesting that the use of the Total HADS score may represent a more useful measure of overall psychological distress. However, this requires further validation.

Although an optimal cut-off score of 8 has generally been suggested for identifying clinical levels of anxiety or depression, this was found to vary amongst some studies using different populations. Only a few studies have presented normative data for the general population (e.g. Crawford et al., 2001), and even fewer have evaluated the measure with forensic populations (Boothby et al., 2010). The HADS was used to measure prisoners' psychological wellbeing within the empirical research study described in Chapter 4 and demonstrated good levels of reliability, adding to the proposition that the measure may represent a useful tool for estimating levels of anxiety and depression amongst prisoners. Further population-specific normative data would be useful, particularly using a larger prison sample in order to establish norms for this population.

Chapter 4 detailed a research study exploring the influence of perceived safety and social support on the psychological wellbeing of prisoners in open conditions. The study employed a mixed-method design with the aim of investigating statistical relationships between levels of psychological wellbeing and prisoners' ratings of their social support and safety in prison. As a strength in comparison to the majority of prison research, this study also used interviews to explore prisoners' personal experiences of their safety, support and relationships.

The results revealed relatively low levels of anxiety and depression with high levels of perceived safety amongst prisoners, which in part appeared to reflect the more relaxed and autonomous prison environment and regime of open conditions. Although some associations were found between higher levels of anxiety and depression and lower levels of perceived

social support, the small sample size in this study minimised the statistical power of these analyses. There was an overall pattern of prisoners seeking lower levels of support from prison staff and fellow prisoners in comparison to their friends and family outside prison, which qualitative analysis revealed appeared to be due to issues of mistrust and fear of being returned to closed conditions if associated with troublesome peers. A wide variety of suggestions were made by prisoners to improve aspects of safety, support and relationships in the prison. One dominant theme that appeared was that of improved communication between staff and prisoners.

