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ATTEMPTED SUICIDE AND SELF-INJURY IN PRISONS:

AN EXPLORATION OF RISK FACTORS AND MOTIVATIONS

Thesis submitted in accordance with the requirements of the University of Kent at Canterbury for the degree of Doctor of Philosophy

LOUISA CLAIRE SNOW

October 2002

One day, during my stay in New York, I paid a visit to the different public institutions on Long Island ..... One of them is a lunatic asylum ..... In the dining room, a bare, dull, dreary place, within nothing for the eye to rest on but the empty walls, a woman was locked up alone. She was bent, they told me, on committing suicide. If anything could have strengthened her in her resolution it would have certainly been the insupportable monotony of such an existence.

Dickens, C (1842) *American Notes for General Circulation*, Penguin, 2nd Edition, 2000.

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DEDICATION

In Memory of Sarah Helen Snow, my sister.

23rd December 1959 – 2nd April 2001

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ABSTRACT

This research aims to develop a theoretical understanding of prisoners' motivations for attempting suicide or injuring themselves without suicidal intent. The research proposes that whilst there are some similarities between the behaviours (i.e., both are self-directed and both result in physical harm) the differences between them outweigh their similarities. Most fundamentally, they are seen to differ in psychological, cognitive, motivational and functional respects.

The research attempts to overcome limitations of previous studies, by providing a qualitative and quantitative analysis of first-hand prisoner accounts, focusing on their explanations for their behaviours. The research has three broad aims:

1. To examine what motivates or underlies attempted suicide/self-injury;
2. To explore the relationship between these behaviours and previously-identified risk factors;
3. To identify differences and similarities (in motivation and identified 'risk' factors) between different types of prisoners and different degrees of 'suicidal' behaviour.

In-depth interviews with 143 prisoners in ten prisons were conducted. The sample was broadly balanced according to sex, age and behaviour. The interviews explored a range of issues, e.g., personal background histories, social support networks and self reported feelings before and after the incident. Data were analysed using qualitative and quantitative techniques to explore the underlying structures of risk and motivation, in addition to between-group differences.

The research shows that prisoners who attempt suicide and those who injure themselves for other reasons share many similarities in terms of background, socio-demographic, psychiatric and criminal characteristics. However, the research has provided support for the proposition that these distinct behaviours are underpinned by fundamentally different motivations; they are precipitated by different emotions and serve different functions. These findings are drawn together into a Dual Path Model, indicating the different psychological routes to these behaviours. The implications, in terms of understanding these behaviours and in their broad management, are discussed.

INTRODUCTION

There has been increasing academic, political and media interest in suicide, attempted suicide and self-injury in prisons in recent years. In spite of this interest and in the context of the introduction of revised management strategies, rates of suicide, attempted suicide and self-injury have continued to increase. The prison context provides a particularly interesting and important area for the study of these behaviours, not least because suicide rates in prisons are six times higher than in the general population for equivalent age and gender groups (Sattar, 2001). Developing a theoretical understanding of suicidal behaviours in this context will not only make a valuable contribution to the reduction of these behaviours in prisons, but will also make an important contribution to the development of more general theoretical models of suicide and self-injury.

Earlier academic interest in suicide in prisons focused almost exclusively on 'psychological autopsies', which consist of retrospective analyses aimed at identifying the individual characteristics of those who die. Consequently, the factors associated with heightened risk of suicide are now relatively well known and understood. Recent years have seen a shift from the almost-exclusive focus on individual factors, towards an understanding of the social, situational and environmental contexts of suicide, as well as individuals' interpretations of these contexts. This change of focus raises many challenging theoretical questions, the answers to which are not only of academic interest, but also have practical implications for the management and ultimately the prevention of suicide in prisons.

Despite the Prison Service's introduction of revised strategies (in 1994 and 2001) aimed at suicide awareness, management and prevention, suicide rates have continued to increase. A central argument of the present thesis is that effective suicide prevention strategies must be framed around a theoretical understanding of the unique context of prisons and people's experiences of imprisonment. Research into suicidal behaviours in prisons has, generally speaking, failed to address the important question of why prisoners engage in these behaviours. It will be argued that, unless accurate information can be gathered about prisoners' motivations for attempted suicide and intentional self-

injury, with adequate recognition of the importance of social, environmental and situational factors, it is somewhat difficult to implement preventative strategies or, more crucially, *effective* prevention strategies.

Research Aims

The overall aim of the current thesis is to develop a theoretical understanding of suicidal behaviours amongst prisoners. The intention is that this should further inform and develop the current Prison Service strategy for the identification and management of prisoners who are suicidal or who injure themselves in other ways. The specific aims of the thesis are three-fold:

1. To develop an understanding of the *aetiology* of suicidal behaviours in prisons. Specifically the research will explore the relationship between prisoners' suicidal behaviours and various life events and background factors. The aim is also to identify the contribution of previously identified 'risk factors' to prisoners' suicidal behaviours;
2. To explore prisoners' conceptualisations of the factors precipitating their suicidal or self-injurious behaviour/s. The principal aim here is to identify what *motivates*[1] their behaviour and to understand the *functions* that it serves. In particular the differences and similarities between suicide and self-injury are explored;
3. To understand the differences and similarities relating to Questions 1 and 2 between different types of prisoners (i.e., adult/young offender and male/female prisoners) and different types of suicidal behaviours (i.e., self-injury and attempted suicide).

Question 1: What is the relationship between suicidal behaviours and previously identified 'risk-factors'?

As most research on prison suicide is retrospective, it has only been able to relate contributory factors to overall incidence. Thus, factors that relate more specifically to aspects of individual incidents of suicide, attempted suicide or self-injury have not been

[1]The meaning of 'motivation' adopted within the current thesis is 'psychosocial', in that it is orientated towards explanations of complex, learned human behaviours (Reber, 1985). In other words, it will examine participants *explanations* for attempting suicide or otherwise injuring themselves. This definition differs from 'physiological' interpretations of motivation, which are based on neurological and biochemical underpinnings. It also differs from 'behavioural' interpretations, which consist largely of elaborations or refinements of drive theory and learning theory (Reber, 1985).

identified. This forms the first broad research aim of the thesis, which sets out to improve understandings of suicidal and self-injurious behaviours by exploring the relationship between these behaviours, on an individual and group basis, and previously identified risk factors. The factors associated with suicidal and self-injurious behaviours are many and varied. Furthermore, they are simply correlates and not causative. It is therefore very difficult to assess the relative contribution of each previously identified factor associated with heightened risk. For the purposes of manageability, factors that (within the literature) have been associated with suicide/self-injury are classified into several broad categorisations. They are as follows:

- Demographic characteristics (such as participants' ages, their ethnicity and gender groupings);
- Social characteristics (including their marital status and social and domestic circumstances);
- Criminological factors (such as participants' previous convictions and custodial experiences, as well as their current offence-types);
- Situational factors focussing of participants' day-to-day experiences of prison life (including whether or not they work or attend education, and the nature and quality of their relationships with others inside prison);
- Psychological and psychiatric factors (including the prevalence of psychiatric morbidity, psychological difficulties and drug/alcohol dependence in the current sample).

Question 2: What motivates or underlies suicidal behaviours in prisons?

While there is much retrospective research on suicide in prisons, very little attention is paid to individuals' own experiences of imprisonment or to prisoners' reasons for attempting suicide or otherwise injuring themselves. Whilst this is expected in the area of completed suicide (obviously people cannot be questioned after the event), little attempt has been made to theorise on the issue of prisoners' motivations. Further, there is surprisingly little research into the reasons that (surviving) prisoners attempt suicide or injure themselves. The second principal aim of the research is to address this issue and to develop a theoretical understanding of prisoners' conceptualisations of the

factors that precipitated their suicidal or self-injurious behaviours, i.e., to explore *why* they attempted suicide or self-injured. More specific aims are to:

- Identify prisoners' views as to reasons for attempted suicide/self-injury;
- Identify prisoners' motivations for wishing to die (if death was the desired outcome);
- Explore prisoners' reasons for self-injury (if death was not the desired outcome);
- Explore the nature and extent of prisoners' previous suicidal or self-injurious behaviour/s.
- Explore the functional aspects of suicidal behaviours in prisons.
- Explore what might have helped prevent previous incidents and what might help prevent future incidents.

Question 3: What are the differences/similarities in motivation and background risk factors between different groups of prisoners (men/women and adult/young offender) and different types of suicidal behaviours (self-injury and attempted suicide)?

The current Prison Service strategy for suicide prevention is generic – i.e., it is intended to apply to every prisoner who engages in any form of suicidal behaviour, irrespective of their age, their gender or the precise type of suicidal behaviour they have engaged in. The first notable consequence of this is that the strategy intends to treat self-injury/harm and suicide attempts as synonymous (at least theoretically). There is evidence, however, that the different types of suicidal behaviour (e.g., attempted suicide and self-injury) have different motivations and outcomes and serve different functions (although, clearly, there is a degree of overlap between them). Based on a *differentiation* between these behaviours, it is argued that attempted suicide and self-injury require quite different preventative approaches.

A second consequence of this generic approach is that it is not age or gender specific, i.e., it does not consider the differences that may exist between male/female and young/old prisoners. However, there are clear differences between these groups in the types of self-injurious/suicidal behaviours in which they engage, not least in terms of the frequency, intensity, actual and intended outcome of their behaviour. For example, a far higher number of men than women die by suicide in custody, whilst women (both

adult and young offenders) are more likely to engage in intentional self-injury (relative to their proportions within the total population). Arguably, these different types of prisoners have different needs, which should be reflected in the tailoring of any strategy to fit those particular needs.

In order to further inform and develop Prison Service policy and practice, an exploration of the views of different types of prisoners (in terms of age and gender) as to their reasons for engaging in different types of suicidal behaviours (i.e., attempted suicide and self-injury) was undertaken. This forms the basis of the third broad research aim which, more specifically:

- Examines the similarities/differences (in motivation, actual and intended outcome) between attempted suicide and self-injury;
- Considers the similarities/differences (in motivation, actual and intended outcome) between different groups of prisoners (male/female and adult/young offender).

Each of these questions raises theoretical and practical issues. The present thesis is directed towards addressing them from the premise of examining the experiences of prisoners who have recently engaged in an attempt at suicide or self-injury. To achieve this end, participants were drawn from four main groups within the prison population: adult men, young offender men, adult women and young offender women. Each group contains a sample of prisoners who attempted suicide and a sample who injured themselves but who were not suicidal.

Thesis Outline

The opening chapters review the theoretical and empirical literature relevant to the present study. Chapter 1 begins with definitions of the various behaviours examined; that is, completed and attempted suicide, self-harm and self-injury. An overview of the main theoretical approaches to suicidal behaviours is then undertaken. Chapter 2 examines the life events and background factors associated with suicidal and self-injurious behaviours. Chapter 3 focuses on completed suicide within the prison context, beginning with an examination of the perceived negative effects of imprisonment and prisoners' adaptation to their circumstances. A review of retrospective analyses of

completed suicides in prisoners is then provided, highlighting the factors ordinarily associated with heightened risk of suicide. Chapter 4 follows a similar approach, although the focus is on attempted suicide and self-injury in prisons. Chapter 5 describes the relevant methodological issues, in terms of conducting research into suicidal and self-injurious behaviours, as well as conducting research in prisons. A discussion of the sampling, recruitment, data collection and data analysis for the main study is provided.

Chapters 6 to 11 contain the results of the research. Firstly, Chapter 6 (Results I) provides an overview of the main characteristics of the research population, in terms of background, social-situational, crime-related, psychological and psychiatric factors. Chapter 7 (Results II) provides an analysis of prisoners' experiences of imprisonment itself, including their day-to-day lives and activities, as well as their relationships with other prisoners, with prison staff and with their external contacts. The main focus is on participants' availability and utilisation of social support networks. Chapter 8 (Results III) provides an analysis of the extent to which the negative life events experienced by participants in the sample contributed to their suicide attempts or incidents of self-injury, focusing on the identification of similarities and differences between the sub-groups in the analysis. Chapter 9 (Results IV) focuses on the participants' mood states and key emotions immediately preceding their suicide/self-injury event. Chapter 10 (Results V) presents an analysis of the nature and conceptual structure of participants' motivations for attempting suicide or injuring themselves. The main focus is on the differences between the groups in this regard. Also, an analysis of the functional aspects of these behaviours is provided. Finally, Chapter 11 (Results VI) provides a descriptive analysis of participants' views regarding the effects of imprisonment and its impact on attempted suicide/self-injury. It also examines the potential prevention of future incidents. Finally, Chapter 12 consists of a discussion of the results reported within the thesis in relation to relevant research into suicide, attempted suicide and self-injury, both within the general community and, more specifically, in the prison context. Methodological and theoretical implications of the current research are then discussed and implications for future research outlined. Finally, a number of conclusions are drawn from the research and some recommendations for future policy and practice are made.

CHAPTER 1

THEORETICAL APPROACHES TO SUICIDE, ATTEMPTED SUICIDE AND SELF-INJURY

1.1 INTRODUCTION

The overall objective of the current research is to develop a theoretical understanding of suicidal behaviours among prisoners. The generic term 'suicidal behaviours' in fact includes a variety of behaviours, most notably suicide itself, attempted-suicide (i.e. non-fatal) and self-injury. The view is held by some that these behaviours are relatively homogenous and serve a similar motivational function. However, this thesis will argue that while suicide/attempted suicide and self-injury share many common characteristics, particularly in terms of their aetiology and observable behaviours, there are strong theoretical arguments to consider them as distinct, not only in terms of their immediate on-set but also for their fundamental underlying functional roles. While the development of this distinction is of theoretical importance, it also carries profound practical consequences. At present, the Prison Service in England and Wales follows the same prevention strategy for both suicide and self-injury. The research currently presented provides evidence for the suggestion that this approach is flawed because of these functional differences and hence requires reconsideration.

The current chapter begins by examining the definitional issues surrounding suicide and self-injury, leading to a definition of the behaviours that will be examined in the present research. An historical and cultural overview of suicidal and self-injurious behaviours is followed by a discussion of more modern theoretical approaches towards suicide from sociological and psychological perspectives. The main theoretical approaches, beginning with the influential works of Durkheim (1887) and Freud (1917), represents the first attempt to explicitly *understand* suicide and marks a shift away from mere condemnation or arguments about an individual's right to chose the timing of their death. Attention then turns to theoretical approaches to self-injury, with an overview of the main epidemiological studies, and a contextualisation of self-injury within a broader

range of self-harming behaviours.

In the following chapter (Chapter 2), the life events and background characteristics typically associated with suicide and self-injury are examined. Following that, in Chapters 3 and 4, research into suicide and self-injury in prisons is reviewed. These first four chapters provide the basis from which the research methodology and interview schedule utilised in the current study are then developed.

1.2 DEFINITIONAL ISSUES

There are definitional problems inherent in the terms 'suicide', 'parasuicide' 'attempted suicide', 'self-harm' and 'self-injury'. Indeed, as Neuringer (1962) noted, one of the most common methodological problems of research in the area relates to the question of definition. Is vital therefore that the behaviours studied are clearly defined from the outset. Although, within the vast literature, the terms suicide, attempted suicide, parasuicide and self-harm or injury are often used interchangeably, it is clear that differences between the behaviours exist. A detailed discussion of definitional issues now takes place.

1.2.1 Suicide

Conceptually, the term 'suicide' is straightforward. Expressed very simply, it is an act of intentional self-killing. More formally suicide can be defined as a wilful, self-inflicted, life-threatening act resulting in death (Beck, Weissman, Lester and Trexler, 1974; Beck, Kovacs and Weissman, 1975; Beck, Weissman, Lester and Trexler, 1976, Beck, Kovas and Weissman, 1979). According to this interpretation, all situations in which the circumstances surrounding an individual's death led to the conclusion that they undertook the action with the primary purposes of ending their life would be defined as an incident of suicide. However, investigations into suicide are hindered by their retrospective nature, making the true assessment of an individual's intent somewhat arduous. For example, it can be difficult to ascertain whether an individual's death was suicide, or accidental and, therefore, unintentional (Morgan, 1979, p.4).