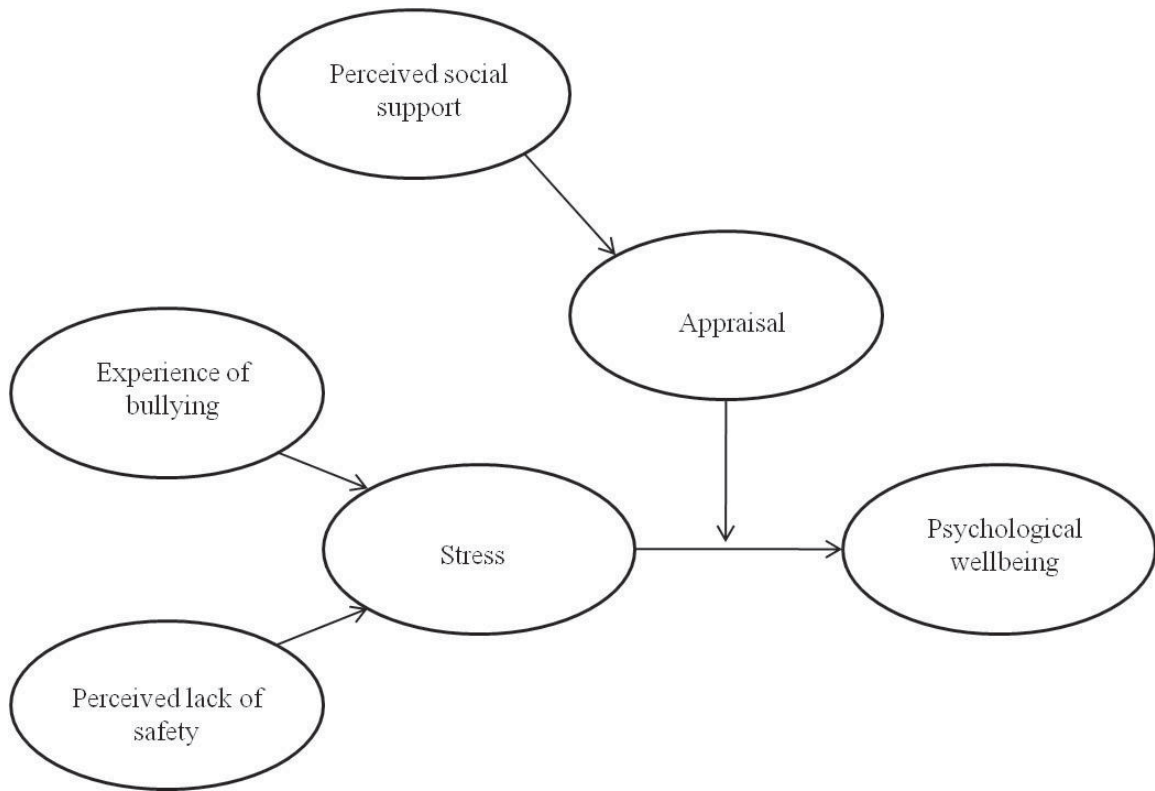
### **Theoretical implications**

The current research made several contributions to the existing literature, adding to the growing research base into individuals' experiences of imprisonment and how they cope with the challenges they face during a custodial sentence. In contrast to most other studies on prison adjustment, this empirical study explored prisoners' experiences within open conditions. It demonstrated that similar 'pains of imprisonment', such as deprivations of liberty and security, do exist within these types of establishments, although to a lesser degree than within closed conditions.

There have been two main theoretical models of adjustment to prison debated over the years: the 'importation model' (Irwin & Cressey, 1962), which emphasises the importance of personal characteristics of inmates that are 'imported' with them into prison, and the 'deprivation model' (Clemer, 1940, as cited in Dye, 2010), which in contrast focuses on characteristics of the prison environment that impact upon prisoners' wellbeing. Findings from both the systematic review (Chapter 2) and research study (Chapter 4) suggest that successful adaptation to prison is likely to depend on an interaction between inmate

characteristics, such as personality, attitudes and prior experience, and the prison environment, including levels of bullying and perceived independence. This is in support of other recent research (e.g. Gover & MacKenzie, 2003). However, the nature of the complex interaction between these factors continues to require further exploration.

Although it is noted that it is difficult to imply causality from the current cross-sectional study, the findings tentatively support social support theories, which suggest that support from others can act as a buffer against stress and trauma (Lakey & Cohen, 2000). Participants who reported above average levels of anxiety and depression also reported lower levels of actual emotional and practical support, although some of these findings failed to reach statistical significance. This adds to the existing research base that has demonstrated that social support helps to reduce the stress of living within prison settings (Biggam & Power, 1997; Hochstetler, DeLisi & Pratt, 2010). Figure 4 presents a provisional diagram of the interactions between prison stressors, social support and psychological wellbeing (based on an adapted diagram from Lakey & Cohen, 2000). It is suggested that the ‘pains of imprisonment’, including bullying and perceived lack of safety, will contribute to prisoners’ levels of stress. However, perceived social support from others may help prisoners to interpret their situation less negatively, thus reducing levels of psychological distress.



**Figure 4.** *Proposed model of the impact of bullying, safety and social support on prisoners' psychological wellbeing*

### **Practical implications**

The findings of this thesis have a number of potential practical implications for prison settings. The high rates of bullying reported across studies (Chapter 2) highlight the need for effective bullying interventions within prisons. However, there is a clear need to recognise that there may be important distinctions in bullying across different prison groups, including young, adult and female offenders. It is unlikely that a 'one size fits all' approach to intervention would be appropriate or effective at addressing bullying behaviours. Anti-bullying programs should to be tailored to the individual needs of the specific prison population. It is clear that bullying experiences can also vary by prison type as well as population, for example

high levels of perceived safety and relatively low levels of bullying were reported within an open prison (Chapter 4). There may be value in recognising the positive aspects of the open conditions that were identified by prisoners, such as an increased sense of independence and autonomy, and explore whether there is scope to improve some of these areas in other prison establishments.

In addition, the current research study (Chapter 4) highlighted the reluctance of prisoners to seek staff support if experiencing victimisation, due to the inmate culture of not informing on others and fear of being perceived as weak or vulnerable. Therefore, thought should be given to ways in which prisoners could seek support that are perceived as less risky to them. Several prisoners described services that are viewed as more independent from the prison regime, such as Chaplaincy, as useful sources of support. Contact with family and friends appears particularly significant to prisoners, with most citing these relationships as their key sources of support whilst inside prison. This emphasises the importance of ensuring procedures are in place to help facilitate the maintenance of these relationships, including visiting opportunities and telephone contact. The research revealed a number of areas of difficulty for prisoners in this particular study, including poor relationships with prison staff caused by mistrust and perceived lack of communication among prisoners and staff. Thought should be given to improving these aspects, perhaps using forums where prisoners and staff can meet to share and discuss prison-related issues.

### **Limitations of thesis**

The current research has a number of limitations, which have been highlighted within each chapter. It is important to bear these in mind when considering the conclusions. The main limitation of this thesis is the reliance on cross-sectional studies both in the systematic review

and research study. Cross-sectional studies are limited in that they only explore aspects of a population at one single time point, and thus are limited in their ability to draw inferences about how factors relate to one another temporally. For example, in the current study, it is difficult to ascertain whether lower levels of social support resulted in poor psychological health or whether poorer psychological health resulted in lower perceptions of social support. Cross-sectional studies also overlook the fact that prisoners' experiences and psychological wellbeing are likely to alter over time, particularly as they progress through their prison sentence. Longitudinal studies would be helpful in exploring what pre-imprisonment factors contribute to prisoners' wellbeing inside prison and how these change and develop over time.

The systematic review highlighted the heterogeneous nature of existing studies on prison bullying, such as variations in the age and gender of prison samples. Similarly, a wide variety of different personal and environmental factors have been investigated to ascertain their relationship with bullying behaviour. This diversity makes it more difficult to draw accurate and valid conclusions about prison bullying as a whole. It has been noted that within these types of studies, it is difficult to ensure a representative sample of prisoners. For example, in many of the studies included in the systematic review, it appeared that recruitment strategies may have excluded illiterate prisoners. Similarly, in the empirical research study, the opportunistic sampling method may have introduced bias. This study was also limited by a relatively small sample size, particularly with regards to interview data.

Another noteworthy limitation is that all the research explored within this thesis is reliant on self-report measures. Although probably representing the most useful way of exploring prisoners' experiences of imprisonment, self-report measures, such as the behavioural checklists used to measure bullying in the systematic review and the questionnaires used



within the research study, rely on participants being accurate in their perception and reporting of their behaviour and feelings. Prisoners may be reluctant to disclose negative experiences, such as victimisation and/or bullying, for fear of stigmatisation or retribution. The studies also did not explore the views of prison staff, which would have been useful in better understanding the relationships between prisoners and staff.

The final limitation refers to the difficulties in generalising the findings of the current research to the wider prison population. Throughout this thesis, the diverse nature of prison populations has been emphasised, with differences observed in existing literature between different types of offenders (male vs. female, young vs. adult). It is therefore difficult to extrapolate these findings to other prison populations.

### **Future research**

In view of the limitations described above, it is clear that longitudinal studies are required to gain further insight into the factors that contribute to coping within prisons. Measuring psychological wellbeing and factors thought to predict good psychological adjustment, such as levels of social support, prior to incarceration and then at various time points throughout an individual's prison sentence would add valuable information to our understanding of this process. The current study (Chapter 4) demonstrated the wealth of information that can be gleaned from interviews with prisoners, suggesting that more studies should aim to include qualitative aspects in future.

Most of the research on bullying within prisons to-date appears to have been generated from UK studies. Further research is needed into prisons within other countries, such as the USA, to explore cross-cultural differences in the challenges prisoners face and how they cope with

these. Similarly, further studies are also needed into the experiences of female prisoners, who represent a growing proportion of the prison population in the UK (Berman, 2012).

Lastly, recent research (Drago, Galbiati & Vertova, 2011; Hochstetler et al, 2010) has suggested that prisoners' wellbeing in prison may also have important implications for their success upon release into the community and their risk of reoffending. This link between wellbeing inside prison and future rehabilitation is one that certainly requires further exploration.