Problems with the definition of suicide are reflected in official statistics relating to such deaths. In England and Wales, an individual's death can be classified as suicide only by a coroner, who adopts a level of evidence comparable to a criminal court. Consequently a suicide verdict must be supported by evidence of both *actus rheas* (a guilty act) and *mens rheas* (guilty intent) (Dorries, 1999). Therefore, to record a verdict of suicide a coroner must establish that a person killed themselves and that they *intended* to do so. If there is doubt about an individual's intent, if there is no direct evidence of proof of intent, e.g., a suicide note, either an accidental or open verdict is recorded. It has also been suggested that coroners may be reluctant record suicide verdicts in order to minimise stigmatisation and to spare the feelings of bereaved relatives (Chambers and Harvey, 1989). Combined, these factors mean that official suicide statistics substantially underestimate the true incidence of suicide (McCarthy and Walsh, 1975).

Acknowledging these two main difficulties, the term 'suicide' is currently taken to refer to *self-inflicted* deaths. This is broader that the term 'suicide' and includes all deaths that appear to be attributable to the actions of an individual, irrespective of their intent and irrespective of the inquest verdict. This definition accords with the Prison Service definition that was adopted in 1991 as an all-embracing definition to describe deaths arising from non-natural causes (McHugh and Towl, 1997). The Prison Service classifies deaths as self-inflicted for all coroners' verdicts of suicide, death by misadventure, open verdicts and accidental death.

1.2.2 Attempted Suicide

Although seemingly straightforward, the term 'attempted suicide' is also complex and can be misleading. Although, taken literally, the term relates to the intentional infliction of injury aimed ultimately, albeit unsuccessfully, at death it is applied to a broad range of different behaviours (Fairbairn, 1995). It is only since the 1970s that researchers and practitioners have begun to distinguish between 'failed' acts of suicide and the infliction of injuries for reasons other than cessation of life. Prior to this, no distinctions were made between the broad spectrum of suicidal behaviours. For example, Menninger (1935, 1938) coined the term 'focal' suicide to emphasise the perceived similarities

between actual suicide and other behaviours that self-directed injuries but which did not result in death. According to Menninger, these behaviours are 'determined in general by the same motives and mechanisms ..... [as] for suicide proper except in the participation of the death instinct' (cited in Babiker and Arnold, 1997, p.16).

Later writers questioned the perceived similarities between the behaviours, emphasising the inappropriateness of such all-inclusive interpretations. The presupposition for this distinction rested on the important concept of intent, which was considered key to the interpretation and classification of an individual's behaviour as suicidal or otherwise. Other defining dimensions include the physical damage resulting from the injury, the frequency or chronicity of the behaviour and the method that was employed (Walsh and Rosen, 1988).

Stengel (1952) was amongst the first to acknowledge the differences between attempted suicide and other self-injurious behaviours in this respect. Although he proposed that demonstrable conscious intent of self-destruction was a shared component of attempted suicide and other self-injurious behaviours, the differences between the behaviours were also acknowledged. Similarly, Kessel (1965) favoured a distinction between the behaviours suggesting that the description 'attempted suicide' could be misleading and inappropriate in the sense that it was neither a 'diagnosis' nor a description of behaviour. Kessel (1965) argued that the practice of defining an incident as attempted suicide involved 'an interpretation of the motives for the act ..... an unnecessary and usually a wrong interpretation' (Kessel, 1965, p.30). Rather (with specific reference to overdoses), Kessel suggested that people engage in the act in an attempt to alter their life situation in some way, but not to die, as summarised in the following statement.

> 'For four-fifths of patients the concept of attempting suicide is wide of the mark. They performed their acts in the belief that they were comparatively safe – aware, even in the heat of the moment, that they would survive their overdose and be able to disclose what they had done in good time to ensure their rescue. What they were attempting was not suicide' (Kessel, 1965, p.29).

Similarly, Lester and Lester (1971) advocated attempts to interpret individuals' actions in terms of whether death is foreseen or desired, suggesting that establishing an

individual's intent may be more meaningful than actual behaviour or its outcome, because events may not go according to plan. Whilst this approach is favourable, assessing an individual's intent is far from straightforward. Whilst it may be possible to establish whether or not an individual who attempted suicide but *survived* intended to die, it is much less straightforward to ascertain whether or not somebody who had *completed* suicide intended to do so. Further, the classification of different forms of suicidal or self-injurious behaviours can lead to oversimplifications of interpretation (Lester and Lester, 1971). As an alternative to the simple suicidal/non-suicidal dichotomy they suggest that that all such behaviours lie on a continuum, ranging from highly lethal (such as attempted hanging/or actual suspension) to very safe (for example, inflicting medically superficial scratches to one's arm). This is a useful reconciliation between the earlier lack of specificity, for example, Menninger, (1938) and later aspirations for specificity, with all their associated difficulties.

Morgan (1979) concurs with the notion of an inter-relationship between self-injurious behaviours but argues that there should not be such an emphasis on intent, given the difficulties in its assessment. Alternatively, he suggests that the conscious and deliberate nature of non-fatal acts of self-harm is the key issue, irrespective of the ability to demonstrate intent to end life. Morgan (1979) introduced the term 'non-fatal deliberate self-harm' to describe '[a] non-fatal act, whether physical, drug overdose or poisoning, conducted in the knowledge that it was potentially harmful, and in the case of drug overdose, that the amount taken was excessive' (Morgan, 1979 p.88). As implied, this definition avoids the issue of intent completely.

Like Morgan (1979), Kreitman (1977) argued that the establishment of intent should not be the defining criterion in behavioural classification because of its interpretative problems. Kreitman (1977) coined the term *parasuicide* to include all behaviours involving self-inflicted injury (being a behavioural analogue of suicide) whilst precluding the necessity of assessing one's psychological orientation towards death, although acknowledging the affinity between the behaviours. Parasuicide following overdose is defined as 'a non-fatal act in which an individual deliberately causes self injury or ingests a substance in excess of any prescribed or generally recognised

therapeutic dose' (Kreitman, 1977 p.3). Thus, parasuicide (like deliberate self-harm) is a generic term that avoids the necessity of establishing the intended outcome of an individual's behaviour, referring only to the actual outcome (i.e., the behaviour) itself.

There are advantages in broadening earlier definitions of self-destructive behaviours to include both 'unsuccessful' suicide attempts and acts of self-harm/injury where it is apparent that self-destruction was clearly not intended. Adopting a comparatively over-inclusive definition allows the incorporation of a wider variety of methods, such as self-poisoning and drug-overdose, as well as lacerations and other forms of self-injury. However, on the other hand, this approach can be criticised for its lack of specificity and the lack of distinction (both theoretical and practical) between suicide and other types of self-harm/injury. For example, Fairbairn (1995) criticises the umbrella concept of 'suicide' and its variants, suggesting that the behaviours are not distinguished, even in theory, perhaps because they prove difficult in practice. Similarly, Pritchard (1995) suggests that suicide/attempted suicide and self-harm/injury are *different* phenomenon, not only in terms of outcome, but also in terms of the psychological and social characteristics of those who engage in the behaviour/s.

Although a theoretical distinction between the broad spectrum of self-harming behaviours is currently adopted, it is important to acknowledge the relationship between attempted and eventual suicide (Barraclough and Hughes, 1987). It is also important to acknowledge that strict adherence to a differentiation between attempted suicide and self-injury may be difficult in every instance. Firstly, there are difficulties in assessing whether a 'completed suicide' intended to die, particularly if no suicide note was left. Secondly, it is apparent that a proportion of so-called 'failed suicide attempts' are conducted by those who have confused and often ambivalent feelings about their actual intent (Shneidman, 1985).

Despite these difficulties, as will become more apparent, there are clear differences between attempted suicide and injuries inflicted for reasons other than cessation of life. Differences exist, for example, in individuals' motivations for engaging in the behaviours, as well as in the functions they may serve. For the current purposes the

term 'attempted suicide' relates to *all incidents where an individual engaged in self-injurious behaviour/s specifically for the purposes of terminating their life, irrespective of the method employed.* Based on this definition, for an individual's actions to be classified as attempted suicide, intention of death must be present (the assessment of suicidal intent will be more fully discussed in Chapter 5).

1.2.3 Self-Injury/Self-Mutilation

> 'Deliberate self-injury is often a confusing and a confused act; confused because it seems to have such mixed motives and intentions, and confusing to the extent that there is not even general agreement as to what name should be given to this behaviour' (Pierce, 1977, p.377).

As intimated, there are a number of clear differences between attempted suicide and self-injury without suicidal intent. For example, there can be differences in aetiology and outcome aetiology, as well as in the function of the behaviours. Nevertheless, the *practical* distinction is far from straightforward. Perhaps because of the inherent definitional difficulties and the consequent reluctance to distinguish between what may be loosely termed 'suicidal behaviours', there has been comparatively little theoretical literature on self-injury.

Before outlining the main literature in the area it is important to highlight the parallels between self-injury and other forms of 'self-harming' behaviours. There are some similarities between self-injury and other seemingly self-destructive behaviours, such as smoking, excessive alcohol intake, over-eating and sexual risk-taking. Ross and McKay (1979) make the distinction between direct and indirect self-injurious behaviours. In direct self-injurious behaviours (such as cutting) the link between the action and the consequences is unequivocal and immediate. In cases of indirect self-injury, such as alcohol misuse or eating disorders, the link is remote and unequivocal. Similarly, Favazza (1996) distinguishes between culturally acceptable and 'pathological' types of self-harming behaviours, suggesting that the latter be categorised into three further sub-types: 'suicidality', 'self-mutilation' and 'unhealthy behaviour'. Favazza's (1996) description of 'unhealthy behaviour' is equivalent to Ross and McKay's (1979) definition of indirect self-harm. Favazza (1996) differs however in his

interpretation of the three sub-types of 'suicidality'. By categorising them all as 'pathological' Favazza is emphasising a perceived affinity between them.

Babiker and Arnold (1997) emphasise an important parallel between self-injury and other 'unhealthy' behaviours (such as sexual promiscuity and substance misuse) namely the *functions* that they serve. For example, both substance misuse and self-cutting may be used as distraction from negative emotions or distress or as means of self-punishment. Where these behaviours differ is in the extent to which they are socially acceptable. For example, it is quite acceptable to get drunk following an argument with one's partner, although it is not acceptable to slash one's face with a razor blade. Both alcohol and drug use constitute acceptable social behaviour (unless taken to extremes) whereas self-injury does not. Perhaps as a function of its social unacceptability, self-injury is explicitly 'psychiatrised'. Whilst excessive alcohol intake may be regarded as a *social* (rather than an *individual* psychiatric) problem, the reverse is true with regards to self-injury. Perhaps because of the fact that it is outside of the ordinary range of managing feelings and emotions it is considered indicative of 'madness', at least when compared with other forms of 'unhealthy' behaviour (Babiker and Arnold, 1997).

Various attempts have been made to classify self-injurious behaviours according to several criteria including the lethality or potential lethality of the behaviour, its purpose or function, whether or not it is cultural acceptable, its expected outcome and chronicity. Menninger (1938), who was the first to categorise the behaviours, adopted a very broad definition of 'self-mutilation' including cutting, hair pulling and nail biting, and suggested that the following criteria should be applied:

1. The extent and type of the psychological or physiological dysfunction of the person;
2. The sub-cultural context of the behaviour and the meaning of the act within that context;
3. The degree of self-harm and its physical location on the body;
4. The specific psychodynamic determinants of the behaviour.

Ross and McKay (1979) proposed a more precise typology that included similar

dimensions, but was intended to apply to more specific behaviours, such as cutting, inserting objects, hitting, constricting and ingesting. Their categorisation is couched exclusively in behavioural terms. They made no attempt to categorise the behaviours according to the sub-cultural context or the level of disturbance of the individual. They proposed that three related dimensions were applicable to self-injurious behaviours:

1. The severity of the physical damage;
2. The psychological state of the individual;
3. The social acceptability of behaviour.

Drawing on the work of Ross and McKay (1979), Walsh and Rosen (1988) adopted a categorical schema that goes beyond the behavioural-descriptive, developing what they term a 'compromise between Menninger's level of speculation and Ross and McKay's restrictiveness' (Walsh and Rosen, 1988, p.6). Walsh and Rosen (1988) developed a schema of self-harming behaviours based on the following three factors: the degree of physical damage; the psychological state of the individual; and the social acceptability of the behaviour. Walsh and Rosen's four types of self-injury are as shown in Table 1.1.

Table 1.1

No.	Example of Behaviours	Degree of damage	Psychological state	Social acceptability
1	Ear piercing, nail biting, small professional tattoos, cosmetic surgery	Superficial – mild	Benign	Acceptable in all or most groups
2	Punk-rock piercings, ritualistic scarring, large tattoos among sailors/motorcycle gangs	Mild – moderate	Benign to agitated	Acceptable only in a specific subculture
3	Wrist/body cutting, self-inflicted cigarette burns, wound excoriation, self-inflicted tattoos	Mild – moderate	Psychic crisis	Generally unacceptable, unless with like-minded peers
4	Autocrastation, self-enucleation, amputation	Severe	Psychotic decompensation	Entirely unacceptable with all peers and in all social groups

Table 1.1 Walsh and Rosen's (1988) Typography of Self-Mutilation

The definition adopted in the current thesis is that self-injury is an act in which an individual purposefully injures themselves irrespective of the method employed, where

the motivation for the behaviour is something other than cessation of life. According to this definition, self-injury does not involve an intention to die but, in some case, quite the reverse. Many of those who injure themselves intentionally regard it as an attempt not to end life, but to preserve it, in the sense that inflicting and feeling pain reinforces the fact that one is alive (Arnold, 1995; Babiker and Arnold, 1997).

1.2.4 Terms Adopted Within the Current Thesis

- The meaning of **suicide** currently adopted is broadened to the wider definition of 'self-inflicted death' and includes all (non-natural) deaths that appear to be attributable to the actions on the individual concerned, irrespective of their intent.

- The term **attempted suicide** is taken to include all incidents that involved self-inflicted injury conducted by a single individual with the sole intent of ending their life.

- **Self-injury** includes all incidents that involved the purposeful infliction of injury that were undertaken for something other than ending their life.

1.3 HISTORICAL OVERVIEW OF SUICIDE AND SELF-INJURY

Suicide has for many years held strong moral attachments. This has been particularly so since suicide was pronounced as morally sinful in 400 AD, a view that emerged from the belief was that there should be no interference in God's authority over life and death. The overwhelmingly negative view with which suicide was regarded is demonstrated by the introduction of laws against it some 300 years ago. In English law, prior to the latter part of the 20th century, those who 'failed' in their suicide attempts were sometimes imprisoned as a direct result. Suicide was decriminalised in 1961, however it still remains a criminal offence to assist in the suicide of another person.

Reactions to and attitudes towards suicide are inherently historically and culturally specific and dependent on a multitude of factors, of which religion is one of the most

profound. Contemporary understandings appear to be polarised into two divergent approaches, which have remained largely distinct, both in terms of their methodologies and their theoretical conclusions (Giddens, 1971). The two main approaches are the epidemiological, statistical, *sociological* approach on the one hand, and the individual, clinical or *psychological* on the other (Morgan, 1979). Traditionally, sociological approaches have consisted of surveys of the distribution of suicide, focussing on social, environmental or economic explanations of the behaviour. Psychological approaches, on the other hand, have tended to focus on the description of individual cases in order to understand individual causes of and reasons for suicidal behaviour/s and, in particular, the role of psychiatric illness.

As Morgan (1979) suggests, these approaches are difficult to equate, as each has its own adherents and regards the other as less important, even irrelevant. From a sociological perspective, it could be argued that the explanation of suicide in terms of individual factors (namely, psychiatric illness and clinical factors) unjustifiably 'blames' the individual and hinders the search for social or situational causes. Conversely, from a psychological perspective, the examination of individual factors is considered far more important that social or other factors (e.g., economic). Reconciliation between these two approaches remains one of the biggest challenges in contemporary attempts to understand and thereby prevent suicide (Morgan, 1979). Although both approaches have an equally valid and important contribution to make, their integration may further improve understandings of what is an inherently complex and multi-factorial phenomenon. Arguably, a comprehensive understanding of suicide can only be achieved through an adequate knowledge of both approaches. As will be more fully discussed subsequently, integration of what are largely disparate approaches may be achieved through the adoption of a model of suicide similar to that proposed by Stillion and McDowell (1996).