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## **APPENDICES**

## **Appendix A: Syntax used to search electronic databases**

### Ovid MEDLINE (R); EMBASE; PsycINFO:

1. exp offender/ or offend\*.mp.
2. prison/ or prison\*.mp.
3. exp prisoner/ or inmate\*.mp.
4. jail\*.mp.
5. exp custody/ or custod\*.mp.
6. 1 or 2 or 3 or 4 or 5
7. exp bullying/ or bully\*.mp.
8. bullies.mp.
9. exp victim/ or victim\*.mp.
10. 7 or 8 or 9
11. 6 and 10

### Applied Social Sciences Index and Abstracts (ASSIA):

KW=(offend\* OR prison\* OR inmate\* OR jail\* OR custod\*) AND KW=(bully\* OR bullies OR victim\*)

### Science Direct:

title-abs-key((offend\* OR prison\* OR inmate\* OR jail\* OR custod\*) AND (bully\* OR bullies OR victim\*))

### ISI Web of Science:

TS=(offend\* OR prison\* OR inmate\* OR jail\* OR custod\*) AND TS=(bully\* OR bullies OR victim\*)

## Appendix B: Quality assessment form

### Study title and authors:

Quality Criteria	2	1	0	Comments
<b>Screening questions</b>				
Did the study address a clearly focused question?				
Was an appropriate method used to answer the question?				
<b>Selection bias</b>				
Were the inclusion criteria for participants explicit?				
Were the individuals selected to participate in the study likely to be representative of the target population?				
Was a sufficient sample size used?				
Is the description of demographic factors clear and comprehensive?				
If groups of participants were compared, were the groups comparable with respect to important confounding variables?				
Was there any control or adjustment for the effects of these confounding variables?				
<b>Performance and detection bias</b>				
Is the definition of bullying (or victimisation) clearly defined?				
Is the definition and types of bullying behaviour studied comparable to other studies?				
Were standardised instrument(s) used to measure bullying?				
Were the instrument(s) used to measure bullying comparable to instruments used in other studies?				
Were bullying measures shown or known to be valid / reliable?				
If groups were compared, were assessors blind to exposure?				
<b>Attrition bias</b>				
Was the non-response rate reported and at a reasonable level?				
Were those who completed the assessments the same as those who did not?				
Were any missing values dealt with appropriately?				
<b>Analysis</b>				

Are the statistical tests used appropriate?				
Are the results significant? Is the effect size reasonable?				
Have methodological limitations been discussed?				
<b>Total score =</b> <b>Percentage =</b>				

## Appendix C: Data extraction form

General information	
Date of extraction	
Author(s)	
Title of article	
Title of journal	
Quality score	
Clarity score	

Re-verification of eligibility	
Is the study eligible? - <i>Population</i> - <i>Exposure</i> - <i>Comparator</i> - <i>Outcome</i>	Y / N
Study design	

Detailed information	
Study aims	
Target population - <i>Type of prisoners</i> - <i>Demographic information</i>	
Recruitment procedures	
Inclusion criteria	



Exclusion criteria	
Methodology <ul style="list-style-type: none"> <li>- <i>Bullying measure used</i></li> <li>- <i>Validity and reliability</i></li> </ul>	
Non-response rates	
Statistical tests used	
Results	
Other notes/limitations	

## **Appendix D: Participant information sheet (Questionnaires)**

I am conducting a study into prisoners' views of life at HMP [REDACTED], and would like to invite you to take part. I would be grateful if you would take a few minutes to read this information sheet and decide whether you would like to take part in the study.

### **What will I have to do?**

This study aims to find out about your views on safety, support and relationships within this prison and how these experiences affect your mood and feelings. If you choose to take part in this study, you will be asked to complete three questionnaires. One questionnaire looks at your current feelings and moods; one questionnaire looks at the personal support that you receive in prison and the relationships that you have with other people; and one asks you about prison safety. You will be able to complete these questionnaires in a private room and with help from the researcher if you require. The questionnaires will take approximately 20 minutes to complete.

### **Do I have to take part?**

Your participation in this study is completely voluntary and you do not have to take part if you do not wish to. If after reading this information about the study you feel you would like to take part, I will ask you to sign a consent form to show you have agreed to take part. Whether you choose to participate or not will have no effect on your sentence plan or any future involvement with HM Prison Service or the University of Birmingham.