Early writings on suicide (prior to the seventeenth century) were largely directed against mediaeval prohibitions condemning suicide, which was regarded as a singularly personal or individual act. In contrast to earlier theorists, Donne (1648) can be said to have been foremost in recognising the *social* nature of suicide. Donne suggested that

profound influence could be exerted over individuals by the ethos and natures of the societies in which they existed. Donne's embryonic social understanding of suicide is depicted in the following sermon extract: 'No man is an island, entire of itself; every man is a piece of a continent, a part of the main. Any man's death diminished us' (Donne, cited in Pritchard, 1995 p.24).

Understanding of suicide took on a new dimension with the publication of Durkheim's *Le Suicide* (1897/1952) in which suicide was, for the first time, explicitly related to environmental, situational and demographic factors such as marital status, socio-economic class and degree of social integration. Durkheim's work represents an important departure from early moral, religious and 'psychopathological' approaches and remains highly relevant to the contemporary approaches to suicide.

1.4 THE SOCIOLOGY OF SUICIDE

Durkheim was among the first to recognise suicide as an indication of how individuals interact with society, and how individuals' actions reflect something of the nature and structure of their societies (Pritchard, 1995). In this sense, Durkheim's analysis marked a significant departure from previous theorists in its rejection of non-social factors as being irrelevant in determining variations in rates of suicide. Previous theorists paid at most only scant attention to the existence of social factors, regarded them simply as one among other types of factors, such as climate, which were important in the aetiology of suicide (Giddens, 1971).

The premise underpinning Durkheim's theory of suicide was developed in an earlier work (Durkheim, 1895/1966) in which he proposed that social phenomena could not be understood simply in terms of individuals' actions or motives. Rather, individuals were born into already organised societies that influenced them independently of their own volition and, as such, had a reality distinct from each individual. Thus, society is 'external' to the individual, in that it consists of an ordered system of norms and relationships to which an individual's own thoughts and actions form only a minute element. Further, Durkheim argued that 'social facts' were autonomous and could not

be explained solely by reference to individuals, but instead as realities external to the individual (as 'things'). Durkheim's *Suicide*, argues Taylor (1982), demonstrated the extent to which behaviour was determined by a collective reality. This was in contrast to the previous view that suicide was an individual (rather than social) act. In this sense, Durkheim sought to demonstrate that suicide was, in fact, governed by the societies in which individuals existed.

Durkheim (1897/1952) suggested that there was an essential distinction between the explanation of variations in *rates* of suicide and the aetiology of *individual acts* of suicide. Based on the relative consistency of suicide rates within European countries, he suggested that suicide was unified and definite, in the sense that even when there were changes to the number of suicides, the overall rate remained relatively stable. As Giddens (1971) explains:

> 'The statistics for one and the same society are almost invariable. This is because the environmental circumstances... remain relatively unchanged from year to year. To be sure, more considerable variations occasionally occur; but they are quite exceptional. They are also clearly always contemporaneous with some passing crisis affecting the social state' (Giddens, 1971 p.11).

Given the relatively stable character of suicide rates, Durkheim argued that they should be should be analysed in relation to factors that act upon the social community to produce a definite 'collective tendency' towards suicide (Giddens, 1971). For Durkheim, the second reason for analysing such factors is that study of an individual case of suicide, whilst relevant to that individual, could not explain the *social* phenomenon of suicide. Neither could it explain such regular statistical distribution of rates. Instead, it was argued that different rates of suicide in European countries could only be sought in the differing characteristics of those various countries and, in particular, the social integration of its members. Durkheim developed a typology of four main types of suicide, each of which is now outlined.

1.4.1 Egoistic Suicide

Citing religion as an example, Durkheim (1897/1952) argued that egoistic suicide varied inversely with the degree of integration of members of a social group. It was noted that predominately Catholic societies had substantially lower rates of suicide than Protestant societies. It was argued that the phenomenon could not be accounted for by varying attitudes since both Protestantism and Catholicism condemned suicide with equal severity. Rather, it was claimed that the main difference between the religions was in their 'integration' of individual members. As Giddens (1971) suggests, Catholicism involves a traditionally established set of beliefs and ritual practices into which the individual is closely bound. Protestantism, on the other hand, is more individualised. That Catholicism integrates its member more fully that Protestantism, argued Durkheim, accounted for the higher rate of suicide amongst the latter.

Further support for the phenomenon of egoistic suicide is provided by consideration of the relationship between marital status, social integration and suicide, demonstrating that unmarried people were more likely to die by suicide (a factor which remains so, particularly for men). Further, suicide rates decrease in proportion of increasing family size. Thus, suggested Durkheim, (egoistic) suicide varies inversely with the degree of integration of the social groups of which the individual forms a part. In this sense, egoistic suicide derives from excessive individuation, whereby individuals become detached from close contact with others. Durkheim suggested that egoistic suicide is an unavoidable consequence of the growth of individuation in modern societies. Where individual freedom and self-fulfilment are primary values, it was argued that an inevitable increase in egoism and egoistic suicide occurs.

1.4.2 Anomic Suicide

In contrast, anomic suicide, argued Durkheim, was induced by a lack of regulation and stability, particularly in the economic sphere. Durkheim noted that suicide rates increase during economic transformation both in periods of economic crisis and in periods of unusual prosperity. It was argued that such fluctuation placed individuals in

situations where the previous norms that regulated their lives were no longer appropriate. As a result, individuals became left in a situation of de-regulation, or 'anomie'.

1.4.3 Altruistic Suicide

Durkheim argued that altruistic suicide occurred in comparatively primitive societies, not because of moral de-regulation, as in anomic suicide, or 'excessive individuation', as in egoistic suicide, but out of a sense of duty - a theory that has resonance with suicide in cultures such as Japan. Examples include suicides of the elderly or infirm, or women following the deaths of their husbands and individuals who kill themselves in order to bring honour to their name. In such cases, altruistic suicide occurs in response to the demands of the group, in furtherance of the values of the collectivity. As Durkheim remarks:

> 'When a person kills himself, in all these cases, it is not because he assumes the right to do so but on the contrary, because it is his duty. If he fails in this obligation, he is dishonoured and also punished, usually by religious sanctions' (cited in Giddens, 1971, p.19).

Durkheim suggested that altruistic suicide was also evident in modern societies, particularly in institutional spheres with strong moral codes that subordinate the individual to the collectivity. A contemporary example of altruistic suicide would be that involving a member of the armed forces (Giddens, 1971, p.xvii).

1.4.4 Fatalistic Suicide

According to Durkheim, 'fatalistic' suicide derived from excessive regulation of the individual, '[amongst] persons with futures pitilessly blocked and passions violently choked by oppressive disciplines' (Giddens, 1971, p.26). Because of its intrinsic cultural specificity, Durkheim suggested that fatalistic suicide had little contemporary significance. Consequently, it was given scant attention, to the extent of a short footnote. However, as illustrated in the following excerpt, this type of suicide appears particularly relevant to the current examination of suicide amongst prisoners.

> 'Do not the suicides of slaves, said to be frequent under certain conditions, belong to this type, or all suicides attributable to excess physical or moral despotism? To bring out the ineluctable and inflexible nature of a rule against which there is no appeal, and in contrast with the expression 'anomie'... we might call it fatalistic suicide' (cited in Giddens, 1971, p.26).

Although Durkheim acknowledged the relevance of psychological factors, he argued that they were distinct from the factors of social structure that produced a given distribution of suicide within an individual society. Thus, suicide was regarded, quite simply, as a reflection of the type of society in which an individual lives. Although, as Giddens (1971) argues, Durkheim's thesis provides a 'viable basis for the analysis of macro-sociology relevant to the aetiology of suicide' his psychological understanding is 'fragmentary and inadequate' (Giddens, 1971, p.100).

1.5 THE PSYCHOLOGY OF SUICIDE

Departing from the focus on social factors, attention now turns to the earliest psychoanalytic and psychological interpretations of suicide, beginning with Freud's *Mourning and Melancholia* (1917). Attention then turns to later developments of Freud's works (e.g., Menninger, 1935, 1938) and closes with an overview of the work of Shneidman (1981, 1985 and 1996), Beck and colleagues (1974, 1979 and 1989).

1.5.1 Psychoanalytic Approaches

Freud's comparison between severe depression and the normal experience following the loss of a loved one (in *Mourning and Melancholia,* 1917) represented a highly influential and useful theory of suicide (Giddens, 1971; Litman, 1994). For Freud, depression was linked to the mourning and melancholia that arose from actual or symbolic profound bereavement and loss (Pritchard, 1995). Mourning is normal following the death of a loved-one and, for the sake of self-protection, the bereaved must withdraw their emotional ties to the deceased. Since, according to Freud, such detachment cannot be undertaken immediately, the individual's emotional energy is withdrawn from the external world into the ego. However, the individual can continue to identify with an introjected image of the other and, consequently, lose interest in the

external world. At its most extreme, the individual holds repressed hostile feelings for the deceased and unconsciously feels that he/she has been abandoned. Aggressive feelings ensuing from this sense of abandonment become the focus of the previously developed reservoir of hostile feelings which cannot be directed outwardly. Consequently, these hostile impulses are retroflected against the introjected (ambivalently viewed) love object, leading to a desire to harm oneself and, ultimately, to suicide. For Freud, the key difference between grief (mourning) and depression (melancholia) is depression is related to an object-loss withdrawn from consciousness, whilst in the case of grief, 'there is nothing about the loss which is unconscious ... it is the world itself which has become poor and empty; in melancholia it is the ego itself' (Freud, 1961, p.246).

Central to Freud's understanding of suicide is his theory of personality. Freud suggests that an over-developed or demanding super-ego can lead to the development of perfectionist standards that cannot be achieved. Continual 'failure' inevitably results in constant intrapsychic conflict that is highly energy-resourceful, such that individuals have little left to deal with life's day-to-day demands. Consequently, they become further removed from their ego ideal and further in conflict with themselves. Freud's (1961) theory of personality also influences his understanding of depression which, it is argued, is characterised by an exceptionally punitive and rigid super-ego, resulting in inverted hostile impulses. This response, generated by existing frustrations, is not confined to actual object-loss, but can extend to include all situations of 'being slighted, neglected or disappointed' (Freud, 1961, p251). According to this theory feelings of worthlessness, which often characterise depression, can be understood as sentiments which actually refer to another, stimulated by the actual or imagined behaviour of others.

Of further importance is Freud's fundamental belief in the dynamic between the life and death instincts (*Eros* and *Thanatos*). According to Freud the purpose of the life instinct is individual survival and species propagation, whereas the death instinct is defined as the psychological embodiment of the drive to return to an inorganic, unorganised state (as is often seen in nature). This view sees life as preparation for death, with the death

instinct as a drive to its end (Williams, 1997).

Later psychoanalysts have built on Freud's work. For example, Menninger (1935, 1938) suggested that every suicide consisted of three impulses. Firstly, those derived from primary aggressiveness crystallised as a wish to kill (originating from the death instinct). Secondly, those derived from a *modification* of primitive aggressiveness crystallised as the wish to be killed (originating in the super-ego's masochistic need punishment). Thirdly, impulses derived from primary aggressiveness and *additional* motives crystallised as the wish to die (originating in the desire to return to the womb). Thus, the suicidal individual must expect to kill, be killed and to die. Menninger coined the term 'focal' to describe both attempted suicide and self-injury representing what he perceived to be a compromise between the above-mentioned life and death instincts, resulting in a postponement of the death instinct and a dilution in the impulse to kill oneself.

1.5.2 Behavioural Approaches

Early psychological theories of suicide were also very much grounded in the behavioural perspective, which has its roots in Pavlov's (1927) theory of classical conditioning. According to the theory, a stimulus initially incapable of eliciting a particular response gradually acquires the ability to do so through repeated association with a stimulus that has already provoked this response (Stroebe and Jonas, 1996). The concept of operant or instrumental conditioning is an important element of behaviourism popular in the treatment or management of suicide/self-injury, with reinforcement being the basic principle. According to this theory, reinforcement is the key to learning and thereby controlling behaviour. Reasons for an individual's behaviour are understood by identifying the circumstances in which it occurred and the contingencies that shaped and maintained it (Stillion and McDowell, 1996). Taking this notion to its logical conclusion, all that has been learned can be unlearned, by reinforcement.

Social learning theories, with their emphasis on modelling and imitation as prime

factors in learning, are particularly pertinent to the question of suicide, most notably through the concept of **learned helplessness**, which describes individuals' response patterns following exposure to uncontrollable or non-contingent situation. Abramson, Seligman and Teasdale (1978) argued that causal attributions (i.e., how people attribute effects to causes) were determined by their responses to non-contingent events. They proposed a five-stage model incorporating the following elements: objective non-contingency; perception of present and past non-contingency; attribution for past and present non-contingency; expectation of future non-contingency and symptoms of helplessness. In short, an individual's reaction to an unexpected/uncontrollable event is dependent upon their reactions to similar events in the past, as well as their expectations of future outcomes. An expectation that nothing can be done to solve the situation is characteristic of learned helplessness. A similar expectation has been found to be characteristic of those who attempt suicide as they often report that they felt they had no alternative way of dealing with their problems and that suicide was the only 'way out' (O'Connor and Sheehey, 2000).

The behavioural perspective would maintain that suicidal behaviour, just like all other types of behaviour, is learned. Whether through learned helplessness, modelling and imitation or operant conditioning the suicidal individual has learned that suicide is a viable option (Stillion and McDowell, 1996, p.57). This theme is developed further in Chapter 2, where the risk factors associated with suicide are discussed.

1.5.3 Cognitive Approaches

In contrast to the behavioural approaches to suicide, the cognitive approach holds that the way in which one organises one's thoughts can have a profound influence on the way in which an individual understands and deals with their world, and in extreme cases, their suicidal intentions. As suggested by O'Connor and Sheehey (2000), the psychological components of the 'suicidal mind' can be divided into interpersonal and intrapsychic factors, both of which are cognitive in nature. The interpersonal component affects an individual's ability to develop and maintain personal relationships whilst the intraspsychiac element affects an individual's outlook. The leading

proponent of the theory of the 'suicidal mind', Shneidman (1967, 1976, 1985, 1996) is proclaimed to be responsible for a shift in cultural attitudes towards suicide and suicidal behaviour. The previous tendency to equate suicide with sin, psychiatric illness or individual personality traits was superseded by the recognition that it occurred amongst individuals who were experiencing overwhelming ambivalence towards life. Rather than viewing suicide as a product of individuals' personality traits, Shneidman argued that it was indicative of personal crisis.

Whilst acknowledging the multi-faceted nature of suicide, Shneidman (1996) argued that both conscious and unconscious elements were present and that its essential nature was psychological, as implied in the following statement: 'each suicidal drama occurs in the *mind* of a unique individual' (Shneidman, 1996, p.5). Shneidman's (1985) 'cubic model' of suicide gives further credence to the psychological nature of suicide. Having content analysed over 5,000 suicide notes, Shneidman extracted three major themes from those who left records of their intent and action: *perturbation* (extreme psychological pain or distress); *psychological constriction* (a belief that no alternative options exist); and, finally, a *penchant for action.* Based on this analysis, Shneidman (1985) proposed that there are ten features common to the vast majority of all suicides. These features are discussed later in this chapter, in Section 1.9, where they are used to inform the theoretical model adopted within the current study.

1.5.4 Attitude Theory

Cognitive theories have been drawn upon by social psychological theorists, in the development of social cognitive theories. Central to this are debates around the nature, structure and function of attitudes and in particular their relationship to behaviours. Although the current thesis is not an examination of attitude theory as such, it proves useful to recognise this central debate within psychology. Indeed, in many ways, it can be seen that the current thesis argues that people's understandings of the situations and their decisions to act in particular ways (suicidal or self-harming) arise as a consequence of their attitudes, attitudes formed through past experience, cognitive styles, and what they see as acceptable behaviour.

One of the most influential early theories of attitudes is that proposed by Rosenberg and Hovland (1960) who assumed that responses that express evaluations and, therefore reveal people's attitudes, can be divided into three classes: cognition, affect and instrumental responses. The *cognitive* element refers individuals' thoughts about a given object. The *affective* element represents feelings or emotions an individual may hold towards a particular object. The behavioural or *instrumental* response contains people's intentions and actions with respect to the attitude object. These three classes of response are often referred to as the three *components* of attitudes. Rosenberg and Hovland's three-component model views attitudes as a response to stimuli, but further introduces the idea of different psychological subsystems acting between these stimuli and measurable output. However, as Ajzen (1988) has argued, there is a lack of empirical support for the distinction between these three components. Nevertheless, the theory has been accorded a certain heuristic value within psychology.

Fishbein and Ajzen (1974) and Ajzen and Fishbein (1977) furthered earlier theories of the attitude-behaviour debate by making explicit the role of *intentions* within attitudes. Fishbein and Ajzen's Theory of Reasoned Action (1974) contained a model of the psychological processes that mediate observed relations between attitudes and behaviour. They argued that the proximal cause of an individual's behaviour is their intention to engage in that behaviour. Behavioural intentions are assumed to be determined by two factors: an individual's attitude towards performing the behaviour and subjective norms. Very clear parallels can be drawn between the attitudinal concept of behavioural intention and the *penchant for action* theme identified by Shneidman (1999) in his analysis of suicide notes. This observation is useful, as it indicates that an understanding of attitude theory, perhaps the most central concept within social psychology, can inform a discussion of the nature of suicide.

Although this model was successful in predicting a variety of behaviours (Ajzen and Madden, 1986) it has been suggested that a model that relies solely on intentions to predict actions would not perform well in predicting behaviours over which the individual had only limited control. To improve such predictions, a model must assess not only intentions, but also the extent to which an individual is able to exert control

over the behaviour in question.

More recently, Ajzen (1985) devised the Theory of Planned Behaviour to address this shortcoming, by adding an extra element of *perceived behavioural control.* Both this and the earlier model are formed on the basis of deliberative reasoning, in that attitudes towards a specific behaviour are initially formed by thinking about the consequences of that behaviour in a relatively conscious manner. Arguably, suicidal and self-injurious behaviours are highly individualised and are behaviours over which the individual has substantial control although, of course, they are influenced by 'external' factors, such as events and experiences, etc. The Theory of Planned Behaviour may therefore further inform the relationship between individuals' intentions to engage in such behaviours and the act itself. Although these models are open to criticism for their strong assumption about the causal dependence of each of its elements (Liska, 1984), they have played a crucial role in formally examining the links between attitudes and behaviour (Eagly and Chaiken, 1993).

A key thrust of the current thesis is to understand the factors (particularly background and motivational factors) that influenced individuals' intentions to kill or harm themselves which, according to Fishbein and Ajzen's theories then influence their behaviour. The Theory of Planned Behaviour provides a useful heuristic for this explanation. Although the current thesis does not attempt to either verify or refute this model, it is important to acknowledge an understanding of how attitudes have a substantial impact on behaviour.

1.5.5 Attribution Theory

Related to theories on attitude is the notion of attributional style. This is important, as one of the main features of the current research is to understand people's motivations for attempting suicide or injuring themselves (i.e., to ascertain what *caused* their behaviour). Attributions relate to interpretations of behaviour, both individually and with regards to the behaviour of others. Attribution theory elucidates the rules we use and the errors we make when we attempt to interpret and explain behaviour and its

causes (Heider, 1958; Jones and Davis, 1965; Kelley, 1967). Heider (1958) viewed individuals' interpretations of others' behaviours as linking observable behaviour to unobservable causes. Heider's main contribution to attribution theory was the division of potential sources of action into personal (or internal) and environmental (or external) types. According to Heider, an individual making an attribution (perceiver) decides whether a given action is due to something within the person who is performing it (such as ability, effort or intention) or if it is to do with something outside the person (such as difficulty of the task or luck). Heider suggests that understanding which set of factors should be used to interpret the behaviour of another will make the perceiver's world more predictable, thereby giving them a sense of control.

Fundamentally, for the current purposes, is the observation that attribution rules apply also to observations of an individuals' own behaviour, as well as that of others (Bem, 1972). This theory is useful for the current study, particularly in the context of psychodynamic approaches to suicidal behaviours, their with emphasis on inwardly directed hostility. It may, for example, be the case that an individual blames him or herself for an event or situation (i.e., 'internalised' attributions) which leads them, ultimately, to engage in these behaviours.

According to 'correspondence inference theory' (Jones and Davis, 1965; Jones and McGillis, 1976) the goal of the attribution process is to *infer* that observed behaviour and the intention that produced it *correspond* to some underlying stable quality in the individual undertaking the behaviour. The central concept of this theory refers to the perceiver's judgement that an actor's behaviour is caused by or corresponds to a specific trait.

A further important factor in attribution theory is the *covariance* rule (Kelley, 1967, 1972). Kelley considers the issue of what information is used to arrive at causal attributions and outlines two different cases depending on the amount of information that is available to the perceiver. In the first case, the perceiver has information from multiple sources and occasions and can perceive the *covariation* of an observed effect and its possible causes. The perceiver separates out what effects are attributed to which

of a number of factors. In the second case, the perceiver is faced with a single observation and must take account of the *configuration* of factors that are plausible causes of the observed effect. A drawback of the covariation model is that it requires multiple observations, which are often not available when making attributions in everyday life. In the circumstances of incomplete information, attributions are made using *causal schemata*, which are ready-made beliefs and preconceptions built up from experience, about how certain kinds of causes interact to produce a specific effect (Hewstone and Fincham, 1996).

One of the simplest causal schemata is the multiple sufficient cause (MSC) schema (Kelley, 1972). According to this schema, any of several causes acting individually can produce the same effect. The MSC schema is associated with the *discounting* principle: given that different causes can produce the same effect, the role of a given cause is discounted if other plausible causes are present. The *augmentation* principle means that the role of a given cause is augmented if an effect occurs in the presence of an inhibitory cause.

The rules for discerning the causes of others' behaviour (e.g., covariance, discounting, etc) mean that interpretations of behaviour are often accurate. However, it is also the case that errors apply. Heider (1958) argued that an individual's behaviour can be so compelling that it is often taken at face value by observers, and that insufficient weight is given to the circumstances surrounding that behaviour. Similarly, Ross (1977) argued that the situational causes of behaviour are often underestimated and instead biases towards the dispositional aspects of behaviour occur. This process is known as the fundamental attribution error (Ross, 1977). This has relevance to the current thesis, particularly as it is often argued that suicidal and self-injurious behaviours are misunderstood, leading them to be dismissed by prison staff and other professional (see for example, Soloman and Farrand, 1996). It is possible that fundamental attribution errors occur, in the sense that observers focus on the behaviour itself and instead of the factors that have surrounded it, which may have lead them to react more sympathetically.

This understanding of attributional processes will be seen to be important when the 'risk factors' associated with suicide and self-injury are discussed in Chapter 2.

1.5.6 Theories of Motivation

Developing some of the ideas in attitude theory, and in contrast to the instinctual emphasis central to Freud's psychoanalytic approach discussed earlier, social learning theory (Bandura, 1973) argues that individuals' patterns of behaviour are learnt through interactions with and observations of the behaviour of others. This approach emphasises the reciprocal interaction between behaviour and environment. Individuals are not driven by internal forces, nor are they mere passive reactors to external stimulation; rather, behaviour partly influences the rewards or punishments it receives which, in turn, influence behaviour. Social learning theory emphasises the relevance of cognitive processes on behaviour. As individuals are able to think about their behaviour and, to some extent, foresee the likely consequences of their actions, they are able to alter their behaviour accordingly. In this sense, an individual's behaviour is influenced by the expected consequences of their behaviour. Social learning theory also stresses the importance of *vicarious* learning, that is learning by observation. This concept is particularly relevant to the prison context, given the suggestions that there is a contagious effect to self-injurious and suicidal behaviours (Grunebaum and Klerman, 1967). This issue will be more fully discussed later in this chapter.

This section has overviewed key elements of the social-psychological literature that are relevant to current study. More detailed analyses of the most pertinent elements of this literature will be themed throughout the thesis and, in particular, will be examined in Chapter 2, when risk factors for these behaviours are considered. Attention now turns to an understanding of the nature of self-injury, as distinct from attempted or completed suicide.

1.6 The Social, Cultural and Historical Context of Self-Injury

As Babiker and Arnold (1997) suggest, self-injury is often regarded as shocking,

frightening, incomprehensible, offensive and repulsive. The deliberate infliction of injuries to one's own body is often viewed as bad or wrong, and in complete contrast to the preservation of the idealised image of body perfection. Yet, as Favazza (1996) points out, the deliberate infliction of injuries to the body is part of a long tradition, which has had important cultural significance and served various functions for many different groups. As Babiker and Arnold (1997) argue, the infliction of pain and injuries, as well as the drawing of blood had, and continue to have, a range of powerful symbolic meanings in different cultures. In some cases, injuries are self-inflicted, but with the sanction of the society in which the injury takes place. Alternatively, individuals may inflict injuries on others. For example, parents may agree to the infliction of injuries to their children or individuals may undergo voluntary mutilation.

This section examines the various ways in which the deliberate infliction of harm to the body has been carried out and the various purposes it has served for different cultural groups, drawing largely on the work on Favazza (1996) and Babiker and Arnold (1997).

1.6.1 Enlightenment, Wisdom and Spiritual Advancement

Various traditions have existed in most religions whereby pain, suffering and sacrifice are believed to lead to a relationship with the sacred (Babiker and Arnold, 1997) or the development of healing or otherwise 'special' powers. Favazza (1996) outlines how self-mutilation was considered an essential means of developing healing powers in many cultures. Shamen underwent various torturous initiation procedures involving practices such as walking over hot coals or having their torsos pierced with hot rods (Favazza, 1996). It has also been believed that self-mutilation could lead to the development of enlightenment and wisdom. Favazza provides a number of examples including the ordeal suffered by Native American Plain Indians which involved dancing whilst attached to a pole via skewers through their flesh. The 'reward' for this ordeal was to receive a vision making clear the meaning and course of life. It also indicated that the individual was 'pure'. Other traditions, in which suffering and sacrifice are thought to lead to a relationship with the 'sacred' are evident in other, more conventional, religions. The Old Testament story of Abraham, who was willing to kill

his son at God's command, is an example of this. In early Christian times, self-castration was practised in the belief that it would achieve purity and holiness, and continued to be practised in some sects until the 20th century (Favazza, 1996). To the present day some devout Catholics believe that the appearance of stigmata on a person's body are indicative of great piety and approval by God (Babiker and Arnold, 1997).

1.6.2 Healing

Various forms of bodily mutilation have been interpreted as important elements of healing practices in various societies. Often the body of the sick person is mutilated, although in other situations others' blood and body parts have been used for their healing properties. Favazza (1996) cites an example of a Pacific Island practice whereby a person's body would be cut open in order to release vermin in the body thought to be causing disease. Similarly, blood letting (through the use of leeches or cutting of veins) was commonplace in European countries, even up until the 1920s in some areas (Babiker and Arnold, 1997). Various other mutilations have been carried out in the belief that they can cure or protect against illness. These include fingertip removal, scarring of the flesh and male infibulation, whereby the foreskin of the penis is pierced and a clasp attached to prevent erection and ejaculation, which was thought to be a cure against epilepsy (Favazza, 1996). The practice of excising a woman's clitoris was carried out in Victorian Britain as a 'cure' for medical problems thought to be caused by menstruation. It is important to note that mutilation of girls' genitals continues to the present day in many African countries (Babiker and Arnold, 1997).

1.6.3 Identity

Bodily mutilation is often associated with community identification and loyalty, initiation and rites of passage, most being associated with the transition from childhood and initiation into adulthood (Babiker and Arnold, 1997). Extreme examples include the physical ordeals experienced by the young indigenous Australian population. Male initiation rites include nose piercing, circumcision, walking on fire, removal of teeth and subincision of the penis (cutting open the penis and laying open the urethra). A less

extreme, and more commonly engaged practice, is male circumcision that has several functions including identification with the community and its beliefs.

Tattooing and body piercing may also indicate identification with certain groups. Babiker and Arnold (1997) suggest that these forms or self-mutilation (as well as self-injury) can be used to demonstrate community identification and status in certain institutional settings (such as prisons) where they form part of the culture of the resident group. Such behaviours may be a means of demonstrating belonging and solidarity with the group and resistance to those in authority, while the severity of the injuries sustained may contribute to the status of an individual within the group (Ross, McKay, Palmer and Kenny, 1978).

1.6.4 Beauty

Many practices have been, and continue to be, undertaken in order to achieve or maximise notions of beauty and desirability, masculinity and femininity. These include the practice of foot binding, a process whereby the feet of Chinese women and girls were tightly bound in order to prevent growth. Resultant small feet were thought to be very attractive to men. In the West, many practices which involve mutilation to the body are seen as acceptable or normal. These include various forms of cosmetic surgery to achieve the 'perfect' body shape (such as 'face lifts' and breast reduction/enlargement) as well rather extreme practices to achieve the 'ideal' body size (such as jaw wiring, stomach stapling, liposuction, etc). Whilst these practices may not seem to be 'self-injurious' in the sense that they are conducted in an attempt to 'improve' the appearance or achieve an 'idealised' body image, it is the case that they involve pain and are, potentially, harmful. Further, there is an important relationship between self-injury and practices that involve injuring the body to achieve 'beauty'. As Babiker and Arnold (1997) suggest, individuals (usually women) learn that their bodies are not good enough as they are and that they must endure painful or expensive procedures or practices to make them more attractive or desirable. For some, such ideas are translated into starvation, for others they are translated into self-injury.

1.6.5 Summary

The above discussion has highlighted the social and cultural specificity of various forms of self-mutilating behaviours, as well as their relevance for different groups of individuals. Favazza's (1996) description of the cultural relevance and functional elements of self-injury, whilst groundbreaking, has been criticised because of the proposition that self-injury is 'deviant' and 'rooted in mental illness' (Favazza, 1996, p. xxiii). Babiker and Arnold (1997) argue that self-injury has become 'pathologized' as a result of arbitrary and discriminatory distinctions between 'normal' and 'dysfunctional', or comprehensible and mad, features of human behaviour (Babiker and Arnold, 1997, p.21). Instead, Babiker and Arnold argue that self-injury speaks of distress, torment and pain, not mental illness. Attention now turns to psychological theories of self-injury, before undertaking a more in-depth examination of the debate between 'pathologizing' and 'normalizing' self-injury in Chapter 2.

1.7 THE PSYCHOLOGY OF SELF-INJURY

Although, when considering the vast literature on attempted and completed suicide, there is far less on the phenomenon of self-injury, a number of theories have been offered. Bennun (1984) outlines the main psychological approaches to self-injurious behaviours, namely the psychoanalytic model, the behavioural learning model, the anxiety reduction model, the appeal model, the anxiety reduction model, the hostility model and the group epidemic model. Each of these is now reviewed in turn.

1.7.1 The Psychodynamic Model of Inward-turned Aggression

Menninger's work (1935, 1938) has been extremely influential in shaping subsequent psychodynamic theories on self-injury. Menninger included a broad spectrum of behaviours in his classification of 'self-mutilation', ranging from nail biting, 'purposive' accidents, malingering to more extreme forms of self-injury. Elaborating on Freud's explanation of the death instinct, Menninger explained self-injury as 'focal' or partial suicide, in which it is a 'compromise' between life and death instincts, leading to

postponement of the death instinct in which the impulse to destroy the self is diluted.

In the psychodynamic model, self-injury is interpreted as a masochistic act in which the instinctual issue is expressed in a self-disclosed way, such that the individual takes their body as an object (Bennun, 1984). The source of such masochism is derived from attempts to ward off unacceptable aggressive thoughts and impulses by turning them against the self. Hate and aggression directed towards an external object are turned back upon the self and reinforced with self-punishment (Menninger, 1935). This self-punishment can be reparation for the individual's aggressive wishes of the past and present. According to Menninger, this provides protection against future punishment, yet permits further indulgences by the 'advance payment of a penalty' (Menninger, 1935, p.465). In his description of an example of genital self-mutilation, Menninger suggests that it is a form of punishment, possibly linked to castration anxiety, homosexual anxiety, sexual confusion and feelings of guilt. In each case, the genitals, being linked to sexuality, become the focus of mutilation as a way of ridding the 'guilty' part of the body.