### **Will my taking part in the study be kept confidential?**

Your questionnaires will be anonymous as they will be labelled with a personal ID number (chosen by you) rather than your name. Your name will not be revealed in any publication that may result from this study. Only Elspeth Hampton (Researcher) and other personnel involved in this study at the University of Birmingham will have access to the questionnaire data, and again this will be labelled with your ID number, not your name.

All information provided during completion of the questionnaires (including conversation with the researcher) will normally remain confidential. However there are a few circumstances when this confidentiality would have to be broken. If you disclose a previously undisclosed offence or illegal act, if you reveal any information that may threaten the security of the prison, or if you disclose any behavior that could put yourself or someone else at risk of harm (e.g. thoughts of self-harm or harm to others), then this information would have to be passed onto the appropriate member of prison staff.

All records related to your involvement in this research study will be stored in a locked filing cabinet. Data gathered from this study will be kept as long as required by regulations, which

is up to 5 years following the publication of articles in research journals or communications describing the results of the study.

**What will happen if I don't want to carry on with the study?**

You are free to withdraw from the study at any time prior to the submission of the data for publication (19<sup>th</sup> May 2011). If you wish to do this, you will need to tell [REDACTED] at HMP [REDACTED] and give him your personal ID number. He will then contact the researcher, who will locate your data and destroy it. If you request to withdraw from the study, your questionnaire data will be located and removed without question.

**What will happen to the results of the study?**

The data collected in this study will be written up by the researcher (Elspeth Hampton) as a Doctoral research project. There is also the possibility that this study may be published in a research journal. It is hoped that the results of this study will be useful in considering any improvements that are needed in the support given to prisoners.

**Further information**

If you have any questions about the study, please ask Elspeth Hampton (Researcher).

## **Appendix E: Participant information sheet (Interview)**

As part of a study into prisoners' views of life at HMP [REDACTED], I am also hoping to conduct interviews with some prisoners and would like to invite you to take part. I would be grateful if you would take a few minutes to read this information sheet and decide whether you would like to take part in an interview.

### **What will I have to do?**

If you choose to take part, you will be asked to take part in an interview with Elspeth Hampton (Researcher) about your views of life at HMP [REDACTED]. The interview will last approximately one hour and will take place in a private room. The interview will be tape-recorded so that it can be written up afterwards.

### **Do I have to take part?**

Your participation in this study is completely voluntary and you do not have to take part if you do not wish to. If after reading this information sheet you feel you would like to take part in an interview, I will ask you to sign a consent form to show you have agreed to be interviewed and for parts of your interview to be quoted in the research study. Whether you choose to participate or not will have no effect on your sentence plan or any future involvement with HM Prison Service or the University of Birmingham.

### **Will my taking part in the study be kept confidential?**

Your interview will remain anonymous as your name will not be mentioned in any transcriptions and it will be labelled with a personal ID number rather than your name. Your name will not be revealed in any publication that may result from this study. Only Elspeth Hampton (Researcher) and other personnel involved in this study at the University of Birmingham will have access to the interview data, and again this will be labelled with your ID number, not your name.

All information provided during completion of the questionnaires (including conversation with the researcher) will normally remain confidential. However there are a few circumstances when this confidentiality would have to be broken. If you disclose a previously undisclosed offence or illegal act, if you reveal any information that may threaten the security of the prison, or if you disclose any behavior that could put yourself or someone else at risk of harm (e.g. thoughts of self-harm or harm to others), then this information would have to be passed onto the appropriate member of prison staff.

All records related to your involvement in this research study (including interview notes and tapes) will be stored in a locked filing cabinet. Data gathered from this study will be kept as long as required by regulations, which is up to 5 years following the publication of articles in research journals or communications describing the results of the study.

**What will happen if I don't want to carry on with the study?**

You are free to withdraw from the study at any time prior to the submission of the data for publication (19<sup>th</sup> May 2011). If you wish to do this, you will need to tell [REDACTED] at HMP [REDACTED] and give him your personal ID number. He will then contact the researcher, who will locate your data and destroy it. If you request to withdraw from the study, your questionnaire data will be located and removed without question.