1.7.2 The Behavioural Learning Model

Unlike psychodynamic models that reply on guilt and self-inflicted/imposed punishment, the behavioural-learning model regards self-injury as a learned operant or instrumental behaviour, with reward or punishment (reinforcement) being contingent on the behaviour. Carr (1977) distinguishes between positive and negative reinforcements. In the former case, self-injury is maintained by social reinforcement, conditional upon performance of the behaviour. In the case of negative reinforcement, the avoidance or termination of an aversive stimulus following a self-injurious act maintains the behaviour. Here, emphasis is placed on the escape motivation maintaining self-injury. The individual may expose himself or herself to aversive stimulation, if by doing so, greater aversive stimulation can be avoided.

Bennun (1984) suggests four conditions exist that predispose the occurrence of self-destructive behaviours. First, self-injury occurs in the presence or absence of particular

discriminative stimuli that set the occasion for the behaviour to occur. Second, organisms have to be found to be working for punishing self-destructive results. Third, punishing events must be introduced only after a response has been established and should not totally inhibit the occurrence of the response. Fourth, the behaviour must be maintained by the (social) reinforcement that follows it. Given that self-injury can be modified by manipulating environmental consequences, it appears that specific stimuli that set the occasion for its occurrence are learned operative discriminative stimuli, rather than unconditioned eliciting stimuli.

1.7.3 The Appeal Model

According to the social psychological model of appeal, self-injury, like suicide, should not be understood solely in terms of psychiatric pathology. This is because of the vast evidence that suggests its close relationship with interpersonal and social events (Bancroft, Skrimshire, Casson, Harvard-Watts and Reynolds, 1977) and it is in the social psychological or sociological framework that the appeal model is formulated. Stengel (1952) applied the same model to attempted suicide. The appeal function is the tacit message that an individual appeals to another without explicitly revealing in words the content of the communication. It is often a conscious attempt to warn others of an impeding event. A necessary condition of the appeal is a plea for recognition by the initiator towards the respondent. The response is usually immediate, even if only in terms of hospitalisation.

Within this framework, self-injury is understood as an appeal to the social network surrounding the individual, including doctors, nurses, friends, family, etc. Raine (1982) describes the 'appeal' model as deriving from problematic interpersonal relationships, whilst Bennun (1984) suggests that it can arise from a breakdown in communication in that self-injury may be understood as a 'strong and desperate appeal to significant others to re-establish lost communication' (1984, p.172). One of the key components of the appeal model is the possibility of change in the circumstances surrounding the individual. Implicit in the appeal function model is the assumption that the appeal must be adequately understood (and acted upon) and that the overt act of self-injury is

interpreted in terms of the underlying intent of the injurer.

Bostock and Williams (1974) developed a variant of the appeal model. Their operant formulation of self-injury describes the behaviour as serving the purpose of generating an active response from the environment. Where a response is likely to be forthcoming, the severity of injury is lower. It is suggested that those who 'manipulate' by injuring themselves are prone to make future gestures because they discover that their behaviour is a powerful motivator to social manoeuvres. Similarly, Ross and McKay (1979) describe the 'manipulative' aspect of self-injury where it is seen as an attempt to satisfy a specific wish which, in most cases, succeeds, as it may be more effective than a direct request or demand. Ross and McKay suggest that implicit in an individual's 'threat' is the fact that those who do so make others responsible for their actions.

1.7.4 The Anxiety Reduction Model

The anxiety-reduction model is based on the repeated finding that the majority of people who injure themselves report feelings of relief and a reduction in anxiety/tension following the act (Bennun, 1984). Indeed, reported feelings of anxiety preceding incidents of self-injury are common (Arnold, 1995; Williams, 1997; Linehan, 1993; Babiker and Arnold, 1997). Thus, when self-injurers experience emotional discomfort, they may injure themselves in order to reduce it. Such negative feelings may gradually develop, reaching a climax just before the infliction of injury. Bennun (1984) reports that the many people pertaining to the circumstances most likely to facilitate mutilation are 'strikingly similar' (1982, p.174). Dominant precipitating factors include anger (Ross and McKay, 1979; Walsh and Rosen, 1988; Snow, 1997), self-hatred (Arnold, 1995), depression (Williams, 1997), loneliness (Arnold, 1995) and increased tension (Graaf and Mallin, 1967; Pao, 1969). Bennun, drawing on the work of Stengel (1952) suggests that as such feelings increase, individuals struggle with the 'impulsive act and the responsible' act. The 'ordeal character' (Stengel, 1952) of self-destruction is a test between life-preserving tendencies and destructive impulses. The feelings described are exacerbated under conditions of stress, drawing the individual into a struggle between impulse and restraint (Bennun, 1984, p.175). Ross and McKay (1979) suggest that,

although self-injury may be an unorthodox method of tension relief, it is an attempt to achieve some sort of homeostatic resolution or equilibrium, particularly for those who lack adaptive or appropriate means either through situational, social or behavioural restrictions (Bennun, 1984).

1.7.5 The Hostility Model

The violence/punishment, or hostility, model is distinct from traditional psychodynamic formulations in that it emphasises how a previous history of violence can affect future functioning. Experience of violence and thoughts of violence within interpersonal relationships are variables associated with self-injury (Bennun, 1984). Since cognitions, in part, influence behaviour (Mahoney, 1974) it is possible that particular cognitive sets mediate self-injury or may be part of an individual's method of coping with stress. People who were abused and deprived as children demonstrate a significantly higher incidence of self-destructive behaviour (including suicidal ideation, attempts and self-injury) compared with non-abused control groups (Bennun, 1984). Green (1978) argues that abused children later develop feelings of worthlessness, badness and self-hatred and that the transformation of self-hatred into self-destructive behaviour is catalysed by ego deficits and impaired control. Bennun (1984) extends this view to punishment, which is fundamental to psychoanalytic notions of self-injury. Raine (1982) suggests that aggression turned towards inwards can be a substitute for another object or as a punishment for any act or thought which arouses feelings of anger, guilt or remorse. Aggression directed towards the self is mobilised by the need for self-punishment, either in preference to being punished by somebody else, or as a form of expiation (Dabrowski, 1937).

1.7.6 The Group Epidemic Model

A number of studies have emphasised the apparent contagious effect of self-injury (e.g., Cookson, 1975). It is suggested that self-injury can be learned and propagated in institutions and maintained as a response to the reactions of staff. For example, Ross and McKay (1979) suggested that any effects of self-injury were secondary to the

feeling of power and control over staff that self-injury gave. Group formation and strong peer groups can represent a rebellion against authority figures and staff. Competition is evident and undoubtedly contributes to epidemic and group mutilation where individuals may 'cut themselves to prove themselves as the most unhappy' (Grunebaum and Klerman, 1967, p.529). Similarly, Ross and McKay (1979) note how self-injury may be part of an initiation rite which, if resisted, can lead to ostracism and rejection. Raine (1982) emphasises the emotional impact that cutting has on others.

1.7.7 Summary

Having examined psychological models, as well as the context of self-injury and (in earlier sections) the sociological and psychology of suicide and attempted suicide, the fundamental differences between these behaviours will now be explained.

1.8 Model of the 10 Key Differences between Attempted Suicide and Self-Injury

The previous discussion has outlined key theoretical approaches and contributions to understanding completed and attempted suicide, self-harm and self-injury. To further explore the differences between this broad group of suicidal behaviours, attention now turns to Shneidman's (1985) definitions of the ten common characteristics of suicide and 'parasuicidal' behaviour. Shneidman's definitions of suicidal and parasuicidal behaviours are combined with Walsh and Rosen's (1988) similar, yet extended, definition of self-injury to provide the following list of ten key characteristic differences between the behaviours.

1. For Shneidman (1985), the common *stimulus* for suicidal behaviour is enduring (i.e., long lasting and unavoidable) psychological pain, the only escape from which is suicide. In this context, suicide is best understood as a combined movement toward cessation of consciousness and as a movement away from intolerable emotion, unendurable pain, unacceptable anguish. The contrast between this and self-injury is that the psychological pain, although severe (Shneidman, 1985) is escalating and intermittent

(Walsh and Rosen, 1988). People who injure themselves often report periods when psychological distress gradually builds until it becomes intolerable. This may be followed by a state of dissociation or depersonalisation, an irresistible urge to cut themselves, engagement in the act itself and, finally, tension relief/return to normality (Grunebaum and Klerman, 1967). The chronic, long-term unendurable pain experienced by the suicidal is usually absent (Walsh and Rosen, 1988).

2. Shneidman suggests that the common *stressor* to suicide is the inability to fulfil various psychological needs, ranging from the most basic (such as the need to avoid pain or injury) to the most sophisticated (including the need to excel or achieve). Although those who injure themselves without suicidal intent may also feel frustrated in their psychological needs, they differ from the suicidal with respect to elements of time and frustration-tolerance (Walsh and Rosen, 1988). Walsh and Rosen suggest that, among those who inure themselves, frustration is related to the short-term delay or postponement of needs and that the injury provides immediate relief from frustration, anger or anxiety.

3. Shneidman suggests that the common *purpose* of those who attempt suicide is to escape from unendurable pain and intolerable frustration. Suicide is a way out, and the only way out, of an unbearable situation. This differs from self-injury in that the intent is usually to find a short-term, *non-permanent*, alleviation of distress. As Walsh and Rosen comment: '[self-injury does not] entail a radical, conclusive or final solution. Rather,[it] reduces tension for the time being with little thought or planning given to coping with subsequent experiences of distress or anguish' (Walsh and Rosen, 1988, p.44).

4. Shneidman suggests that the common *goal* of suicidal behaviour is permanent cessation of consciousness. In this sense, death is regarded as the *only* escape from continual pain. Self-injurers, on the other hand do not wish to *end* consciousness. Rather, their goal is to radically *alter* their present state to decrease discomfort and to change their cognitive orientation and relationship to the world (Walsh and Rosen, 1988). As Shneidman remarks: 'the goal of one is the stopping of life; of the other, the

changing of it' (1985, p.217).

5. The common *emotion* in suicidal behaviour is hopelessness or helplessness, derived from the perceived inability to have any control over internal pain and external circumstances. They feel hopeless because they see no end or alternative to their unendurable suffering. The common emotion of those who injure themselves is disconnectedness and disenfranchisement (Shneidman, 1985) or intra and inter-personal alienation (Walsh and Rosen, 1988). A crucial difference is that the latter group has a resource available to reduce or change their discomfort, which means they do not feel truly hopeless or helpless. The act of self-injury rapidly diminishes feelings of alienation.

6. For Shneidman, the common *internal attitude* of the suicidal is ambivalence, where individuals are torn between continuation and cessation of life. Ambivalence consists of a wish for a final solution (death) while simultaneously hoping to be saved/rescued. For Walsh and Rosen (1988) the common internal attitude among those who injure themselves is resignation. The scars or pain may be regarded as a 'small price to pay' given the functions it serves (in reducing anxiety, tension, etc). Ambivalence, cited commonly among the suicidal, is rarely voiced among those who injure themselves. Instead they say that pain, anger, tension or frustration precipitates the act.

7. The common *cognitive state* of the suicidal is 'intellectual and perceptual constriction' (Shneidman, 1985, p.271), whereby the individual thinks in "all or nothing" or "black and white" terms, assuming that there is no alternative to their situation except suicide. Conversely, the thinking of those who injure themselves without suicidal intent is fragmented (Walsh and Rosen, 1988). An individual may draw from several sources in an attempt to reduce anxiety, including self-cutting, violence towards others, drug misuse or running away. Thus, 'fragmentation' refers to cognition that encompasses several ways of dealing with distress.

8. The common *interpersonal act* with regards to suicide is communication of an irrevocable conclusion. Noting that 80% of those who die by suicide have, in one way

or another, communicated their intention to others, Shneidman outlining the paradoxical verity that the common interpersonal act is not anger, hostility or rage, but communication of intention (1985). Although self-injury may also be seen as a form of communication, Shneidman suggests that it differs from the communication in suicide, in that it is about communication of a state of unhappiness and, in general, a call to rescue and a plea for nurturance. Walsh and Rosen (1988) take a more resolute position, suggesting that the common interpersonal act in self-injury is coercion. Although they acknowledge Shneidman's (1985) point that the use of such terms adds a pejorative tone to discussions on self-injury, they argue that the attempt to coerce or control the responses of others is one of the central dynamics in the interpersonal relationship of self-mutilators (Walsh and Rosen, 1988).

9. Shneidman argues that the common *action* in suicide is egression – to leave, exit or escape, as summarised in the following excerpt:

> 'Suicide is the ultimate egression, besides which running away from home, quitting a job, deserting an army leaving a spouse seem to pale ... we must distinguish between the wish to get away and the need to end it all, to stop it for real. The point of suicide is a radical and permanent change of scene; the action to effect it is to leave' (1985, pp.144-145).

Self-injury, on the other hand, fosters reintegration. As Walsh and Rosen (1988) suggest, this occurs in two ways. Firstly, reintegration occurs following the reduction in tension, anxiety or psychological pain resulting in a 'reduction in alienated emotions and reintegration of fragmented cognitions' (1988, p.50). Secondly, a re-involvement in fragmented social relationships may arise. Thus, the intended direction of self-injury is in sharp contrast to suicidal acts where the aim is towards psychological disintegration and social breakdown.

10. Shneidman (1985) suggests that both suicide and self-injury are *consistent* with lifelong behavioural patterns or ways of dealing with problems. The acts are not aberrations or departures from the norm, but extensions of an individual's general cognitive and affective styles, coping patterns and lifelong behavioural patterns. Walsh and Rosen concede that self-injury (like suicide) is consistent with a person's general

coping style, but suggest that the latter is ultimately adaptive to sustaining life. This is in contrast to suicide, where egression is regarded as the only solution.

The fundamental differences between suicidal and self-injurious behaviours are summarised in Table 1.2.

Table 1.2

Common Characteristic	Suicide (a)	Self-Injury (b)
Stimulus	Unendurable psychological pain	Intermittent psychological pain
Stressor	Frustrated psychological needs	Deferred psychological needs
Purpose	To seek a solution to an overbearing problem	Achieving short-term alleviation
Goal	Cessation of consciousness	Alteration in consciousness
Emotion	Hopelessness-helplessness	Alienation
Internal attitude	Ambivalence	Resignation
Cognitive state	Constriction	Fragmentation
Interpersonal act	Communication of intention	Coercion
Action	Egression	Reintegration
Consistency	Lifelong coping style	Lifelong adaptive coping patterns

(a) Adapted from Shneidman (1985)
(b) Adapted from Walsh and Rosen (1998)

Table 1.2 Fundamental Differences between Suicide and Self-Injury

1.8.1 Summary of Shneidman (1985) and Walsh and Rosen (1998)

Shneidman's framework of suicide and 'parasuicide' has been compared and developed by inclusion of Walsh and Rosen's model of self-injury. This review has highlighted the main differences between the behaviours, illustrating that they differ on many dimensions and are, in some ways, opposites. Although there are some similarities between the behaviours, for example, they are self-directed and both result in physical harm, there are far more differences than similarities between them. Even on the dimensions on which they appear most similar, for example, they reflect lifelong behavioural patterns and they result from unmet psychological needs, there are

differences. For example, the unmet needs of suicidal reflect long-term continuous frustration, rather than short-term needs that require an immediate solution. Secondly, the lifelong behavioural pattern of those who injure themselves may be regarded as adaptive. It is not about ending life, but continuing it (Babiker and Arnold, 1997).

1.9 CHAPTER SUMMARY

This chapter began by introducing definitions of the behaviours that are examined within the thesis, namely completed and attempted suicide and self-injury. An overview of the main theoretical approaches to these behaviours, from sociological and psychological perspectives, was then provided. This was followed by a discussion of the differences and similarities between self-injury and completed and attempted suicide.

As was discussed, whilst some regard self-injury and attempted suicide as similar, in that they share a fundamental element of self-destructiveness (Linehan, 1993), others have drawn clear distinctions between them. The latter approach, i.e., differentiation, has been adopted within the current study. The theoretical stance currently adopted was outlined by contrasting Shneidman's (1985) framework of parasuicide with Walsh and Rosen's (1998) framework of self-mutilation. The following quotation exemplifies this approach:

> 'The person who self-mutilates can be said in some ways to be carrying out the very *reverse* of self-destructiveness. They are seeking to preserve themselves. Rather than wishing to destroy themselves, their self-injury helps them to stay "together", to struggle to survive' (Babiker and Arnold, 1997, p.7).

The third overall research objective of the current thesis (discussed in the introduction) is an attempt to test this differentiation. Moving away from the theoretical focus, the following chapter consists of an examination of the various factors associated with heightened risk of suicidal and self-injurious behaviours.

CHAPTER 2

FACTORS ASSOCIATED WITH SUICIDAL AND SELF-INJURIOUS BEHAVIOURS

2.1 INTRODUCTION

> 'A true understanding of suicide cannot be achieved through a single lens, [it] must have a historical perspective as well as an interdisciplinary approach' (Stillion and McDowell, 1996, p.xi).

Having examined theoretical approaches to suicide and self-injury and some of the related basic psychological processes, attention now turns to the main factors associated with increased risk of these behaviours.

Numerous factors are thought to contribute to an individual's risk of suicide/self-injury including psychological, clinical, biological and socio-demographic factors. Further, they mediate, are mediated by and interact with one another. Consequently, there are abundant theories as to the causes of suicidal behaviours. In order to maximise understandings of these behaviours, while preserving their complexities, the theories of and factors associated with suicide must be integrated. A discussion of how this may be achieved is now undertaken.

2.2 THE SUICIDE TRAJECTORY

In an attempt to order the disparate and often opposing strands of research into suicidal behaviours, Stillion and McDowell (1996) devised the 'suicide trajectory', a model including *biological*, *psychological*, *cognitive* and *environmental* factors, which simplifies description of the many factors associated with heightened risk. A revised version of their model, presented in Figure 2.1 below, is adopted within the current thesis. It is broadened to include *psychiatric* and *demographic* factors as well as *previous suicidal/self-injurious behaviours*.

Figure 2.1

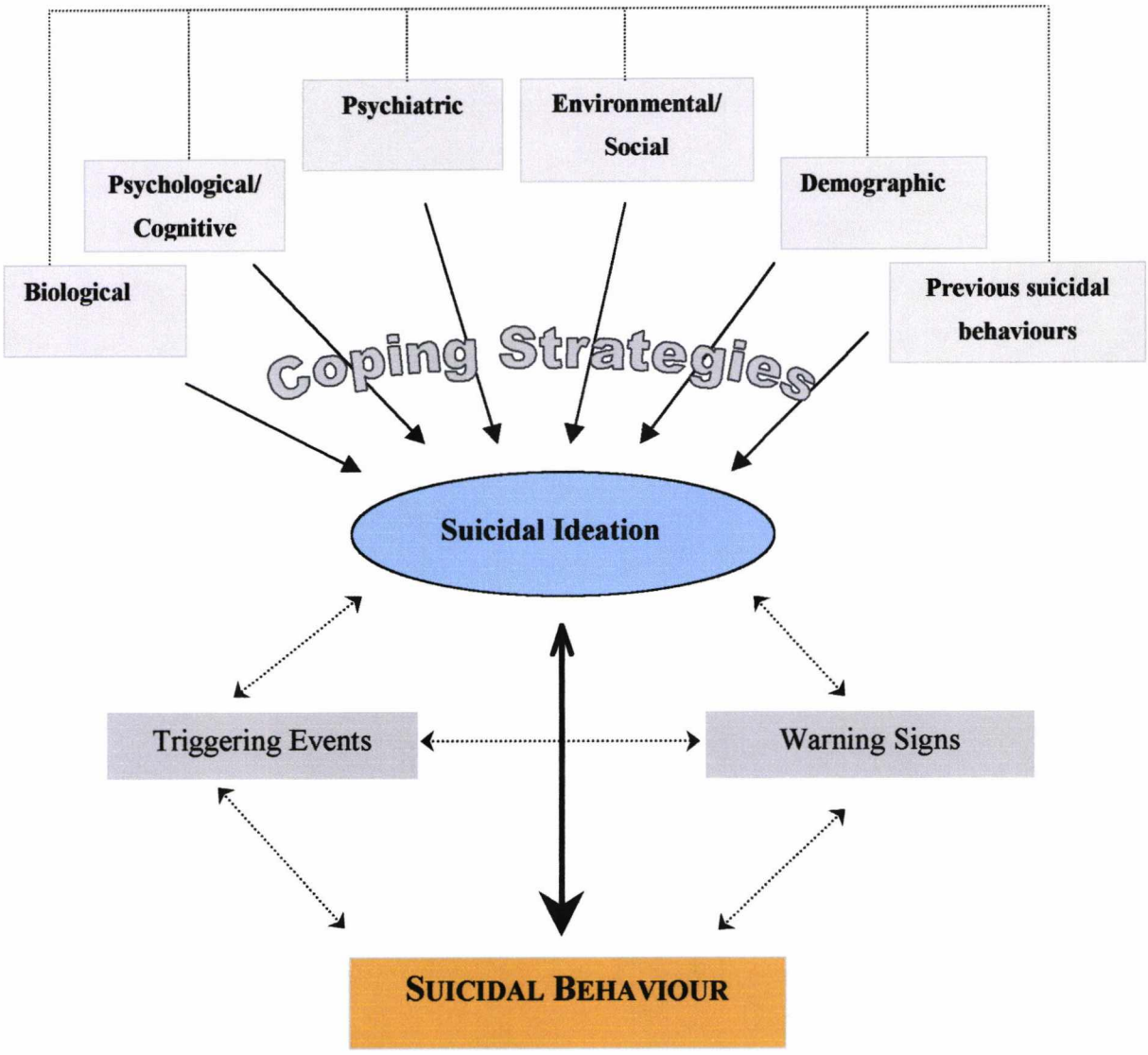

Figure 2.1 The Suicide Trajectory

Adaptation and revision of Stillion and McDowell (1996)

The model represents an attempt to integrate various factors that may contribute to an individual's relative risk of suicide, an integration that is hitherto unachieved. It is important to point out that the association between suicide and the various risk factors

described is correlational and not causal. Conversely, an absence of any of the factors associated with risk does not mean that an individual will not kill him or herself. It is also important to point out that the presence of any of the factors described does not, of course, necessarily result in suicide. Individuals ordinarily encounter experiences, situations and events that may contribute to their relative risk within each of the identified categories.

As Stillion and McDowell (1996) suggest, risk factors influence and associate with one another. It is when the combined contribution of risk factors within each of the categories reaches a point that threatens an individual's coping strategies, the potential for suicidal *ideation*, i.e., serious intentional thoughts of suicide, as opposed to mere contemplation, arises. As the Theory of Planned Behaviour (Ajzen, 1985) suggests, it is the combination of behavioural intentions together with serious and realistic plans for that behaviour, which make it more likely. It is widely suggested that suicidal ideation, and potential suicidal behaviour, is often exhibited in *warning signs* to the extent that those who die by suicide usually inform someone, directly or indirectly, of their intent (Stillion and McDowell, 1996, Appleby, 1992). However, Barraclough, Bunch, Nelson and Sainsbury (1974) argue that 'unequivocal statements of intention to kill shade through to ambiguous hints which may only have significance after the event' (Barraclough et al., 1974, p.366).

Triggering events may intensify suicidal ideation. These may not necessarily be the worst losses or dramatic events in an individual's life, but become increasingly significant following onset of suicidal ideation. Suicidal *behaviour* occurs in this context, namely following the relative and cumulative contributions or significance of the factors within and between the categories associated with risk, factors which may be exacerbated by triggering events in the context of suicidal ideation. Detailed consideration of the factors associated with an individual's risk of suicide, attempted suicide and self-injury is the focus of the remainder of this chapter.

2.3 BIOLOGICAL FACTORS

There is some evidence to suggest that changes in brain functioning are associated with subsequent suicidal behaviour. Most work in the area has focused on levels of serotonin and noradrenaline, chemicals found in the central nervous system. As will be discussed, individuals with depression, which itself is related to suicide, have been found to have lower levels of a by-product of serotonin, 5-HIAA.

There is no clear relationship between biological factors and suicide. Firstly, much of the evidence suggests that the biological link between specific individual characteristics, such as impulsivity, is only indirectly related to suicidal behaviour (O'Connor and Sheehey, 2000). Secondly, lower levels of 5-HIAA have been found among other clinical groups including those diagnosed with personality disorders, alcoholism and violent offenders (Williams, 1997). Although there are some important associations with biological factors and suicide, the relationship is far from straightforward, as the following discussion illustrates.

2.3.1 Depression

Depression is the factor most widely associated with suicide, with high proportions of depressed individuals dying by suicide. It is estimated that 10-15 per cent of those diagnosed with a major depressive disorder will eventually take their lives (DSM-IV, 1994) and that two-thirds of those who die by suicide had a depressive illness (Maris, 1991). Heightened risk of suicide is a feature of different types of depression, such as major depressive disorders, bipolar disorders, reactive or melancholic reactive depression. Aside from completed suicide, depression is associated with attempted suicide, suicidal ideation and self-injury.

Although depression is commonly understood as a manifestation of psychological difficulties, it is also important to mention the possible biochemical basis of the

disorder, hence its discussion in the biological section. Advances have recently been made in the establishment of a link between neurotransmitter brain activity, depression and suicide, such that the effect of Serotonin (associated with the regulation of emotion) is now recognised. For example, Banki and Arato (1983) found overall reduced levels of Serotonin amongst those who died by suicide. Asberg, Traskman and Thoren (1976) identified a deficiency in one of the main metabolic products of Serotonin (5-hydroxyindolacetic acid or 5-HIAA). The researchers found lower levels of 5-HIAA amongst those who had used more violent means of attempted suicide. Similarly, Nordstrom, Samuelsson, Asberg, Traskman-Bendn, Aberg-Wisdelt, Nordin and Bertlisson (1994) demonstrated that, of a sample of individuals who had attempted suicide, those with lower levels of 5-HIAA were significantly more likely to have died by suicide within a year.

There is general agreement of an association between depression per se and Serotonin. Others have gone further by identifying an association between Serotonin and different types of depression. For example, Retterstol (1993) suggests that a third of those suffering from *melancholia*-type depression have significantly reduced levels. Retterstol suggests that danger of suicide is particularly high amongst those with or recovering from melancholic depression, because they make more frequent and violent or medically serious attempts at suicide. In addition, they respond less well to treatment (Retterstol, 1993).

These findings are consistent with other research that found an association between Serotonin function, violence and impulsivity (Williams, 1997), a history of aggressive behaviour (Brown, Elbert, Goyer, Jimerson, Klein, Bunnery and Goodwin, 1982) and impulsiveness (Stanley and Mann, 1988). Relevant to this finding is the evidence that suicide is high amongst violent offenders generally and particularly those who commit murder (Lonnoila, Virkkunen and Scheinin, 1983). Further, suicide attempts and other forms of self-injury are common amongst those charged with non-violent, impulsive offences such as arson (Virkkunen, Nuutila, Goodwin, and Linnolia, 1989). This relationship will be more fully explored in Chapters 3 and 4.

2.3.2 Sex

A further area of research into the biological basis of suicidal behaviour is founded upon the consistent finding that men are far more likely than women to die by suicide, although in the case of attempted suicide and self-injury the trend is reversed (The Samaritans, 2002). As illustrated in Figure 2.2, around three-quarters of all suicide and undetermined deaths in England and Wales occur amongst men (The Samaritans, 2002). Importantly, this difference is apparent for all age cohorts, in all parts of the United Kingdom (Appleby, 1991) and throughout most countries of the world (Stillion and McDowell, 1996).

Figure 2.2

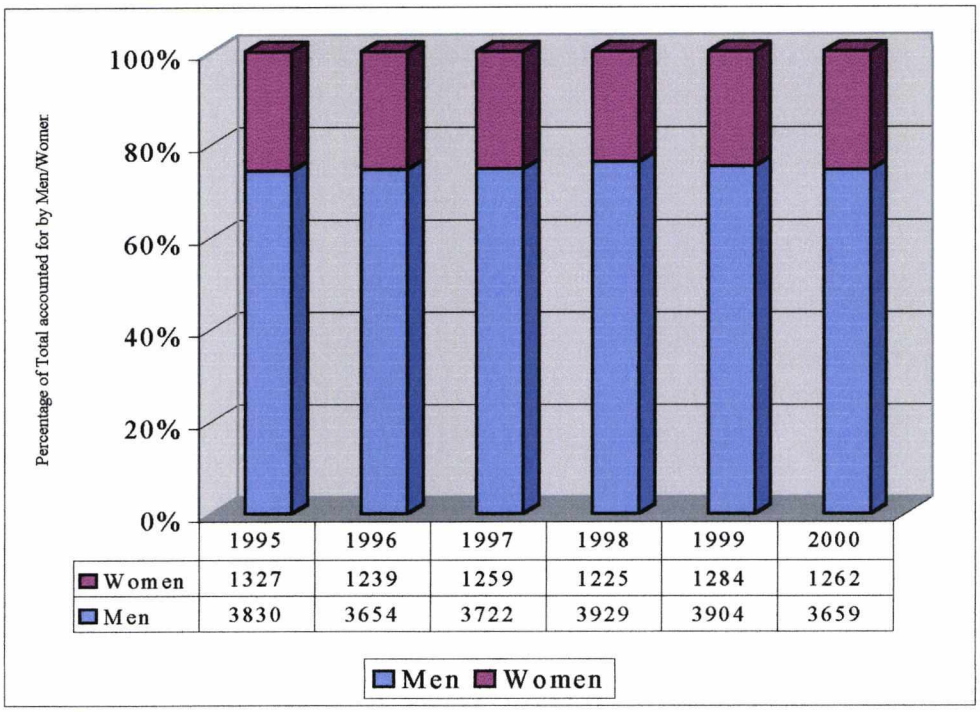

Figure 2.2 Suicide and Undetermined Deaths: England and Wales (1995-2000)

When considering the difference in suicide rates between men and women it is important to mention the differences between sex and gender. For the current purposes, sex is taken to refer to *physical*, i.e., biological or anatomical, differences between men

and women, whilst gender refers to *psychological*, *social* and *cultural* differences between males/females. Some studies, in their attempts to explain the discrepancy in suicide rates between men and women, adopt what may be termed a gender-socialisation theory, by emphasising the differences in socialisation of males and females. For example, The Samaritans suggest that for men 'the pressures of modern day life, coupled with a reluctance to express feelings, can lead to suicidal thoughts' (The Samaritans, 1993, p.3). Retterstol (1993) takes a more radical view suggesting that long-established sex-roles account for the variation:

> 'Women, more than men, use the act of suicide as an aggressive weapon, as a defensive weapon or as a means with which to manipulate their environment. This may be related to the fact that women, more than men, are expected to be careful, restrained and less violent, and perhaps also to refrain more from aggressive means of expression in general' (Retterstol, 1993, pp.75-6).

Others suggest that the difference in suicide rates between men and women can be accounted for in biological terms. Taking as an example the well-documented higher levels of aggression amongst men (e.g., Goy and Resko, 1972; Unger, 1979) Stillion and McDowell (1996) suggest that the variance in suicide rates between men and women may be accounted for by similar sex differences. Their view is summarised in the following statement, 'If suicide can be viewed as aggression turned inward, it would follow that male suicides would outnumber those of females ... [that] the Y chromosome ... defines maleness [is] ... support for a genetic component in suicidal behaviour' (Stillion and McDowell, 1996, p.24).

2.3.3 Genetics

That suicide is more common among relatives of those who have died by suicide suggests the possibility of a genetic component to the behaviour although, as Williams (1997) suggests, relatives share much more than genes. They also share the same environment, socialisation and learnt ways of coping with particular situations, which may include the belief that suicide is an acceptable way out of a situation.