**What will happen to the results of the study?**

The data collected in this study will be written up by the researcher (Elspeth Hampton) as a Doctoral research project. There is also the possibility that this study may be published in a research journal. It is hoped that the results of this study will be useful in considering any improvements that are needed in the support given to prisoners.

**Further information**

If you have any questions about the study, please ask Elspeth Hampton (Researcher).

## Appendix F: Consent form (Questionnaires)

Participant ID \_\_\_\_\_

Please initial box

I confirm that I have read and understood the information sheet for the study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

I understand that my participation is voluntary and that I am free to withdraw at any time prior to publication without giving a reason.

I understand that data collected during the study, may be looked at by co-investigators involved in the research at the University of Birmingham. I give permission for these individuals to have access to my anonymous data.

I agree to take part in the study.

\_\_\_\_\_

Participant's name

\_\_\_\_\_

Signature

\_\_\_\_\_

Date

\_\_\_\_\_

Researcher's name

\_\_\_\_\_

Signature

\_\_\_\_\_

Date

## Appendix G: Consent form (Interview)

Participant ID \_\_\_\_\_

Please initial box

I confirm that I have read and understood the information sheet for the study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

I understand that my participation is voluntary and that I am free to withdraw at any time prior to publication without giving a reason.

I understand that data collected during the study, may be looked at by co-investigators involved in the research at the University of Birmingham. I give permission for these individuals to have access to my anonymous data.

I give my permission for the interview to be audio-recorded and I agree that quotations I provide during the interview may be used in publications.

I agree to take part in the study.

\_\_\_\_\_

Participant's name

\_\_\_\_\_

Signature

\_\_\_\_\_

Date

\_\_\_\_\_

Researcher's name

\_\_\_\_\_

Signature

\_\_\_\_\_

Date

## Appendix H: Interview schedule

<i>Key questions</i>	<i>Prompts</i>
<p><b>Relationships</b></p> <ol style="list-style-type: none"> <li>1. What are your relationships with other prisoners like?</li> <li>2. What about with staff members?</li> <li>3. Have you had any really positive relationships here?</li> <li>4. Have you encountered any difficulties within relationships here?</li> <li>5. Has this always been the case?</li> <li>6. How do you cope with difficult relationships here? (Or how <i>would you</i> cope with difficult relationship here?)</li> <li>7. What do you think could be done to improve prisoners' relationships with staff and other prisoners?</li> </ol>	<p>Personal officer</p> <p>Can you give any examples?</p> <p>Staff members Prisoners</p>
<p><b>Support</b></p> <ol style="list-style-type: none"> <li>1. As a prisoner, what support do you feel prisoners need?</li> <li>2. Are you able to get this support?</li> <li>3. Who do you get support from?</li> <li>4. What type of support do you get from these people?</li> <li>5. What support do you find most helpful?</li> <li>6. What do you think could be done to improve support available to prisoners?</li> </ol>	<p>If not, why not?</p> <p>In prison – staff, prisoners, agencies, Listener scheme Outside prison – family, others</p> <p>Emotional/practical</p>
<p><b>Safety</b></p> <ol style="list-style-type: none"> <li>1. Would you say that this prison is a safe place to be?</li> <li>2. Has this always been the case? What did you think/had heard before you came here?</li> <li>3. Do you think other prisoners would agree with you?</li> <li>4. What helps you to feel safe?</li> <li>5. What makes you feel unsafe?</li> </ol>	<p>Services available Certain staff or prisoners</p>



<p>6. Would you say bullying happens here? ...Tell me more about the type of bullying that happens.</p> <p>7. What do you think could be done to improve prisoners' feelings of safety?</p>	<p>Types of behaviours Types of prisoners involved</p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------

## Appendix I: Modified version of the Significant Others Scale (SOS) – Actual support

This questionnaire asks you about the level of support that you feel you currently receive from people in and out of prison. This includes family members, friends, other prisoners and prison staff, as listed across the top of the table below. Listed down the left-hand side of the table are 10 items, all relating to different types of support.