Roy, Segal and Robinette Centrewall (1991) examined suicide among identical twins sharing identical genetic make-up and found that their concordance rate for suicide (i.e., the rate at which both twins behave in a particular way) was 13.2%. That the concordance rate for non-identical twins was 0.7% suggests a genetic association. However, other studies have found no differences in concordance between identical twins. Thus, there is little evidence of a clear link between genes and suicidal behaviour. Further, as Williams (1997) suggests, it is highly unlikely that there is a single gene effect, but rather a multiple gene leads to increased risk of suicide, when triggered by environmental factors. Indeed, 'if genes are involved, it remains to be seen whether what is inherited is a suicide gene (most unlikely) or a predisposition to psychological disturbance' (Williams, 1997, p.127).

2.3.4 Summary

Although partially useful in predicting and, therefore, assessing an individual's relative risk of suicide, biological differences represent only a very small element of the equation. Clearly, the risk factors considered (depression and being male) are not *causative*: they account for a small amount of variance and are based on correlational studies with well-documented limitations. Rather, these factors form a small element of a much broader picture, of which psychological, cognitive and environmental factors are at least as, if not more, significant. Consideration of the psychological factors associated with suicide will now be explored.

2.4 PSYCHIATRIC ILLNESS

As outlined in Chapter 1, Durkheim's (1897) influential theory on suicide was founded upon an explanation of social factors, centred on integration and disintegration. Although he acknowledged that 'insanity' was sometimes the cause of suicide, he did not accept that it was key to understanding suicide per se. Conversely, the vast majority of researchers since have concluded that the single factor most commonly associated

with suicide is mental illness. This section examines the main psychiatric correlates with suicidal behaviour.

> 'Suicide is the most important consequence of psychiatric disorder, and most major psychiatric disorders carry a high suicide risk..... Psychiatric patients are the group above all others at high risk of suicide' (Appleby, 1992, pp.749-50).

The definition of psychiatric illness current adopted is relatively broad in that it includes all forms of such illnesses such as affective psychoses (i.e., schizophrenia and manic depression), neurotic symptoms (e.g., depression and anxiety), psychopathic and personality disorders, alcohol misuse and drug dependency. Although there exists controversy over the definition of precisely what constitutes psychiatric disorder/illness, for the current purposes, the term is extended to include mental health/psychiatric problems not considered by some to be indicative of a psychiatric *disorder* as such (see, for example, Crighton and Towl, 1997). This definition is consistent with that adopted within a recent study on psychiatric morbidity amongst prisoners (Singleton, Meltzer, Gatward, Coid and Deasy, 1998) although is over-inclusive when compared with the definition adopted within the Mental Health Act (1983).

Although many of those who die by suicide have no such history, evidence suggests that the single factor most often associated with suicide is psychiatric illness (Pritchard, 1995). For example, Morgan et al. (1998) suggest that some form of psychiatric disorder is present during the weeks and months immediately prior to death in over 90% of cases of completed suicide. Similarly, Retterstol (1993) suggests that around one third of those who die by suicide have had a psychiatric illness of such a nature that they have been hospitalised (Retterstol, 1993). Likewise, Barraclough, Bunch, Nelson and Sainsbury (1974) found that 93% of their sample had been diagnosed as suffering from some form of psychiatric illness, with depression and alcoholism accounting for ninety percent of their diagnoses. Thus, although all categories of psychiatric illness are associated with heightened risk, some such as depression, schizophrenia, alcohol or drug dependence are particularly relevant.

Further, many of those who subsequently die by suicide have had contact with general medical services in the months immediately preceding death, usually complaining of physical rather than psychiatric/psychological symptoms. Two-thirds of Barraclough et al's (1974) sample had consulted their GP in the month before death. Of these, 40% had done so in the week prior to their death. That such a substantial proportion had had contact with medical services indicates that they either felt a need to seek help or perceived themselves as sick (Barraclough et al., 1974). Such findings have important implications for preventive interventions in the sense that there exists many opportunities for suicidal ideation or intention to be identified.

2.4.1 Depression and Affective Psychosis

> 'People suffering from extreme states of depressive disorder are not necessarily more prone to suicide than those experiencing an isolated depressive mood which is traceable to some defined precipitating event. Thus, while there is an intimate connection between depression and suicide, it is by no means established what are the specific characteristics of those depressive states producing direct attempts at self-destruction' (Giddens, 1971, p.101).

As mentioned above, the psychiatric illnesses most strongly associated with suicidal behaviour are various forms of depression, in particular, melancholic depression, major depressive disorders, bipolar disorders and reactive depression, and affective psychosis or schizophrenia (DSM-IV, 1994). Support for this statement is provided by Retterstol, 1993, Morgan et al., 1998, Hawton, Kirk and Clark, 1989, Barraclough et al., 1974, Appleby, 1992, Lester and Lester, 1971. Maris (1991) estimated that 15% of depressed people eventually die by suicide and that two-thirds of all of those who die by suicide are experiencing a depressive illness. Barraclough and Hughes' review (1987) of epidemiological studies on suicide, found that almost 70% of people who died experienced severe depression and a further 10% had other psychiatric-related problems. Kreitman (1988) found depression to be strongly correlated with suicide irrespective of other factors such as age and gender.

Morgan et al. (1998) suggest that affective psychosis carries the highest level of suicide

risk, such that around ten percent of those who die by suicide and are experiencing psychiatric illness are schizophrenic. Similarly, Hawton et al. (1989) estimate that ten to fifteen percent of those with this diagnosis eventually die by suicide and Allebeck and Allgulander (1990) found schizophrenia to be the diagnosis most closely related to suicide. Retterstol suggests that heightened danger of suicide is evident during the early stages of the illness, when an individual's feeling of identity may be wavering or when they feel that threatening forces are overwhelming. Internal instructions to complete suicide may also be experienced. Alternatively, ideas of persecution may occur which may cause individuals to 'escape' by, for example, throwing oneself in front of a train (Retterstol, 1993, p.108). This is supported by Roy (1982) who argues that suicide among schizophrenics commonly occurs because of auditory hallucinations.

2.4.2 Personality Disorders/Alcohol and Substance Misuse

Personality disorders, especially borderline and antisocial personality disorders, also carry an increased risk of suicide (Retterstol, 1993). 'Borderline' personality disordered individuals (so-called because they were thought to be at the edges of psychosis and neurosis) are characterised by a broad range of behaviours and symptoms. These include affective instability, a history of relationship difficulties, chronic feelings of emptiness and boredom, intolerance of being alone, dissociative episodes, often resulting from flashbacks of sexual abuse, and repetitive self-injurious behaviours. Evidence suggests that between 4 and 10% of those with borderline symptoms eventually die by suicide, although other forms of self-injurious behaviours are substantially higher (Williams, 1997).

'Personality disorders' are often closely linked with alcohol and/or substance misuse, themselves factors associated with heightened risk of suicide (Diekstra and Hawton, 1987). It is widely understood that both suicide and attempted suicide occur significantly more commonly amongst those who misuse, or who are dependent, upon alcohol or substances than in the corresponding general population.

Numerous studies have pointed to the increased risk of suicide in alcohol-dependent individuals. For example, Barraclough et al. (1974) found that the principal diagnosis of fifteen percent of a sample of one hundred cases of suicide was alcoholism. Similarly, Beck and Steer (1989) suggest that alcoholism is one of the main predictors of future suicide amongst parasuicidal individuals.

The reasons for the contribution of alcoholism to suicide are varied. Firstly, alcoholism is thought to interfere with individuals' interpersonal relationships and social support networks (Murphy, 1986). It reduces personal control and increases helplessness (Williams, 1997) and affects intellectual functioning through brain damage and damages physical health resulting in an increase in medical problems. In short, evidence variously suggests that alcohol has an important impact on risk of suicide. Indeed, it is a strong indicator of future suicide (Morgan et al., 1998).

The relationship between suicide and substance misuse is well established, both in adults and adolescents (Harris and Barraclough, 1997). Recent evidence suggests that substance use may be a greater problem amongst adolescent suicide, a third of whom have been found to experience such problems (Hawton, Platt, Fagg and Hawkins, 1993). Similarly, Retterstol (1993) suggests that the mortality rate from suicide amongst this group is between eight and eighty times higher than in the average population. Others suggest that increased substance use may be a significant factor in the worrying increase in suicide amongst young adult men (Bukstein, Brent, Perper, Moritz, Baugher, Schweers, Roth and Balach, 1993). Whilst substance misuse *per se* is likely to heighten risk of suicide, the illegality of drugs (rather than alcohol) is likely to present an individual with further problems. The effects of this illegality, for example the possibility of convictions and/or imprisonment, are in themselves risk factors for suicide.

2.4.3 Deinstitutionalisation of Psychiatry

A number of researchers have highlighted the probable consequences of reduced

psychiatric in-patient facilities and its effect on suicide rates. For example, Hawton (1998) suggests that the 'de-insitutionalisation' of psychiatry may leave with chronic psychiatric disorders less protected against suicide than previously. Appleby (1992) is rather more direct, suggesting that the two points of maximum risk, i.e., the beginning of an acute phase of illness and following discharge from in-patient care, highlight the potential impact of the policy of community care upon suicide. Similarly, Goldacre, Seagroatt and Hawton (1993) suggest that both the number of suicides and the proportion occurring in the month after discharge from hospital have increased since the introduction and expansion of 'community care'. As summarised in the following quotation, they argue that 'revolving door' patients are at greatest risk. 'The trend to reduce in-patient care ... means that an increasing number of people who have episodes of in-patient care are at risk ...' (Goldacre et al., 1993, p.285). The well-established relationship between suicide and psychiatric illness, coupled with the expansion of community care, resulting in a loss of support/supervision for those at already-heightened risk of suicide, may partially explain the recent changes in rates of completed and attempted suicide.

2.5 PSYCHOLOGICAL AND COGNITIVE CHARACTERISTICS

Various psychological and cognitive factors have been associated with completed and attempted suicide and self-injury. The cognitive characteristics of depression that are commonly associated with suicide namely hopelessness, helplessness and rigidity of thought and low self-esteem form the main content of this section.

2.5.1 Hopelessness and future-directed thinking

There is some evidence that suicidal ideation and subsequent behaviour/s can be derived from specific cognitive distortions. Those who are depressed or suicidal differ from others in the way they think about themselves and their future. For example, when talking about their future they use less elaborate descriptions. They use fewer future-

tense verbs when asked to finish incomplete sentences and they seem to think less far into the future (Williams, 1997). Similarly, they misconstrue experiences negatively or negatively anticipate outcomes to objectives or goals (Beck et al., 1975). Beck and colleagues were influential in their identification of the role of hopelessness and its relationship to suicidal behaviour. Hopelessness, defined as an individual's profound negative feelings about him/herself and/or his/her future, has been shown to mediate the relationship between depression, suicide (Beck et al., 1974) and attempted suicide (Beck et al., 1975).

Such is the extent of this evidence that Beck and colleagues suggest hopelessness may outweigh depression as *the* most significant psychological factor contributing to suicidal behaviour. Indeed, as Beck and colleagues argue: 'The statistical association between suicidal intent and depression is an artefact resulting from a joint attachment to... hopelessness' (Beck et al., 1974, p.863). Similarly, Drake and Cotton (1986) suggest that depression is only a significant risk factor when it also includes the symptom of hopelessness. Williams (1997) suggests that psychiatric illness is only a factor in suicide when coupled with hopelessness, i.e., when the individual feels that they cannot escape from their situation. Similarly, Beck et al (1975) suggest that an individual's level of hopelessness is the catalytic agent in suicidal behaviour and, as such, may be a better long-term predictor of future suicide than depression. Hence:

> 'There is now consistent evidence that hopelessness accounts for the relationship between depression and suicidal intent. Whether measured psychometrically or clinically, hopelessness, defined operationally in terms of negative expectations, is a stronger indicator of suicidal intent than is depression itself' (Beck et al., 1975, p.1148).

Linehan, Goodstein, Nielsen and Chiles (1983) support this notion in their study of factors that protect against suicide. Their results suggested that attempted suicide participants differed in the extent to which they attach importance to their general expectations. Similarly, Baumeister (1990) uses the term 'cognitive deconstruction' to describe suicidal individuals' disengagement from the future, in an attempt to avoid

contemplating a painful future. More recently, others have suggested that, rather than being related to expectations of negative future events, hopelessness is related to the anticipation of fewer positive events (see for example, Hawton and Catalin, 1987; MacLeod, Rose and Williams, 1993). Thus, the painful future is not the anticipation of negative events, but rather a sense of helplessness arising from the prospect of few positive events (Williams, 1997, p.94).

Despite differences of opinion on the relative importance of positive or negative future anticipation, it is clear that hopelessness plays a significant role in suicidal behaviour. Although it should be pointed out that depression and hopelessness do not necessarily occur simultaneously, it remains the case that when an individual's level of hopelessness is high, especially when coupled with the additional symptom of *helplessness,* their relative risk of suicide increases significantly (Stillion and McDowell, 1997). Appleby (1991) suggests that although hopelessness is a symptom of profound depressive illness, it can also occur in other clinical contexts (including schizophrenia) and that, in all such situations, it is strongly associated with suicide.

2.5.2 Rigidity of Thought

A further important aspect of cognition correlated with depression relates to an individual's rigidity of thought (Beck et al., 1974 and 1975 Neuringer, 1964). In short, a rigid cognitive style is characterised by thinking in very 'black and white' terms or dichotomous terms, the inability to imagine multiple outcomes in a situation, for example. In addition, those experiencing cognitive rigidity typically engage in types of thought processes that, suggests Beck and colleagues, may predispose them to suicidal ideation. These include selective abstraction, over-generalisation and inexact labelling. Selective abstraction is an individual's tendency to focus on the wholly negative aspects of their life, whilst ignoring or under-emphasising any positive aspects. Over-generalisation is the tendency to view the world as wholly negatively. Inexact labelling is the tendency to place a negative label on oneself and subsequently reacting to that label rather than to the situation at hand.

Similarly, Schotte and Clum (1982) suggested that cognitive rigidity mediated with negative life events and suicidal behaviour in that dichotomous thinkers were more likely to be overwhelmed with negative life events, making them susceptible to suicide. They later added hopelessness and inter-personal problem solving skills to their model, arguing that the combination of these factors increased risk of suicide (Schotte and Clum, 1987).

2.5.3 Coping Strategies

It is a common observation that suicidal individuals have often reached the limit of their coping strategies. Their utilised defence mechanisms for coping with stressful situations have proved ineffective and thus they may have inadequate resources to deal with any difficulties they may face. To some extent this is obvious. As O'Connor and Sheehey (2000) remark, 'the coping strategies of suicidal individuals must be dysfunctional in some way if they lead people to perceive that suicide is the only option' (O'Connor and Sheehey, 2000, p.120). As discussed in Chapter 1, people may have reached this point because of 'learned helplessness'. People in this state typically express a motivational deficit, an emotional deficit, and fail to learn when negative events are unavoidable (cognitive deficit). Attributional style is the personality trait believed to mediate between negative events and depression. A depressive attributional style refers to the tendency to view negative events as caused by internal, stable and global factors. From a practical perspective, Stillion and McDowell (1996) suggest that those working with suicidal individuals should explore the types of mechanisms such people previously utilised and, importantly, why they are no longer effective. Further, alternative coping strategies can be directly taught within behavioural or cognitive therapies, which focus on attributional styles.

2.5.4 Attributional Style

Peterson, Semmel, von Baeyer, Abramson, Metalsky and Seligman (1982)

demonstrated differences in attributional styles between depressed and suicidal people and controls. Attributional style was measured along three dimensions: stable-unstable, global-specific and internal-external. Respondents were asked to imagine themselves in twelve situations (six positive and six negative, six interpersonal and six achievement-related) and explain what they thought to be the major cause. Depressed and suicidal participants were characterised by a stable, global and internal attributional style. They were more likely to blame themselves for the event (internal). They thought that the causes would always be present (stable) and that they would always interfere with their lives (global). Once this attributional style has been adopted, it is thought to be both self-perpetuating and difficult to modify (O'Connor and Sheehey, 2000).

2.5.5 Interpersonal Problem Solving

A factor also related to suicidal behaviours, interpersonal problems solving, is thought to be associated with memory biases. Williams (1997) describes a tendency towards over-generalisation ('mnemonic interlock') in which people are locked at an intermediate level of processing. They can access general memories but not specific biographical memories from them. The Mean-Ends Problem Solving Test (Platt, Spivack and Bloom, 1975) has been used to demonstrate that suicidal individuals were able to propose fewer and less relevant solutions to solving problems. A modified version of the test demonstrated that those who had attempted suicide provided more passive, less active solutions when compared with similarly depressed individuals who had had suicidal thoughts but not acted upon them. As Williams (1997) suggests, such deficiencies in problem-solving ability are particularly relevant given the increased stressful life events that precede suicide attempts.