Please rate each relationship on each of the 10 items by writing the appropriate number from 1 to 7 in the box, indicating to what extent you receive that type of support from that person:

1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7  
*Never*  *Always*

For example, if you felt that you can never trust, talk frankly or share feelings with an important family member, you would write the number 1 in the first box (see below). If you felt that you can always trust, talk frankly and share feelings with your close friend, you would write the number 7 in the second box, and so on.

	Family member or partner	Close friend (outside prison)	Fellow prisoner	Personal Officer	Other staff member (please state their role) .....	Other (please state) .....
1. To what extent can you trust, talk to frankly and share feelings with	<b>1</b>	<b>7</b>				

In the column labelled ‘Other’, please state any other important relationship that is not already listed. If any of the relationships are not applicable to you, then you may leave the column blank.

	Family member or partner	Close friend (outside prison)	Fellow prisoner	Personal Officer	Other staff member (please state their role) .....	Other (please state) .....
1. To what extent can you trust, talk to frankly and share feelings with						
2. To what extent can you lean on and turn to in times of difficulty						
3. To what extent can you get interest, reassurance and a good feeling about yourself						
4. To what extent can you get physical comfort						
5. To what extent can you resolve unpleasant disagreements if they occur						
6. To what extent can you get financial and practical help						
7. To what extent can you get suggestions, advice and feedback						
8. To what extent can you visit them or spend time socially						
9. To what extent can you get help in an emergency						
10. To what extent can you share interests and hobbies and have fun with						

## Appendix J: Modified version of the Significant Others Scale (SOS) – Ideal support

This is the same questionnaire as the last one but this time I would like you to think about the level of support that in an ideal world you would like to receive from people in and out of prison.

Please rate each relationship on each of the 10 items by writing the appropriate number from 1 to 7 in the box, indicating to what extent you would ideally like to receive that type of support from that person:

1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7  
*Never*  *Always*

For example, if you felt that you would sometimes like to be able trust, talk frankly or share feelings with an important family member, you might write the number 4 in the first box (see below). If you felt that you would always like to be able to trust, talk frankly and share feelings with your close friend, you would write the number 7 in the second box, and so on.

	Family member or partner	Close friend (outside prison)	Fellow prisoner	Personal Officer	Other staff member (please state their role) .....	Other (please state) .....
1. To what extent would you like to be able to trust, talk to frankly and share feelings with	<b>4</b>	<b>7</b>				

In the column labelled ‘Other’, please state any other important relationship that is not already listed. If any of the relationships are not applicable to you, then you may leave the column blank.

	Family member or partner	Close friend (outside prison)	Fellow prisoner	Personal Officer	Other staff member (please state their role) .....	Other (please state) .....
1. To what extent would you like to be able to trust, talk to frankly and share feelings with						
2. To what extent would you like to be able to lean on and turn to in times of difficulty						
3. To what extent would you like to be able to get interest, reassurance and a good feeling about yourself						
4. To what extent would you like to be able to get physical comfort						
5. To what extent would you like to be able to resolve unpleasant disagreements if they occur						
6. To what extent would you like to be able to get financial and practical help						
7. To what extent would you like to be able to get suggestions, advice and feedback						
8. To what extent would you like to be able to visit them or spend time socially						
9. To what extent would you like to be able to share interests and hobbies and have fun with						
10. To what extent would you like to be able to get help in an emergency						

## Appendix K: Safety questionnaire

This questionnaire asks you to rate how much you agree with each of the following statements. Read each statement carefully then circle the number the best represents how much you agree with it.

- 1 = I strongly disagree with this statement
- 2 = I disagree with this statement
- 3 = I disagree slightly with this statement
- 4 = I am undecided about this statement
- 5 = I agree slightly with this statement
- 6 = I agree with this statement
- 7 = I strongly agree with this statement

**“This prison is a safe place to be”**

<i>Strongly disagree</i>			<i>Undecided</i>			<i>Strongly agree</i>
1	2	3	4	5	6	7

**“I worry about my personal safety in this prison”**

<i>Strongly disagree</i>			<i>Undecided</i>			<i>Strongly agree</i>
1	2	3	4	5	6	7

## Appendix L: Final coding template

### 1. Relationships

1. Relationships with prisoners
  1. Positive relationships
    1. Desire to build friendships / create allegiances
    2. Similar backgrounds
    3. Family notoriety
  2. Distancing from others
    1. Lack of desire for close relationships
    2. Selective relationships due to fear of being associated with trouble
    3. Self-segregation (age, ethnicity, sentence length)
  3. Dormitory living
    1. Annoying personal habits
    2. Personality clashes
2. Relationships with staff
  1. Positive relationships
    1. Familiarity
    2. Professionalism
    3. Respect
    4. Approachable
  2. Independence from staff
    1. No need for contact
    2. Autonomous prison routine
  3. Mistrust of staff
  4. Poor staff attitude
    1. Authoritarian
    2. Disrespect
  5. Inconsistency from staff
3. Managing difficulties
  1. Self-policing
  2. Acceptance (get on with it)
  3. Avoidance (walk away)
  4. Reluctance to report difficulties
    1. Fear of being labelled a 'grass'
    2. Fear of being returned to closed conditions
4. Ways of improving relationships
  1. Better orientation on arrival
  2. Clear expectation of prisoner/staff roles
  3. Stricter regime
  4. Improved communication

## 2. Support

1. Types of support needed
  1. Practical
    1. Housing
    2. Education
    3. Employment
    4. Financial
  2. Emotional
2. Sources of support
  1. Practical support
    1. Prison officers
    2. Prisoners
    3. Other organisations (e.g. Probation)
  2. Emotional support
    1. Family
    2. Prisoners
    3. Listener scheme
    4. Personal officer
    5. Chaplaincy
3. No need for support
  1. Fewer issues within open conditions
  2. Self-reliance
  3. Previous experience in prison
4. Availability of support
  1. Support available if needed
  2. Practical barriers to seeking support
    1. Poorer availability in comparison to the past
    2. Lack of awareness of support available
    3. Delays in accessing services
    4. Need to be proactive in seeking support
    5. Lack of communication amongst staff
  3. Interpersonal barriers to seeking support
    1. Staff perceived as unapproachable / busy
    2. Perception that officers don't care about prisoners
    3. Need to be favoured by officers
    4. Mistrust of staff and other prisoners
    5. Concerns about confidentiality
5. Ways to improve support
  1. Practical support
    1. Greater promotion of services available
    2. More focus on skills associated with rehabilitation
    3. Improved access to support services
    4. Improved communication amongst staff
  2. Emotional support
    1. More opportunities for family contact
    2. Officers to have a better understanding of prisoners' emotional needs



### 3. Safety

1. Factors helping to maintain feelings of safety
  1. Prison regime
    1. Lack of boredom
    2. Incentives for good behaviour (e.g. home visits)
    3. Ability to maintain family contact eases frustration
    4. Risk of being returned to closed conditions
    5. Strict rules
  2. Environmental factors
    1. Relaxed atmosphere
    2. Violence rarely witnessed
    3. Personal space / freedom
    4. Prisoner demographics
    5. Cameras
  3. Self-confidence
2. Factors contributing to lack of perceived safety
  1. Environmental factors
    1. Minimal presence of officers
    2. Large house
    3. Presence of contraband items (e.g. drugs)
    4. Poor cleanliness
  2. Personal factors
    1. Boredom
    2. Feeling aggravated by prison staff and regime
    3. Unfamiliarity with prison regime
3. Bullying
  1. Perceptions of bullying
    1. No bullying
    2. Recognition of verbal bullying
    3. Minimal physical bullying
    4. Inevitability of bullying in prison
  2. Types of verbal bullying
    1. Testing of new prisoners
    2. Dormitory bullying
    3. Coercion
  3. Deterrents of bullying
    1. Self-policing
    2. Fear of being moved to closed conditions
4. Ways to improve safety
  1. Environmental factors
    1. More cameras
    2. Improved living conditions (cleanliness)
  2. Staffing
    1. Staff to be more approachable for new prisoners
    2. Greater staff presence on the wings
  3. Prison regime
    1. Stricter regime
    2. More activities
    3. Strict selection criteria for prisoner suitability for open conditions
    4. More searches of prisoners returning from leave