2.6 Environmental and Social Risk Factors

Social and interpersonal factors are of great importance in terms of individuals' relative risk of attempted and completed suicide. A substantial proportion of the factors

discussed herewith have resonance with Durkheim's description of the 'anomic' suicide generally and its relationship with social isolation. For example, marital status (being single) or employment status (being unemployed) are both associated with suicide. Williams (1997) differentiates between long and short-term vulnerability factors. Long-term factors include all those things in a person's past or current relationships or living situation that act as background to short-term crises (Williams, 1997). Short-term vulnerability factors include all those things important to an individual's current situation which, against the background of long-term factors, place an additional burden on the individual or render them incapable of managing short-term problems such as relationship difficulties. Barraclough et al. (1974) propose a similar argument suggesting that short-term, social stresses, particularly those of an interpersonal nature, are likely to increase an individual's risk of suicide in the presence of long-term vulnerability factors.

2.6.1 Negative Childhood/Family Experiences

A number of researchers have highlighted the influence of negative family experiences, abuse and neglect as increasing the propensity to suicidal ideation and behaviour (Stillion and McDowell, 1996). Pfeffer (1986, 1991) suggests that abuse, neglect, parental discord and family disorganisation are very common amongst suicidal children. This is a view shared by Babiker and Arnold (1997) who maintain that self-injury is strongly associated with negative childhood experiences.

There is clear evidence of an association between the loss of parents, through death or divorce, and suicidal behaviours (Williams, 1997). There is also a relationship between poor parenting and suicidal behaviours. Williams (1997) reported that children who attempted suicide were more likely to describe their parents as being both more rejecting and more overprotective. This apparent anomaly resulted in suicidal participants perceiving themselves as less deserving of care, they places a lower value on their life and had poor self-esteem (Goldney, 1989).

2.6.2 Negative Life Events

A further factor subsumed under the category 'environmental' is the occurrence of negative life events or experiences, especially those involving various losses, such as a relationship (through bereavement or separation), employment or prestige (Hawton and Catalin, 1987). Losses such as these are, argue Stillion and McDowell (1996), sometimes significant enough to trigger thoughts of suicide amongst those who have not previously been suicidal. The experience of sexual abuse (usually in childhood) is one of the most significant negative life events that has recently become associated with all types of suicidal behaviour. For example, Van Egmond, Garnefski, Jonker and Kerkhov (1993) for example reported that half of a sample of 158 women who had attempted suicide had been sexually abused at some point in their lives. The vast majority (95%) made their first suicide attempt after being sexually abused. Further, they made their first attempt at a younger age, were far more likely to have made more suicide attempts and had a much greater probability of future suicide attempts. Similarly, Rosenthal, Rinzler, Walsh and Klausner (1972) compared women psychiatric in-patients with a history of wrist cutting against female inpatients with histories of suicide attempts by methods other than wrist cutting. They found that the former were more likely to have early histories of trauma, as well as sexual identify confusion, chronic feelings of emptiness and eating disorders. In short, various negative life events and particularly abuse, and especially sexual abuse, are associated with self-injury and attempted suicide as well as completed suicide (Babiker and Arnold, 1997).

2.6.3 Social Isolation/Marital Status

Social isolation has long been associated with suicidal behaviour. A number of authors highlighted the correlation between marital status and suicide, proposing that the lowest rates are amongst those who are married, with the risk steadily increasing amongst the single, widowed and divorced. Adults generally and older adults in particular appear to be more significantly affected by social isolation and suicide is much more likely amongst those who are single, widowed or divorced, in short, those who are seemingly

socially isolated (Appleby, 1991). Charlton, Kelly, Dunnell, Evans, Jenkins and Wallis (1992) attribute the recent substantial increase in suicide amongst men to the increase in the number of men who are single or divorced. Similarly, Kreitman (1988) found that amongst men divorce or the death of a spouse increased the risk of suicide amongst men of all ages. Amongst the elderly, suicidal individuals are significantly more likely to report feeling lonely or isolated (Morgan et al., 1998). Finally, Hawton (1998) suggests that a broken relationship is a common life event preceding suicide and attempted suicide. Conversely, suicidal ideation/behaviour is relatively uncommon amongst those who have positive relationships with others whose lives are relatively stable.

2.6.4 Class/Status

Similarly, occupational or social class is commonly regarded as contributory to the relative risk of future suicide. Data published by the Office for National Statistics (1998) suggest that men in the professional and unskilled occupational categories are far more likely to die by suicide than men (and women) in other categories. Analysed by occupation, vets had the highest ratio of deaths by suicide among men in the period 1982-1987, more than three times the national average. Farmers, horticulturists and farm managers had the next highest ratios, at a rate of double that of the national average. By the period 1991-1996, vets and farmers had the second and third highest rates of suicide, with dentists becoming the occupation with the most significantly high ratio. Among women, medical practitioners had the highest proportion of deaths by suicide in both periods, with three and a half and three times the national averages respectively.

2.6.5 Unemployment

Increases in rates of unemployment and suicide in the late 1970s and early 1980s generated considerable interest in the possible association between unemployment and suicidal behaviours, particularly attempted suicide (Hawton, Fagg and Simkin, 1998). Although, as has been outlined, particular occupations are variously associated with

suicide, contrasting evidence suggests that, in terms of relative risk of future suicide, being employed is better than being unemployed. For example, Pritchard (1992) argued that the 10-fold increase amongst suicide in young men between 1974 and 1988 was largely due to increases in unemployment. Concerning attempted suicide, Platt and Kreitman (1984, 1985) found that recorded rates amongst the unemployed were almost twelve times the rate amongst the employed. Similarly, Hawton and Rose (1986) found that rates were twelve to fifteen times those of the employed.

Although the vast majority of research into the relationship between unemployment and suicide has focussed solely on men, Hawton, Fagg and Simkin (1998) suggest that a similar relationship exists for women. Hawton et al. (1998) found that rates of attempted suicide among unemployed women (between 1989 and 1992) were between eight and eleven times higher than the rate for employed women. Further, they were particularly high among women who had been unemployed for more than one year. Further, many more unemployed women had a history of psychiatric difficulties, alcoholism and previous suicide attempts. The authors found that, in keeping with the higher overall rate of attempted suicide amongst women, the rates of attempted suicide among both employed and unemployed women were greater than their male counterparts.

In summary, although there appears to be a relatively strong correlation between completed and attempted suicide and unemployment (Platt and Kreitman, 1984, Hawton et al., 1998, Pritchard, 1992) the nature of this association is unclear (Hawton, 1998). It seems unlikely that there is a direct causal relationship. Instead, the association is more likely to be indirect, via social deprivation or depression, for example. On the other hand, the association may be explained by people at risk of suicide, such as those with a psychiatric illness, being more likely to be unemployed (Hawton et al., 1998).

2.6.6 Availability and choice of method

It is widely assumed that men chose more dangerous or violent methods, or those with a

lower chance of intervention, such as hanging (in the UK) or shooting (in the US) and are, therefore, more 'successful' in their attempts. Conversely, women are more likely to attempt suicide by self-poisoning, using readily available medications, which inevitably take some time to take effect, thus increasing the possibility of outside intervention. Thus, the likelihood of an individual dying depends, to some extent, on the ease of access to, and knowledge of, effective means. Indeed, as been demonstrated that the introduction on non-toxic North Sea gas in the 1960s resulted in a dramatic decrease in the overall number of suicides (Kreitman, 1976). Individuals' ease of access to the means with which they can kill themselves may partially explain the higher rates of suicide among particular groups, such as farmers, dentists and medical practitioners.

2.6.7 Media Portrayal

There is some evidence that medial portrayal of suicide can influence incidence of suicide, particularly amongst the young. For example, Schmidtke and Hafner (1988) reported a major increase in suicide in Germany following screenings of a television serial in which a nineteen-year-old boy killed himself on a railway line. The consequent increase in suicides was not matched by a reduction in the use of other methods.

In the UK, current BBC Producers' Guidelines (BBC, 2000) advise that programmes featuring suicide can have a profound effect on audiences. Guidelines contain advice about the portrayal of suicide, suggesting that unnecessary concentration on particular methods of suicide should be avoided. Further, guidance states that care should be taken to avoid explicitly glorifying or overemphasising the 'positive' results of suicide. With regards to legitimate factual reporting, BBC guidelines state that care should be taken to avoid glamorising the story and that graphical or technical details of the employed method should be avoided. Finally, the provision of information about support services such as telephone help-lines is recommended.

2.7 DEMOGRAPHIC FACTORS

Despite the importance of biological, psychiatric, psychological and social explanations of suicide, two key demographic factors are necessary for a fuller understanding of suicidal behaviours, namely age and gender.

2.7.1 Age

Historically, suicide has been widely associated with older age. Indeed, it has been suggested that the likelihood of dying by suicide increases proportionally with virtually every decade (Pritchard, 1992; Lester, 1993; Morgan et al., 1998). It has been suggested that the contribution of age to risk of suicide may be due to an interaction with other factors such as economic/social status and social integration. Indeed, Pritchard (1992) suggests that the elderly, who may be more prone to personal and social neglect, isolation and rejection, are especially vulnerable.

More recent data, however, appears to contradict this finding. Although, there has been an overall decrease in suicide rates in England of approximately 12% since 1990, rates amongst young adult males have increased in recent years (Morgan et al., 1998). The suicide rate amongst 15-24 year olds in England and Wales doubled between 1980 and 1992, whilst the rate for deaths from undetermined causes (the majority of which are thought to be suicides) increased even more. Hawton (1992) reported that the number of undetermined deaths increased by 100%. Tables 2.1 and 2.2 show the number and rate of deaths by suicide and undetermined cause (in England and Wales) between 1996 and 2000. The figures in bold font show the number of deaths; the figures in italic font show the rate of deaths expressed as a proportion of the total population, per 100,000.

Table 2.1

Age	1996	1997	1998	1999	2000
0-14	14	14	15	11	16
	0	*0*	*0*	*0*	*0*
15-24	451	502	461	436	398
	14	*16*	*14*	*13*	*12*
25-34	956	929	1096	935	840
	22	*22*	*26*	*23*	*21*
35-44	713	733	808	865	811
	20	*20*	*21*	*22*	*20*
45-54	628	645	665	692	685
	19	*19*	*19*	*20*	*20*
55-64	359	374	405	427	379
	14	*15*	*16*	*16*	*14*
65-74	274	244	242	261	265
	13	*12*	*12*	*13*	*13*
75+	259	281	237	277	265
	20	*21*	*17*	*20*	*19*
Total	3654	3722	3929	3904	3659

Table 2.1 Suicide/Undetermined Deaths of Men by Age: Numbers are shown in bold and Rates are shown in italicised font

Table 2.2

Age	1996	1997	1998	1999	2000
0-14	7	11	4	5	5
	0	*0*	*0*	*0*	*0*
15-24	118	106	123	112	113
	4	*3*	*4*	*4*	*4*
25-34	221	222	209	213	209
	5	*6*	*5*	*5*	*5*
35-44	225	250	211	255	235
	6	*7*	*6*	*7*	*6*
45-54	215	232	207	212	247
	6	*7*	*6*	*6*	*7*
55-64	147	151	154	153	161
	6	*6*	*6*	*6*	*6*
65-74	144	144	151	155	132
	6	*6*	*6*	*7*	*6*
75+	162	143	166	179	159
	7	*6*	*7*	*7*	*6*
Total	1239	1259	1225	1284	1262

Table 2.2 Suicide/Undetermined Deaths of Women by Age: Numbers are shown in bold and Rates are shown in italicised font

As the data in Tables 2.1 and 2.2 illustrate, young adult men (aged 25-34 and 35-44 years) are most vulnerable, followed by men aged 75+. The pattern is very different among women, where the number and rates are much lower and more evenly spread among the different age-groupings.

2.7.2 Gender

As shown above, many more men than women die by suicide. In fact, 75% of suicides are by men (The Samaritans, 2002). The overall rate of suicide among men remained relatively stable over the five-year period (from 18 per 100,000 in 1996 to 17 per 100,000 in 2000), although rates differ amongst the various age groups. Deaths are most common in the 25-34 and 75+ age groups. The overall rate of suicide/undetermined deaths among women has also remained relatively stable over the five-year period (at 6 per 100,000). In summary, the average rate of suicide and undetermined deaths among men in the general community in England and Wales (between 1996 and 2000) was 18 per 100,000, whilst the rate for women is 6 per 100,000, representing an average of 12 per 100,000 when the groups are combined.

Despite recent decreases in rates of completed suicide, The Samaritans (2001) suggest that attempted suicide among young men and women increased steadily during the 1990s, estimating that approximately 19,000 suicide attempts occur among adolescents annually. It should be noted that The Samaritans adopt a broad interpretation of 'attempted suicide', which includes 'parasuicide', and deliberate self-harm both with and without suicidal intent. During the 1960 and 1970s, there was an overall increase in attempted suicide, mainly through poisoning, followed by a gradual decline in the early 1980s and a further increase during the late 1980s and 1990s. There is evidence that the UK has one of the highest rates of attempted suicide in Europe (Hawton, Fagg, Simkin, Bale and Bond, 1994). Although young women aged 15-19 are the most likely to attempt suicide (by overdose), the rate among young men (15-24) has increased substantially since 1985.

2.7.3 Possible Explanations for the Increased Risk of Suicide Among Young Adult Men

There is no single factor that accounts for the substantial over-representation of suicide among young adult men or the recent increase amongst this group. Hawton (1998) considers a range of factors generally associated with suicide, such as psychiatric and psychological disorders, substance misuse and unemployment and concludes that, because there was no comparable increase in rates among women, such factors occur at different rates among the sexes or have very marked differential effects.

Taking unemployment as an example, Hawton (1998) notes that although rates have increased among both sexes, being unemployed may have greater implications for the self-esteem and social standing of males, a factor that may partially account for the increasing rate of suicide within this group. Similarly, Pritchard (1990) suggests that women's disadvantaged social and occupational status may serve to protect them against the demoralising effects of unemployment (Pritchard, 1990). Further, although there have been recent increases in the prevalence of alcohol/substance misuse, increase in usage has occurred in both sexes. A possible contributory factor relates to the reported increases in rates of youth and adult depression in recent years and the decrease in the usual female to male gender difference in prevalence rates (Klerman, 1989).

Hawton (1994) suggests that, in the absence of any clear gender-specific differences or changes in factors associated with risk of suicide, a complex combination of factors, as well as their interaction with other factors, are relevant. Of particular importance are the changing roles and consequently the self-identify of men and women. It is suggested that women may be protected against suicide because of their recently achieved 'greater freedom ... to live independently ..... plus the extensive networks of support, both formal and informal, available to many young women' (Hawton, 1994, p.163). Conversely, although similar in effect, Pritchard (1990) suggests that being married and having children provides women, more often than men, with a 'reason for living'. In summary Hawton (1998) argues that, for men, the combination of an actual or perceived

reduction in role opportunities makes them more vulnerable to suicide. He suggests that this may be compounded by hopelessness, particularly in the context of other stress factors such as unemployment, broken relationships and substance abuse. A related factor is the reluctance of men (when compared with women) to seek help with the problems they face (Hawton, 1998).

2.7.4 Previous Suicidal/Self-Injurious Behaviour/s

Previous suicide attempts are one of the strongest indicators of future suicide mortality (Roy, 1982). Studies variously suggest that between 12% and 25% of people who attempt suicide do so again within a year (Hawton and Fagg, 1995) with repetition being particularly common in the three to six months following an episode (Bancroft and Marsack, 1977). Further, between 30% and 60% have made a previous attempt at some time (Hawton et al., 1993, Morgan et al., 1998). Moreover, some studies have found that at least 30% of those who die by suicide have injured themselves previously (Barraclough et al., 1974).

Consequently, an individual's relative risk of eventual suicide is greatly increased following an earlier episode, with approximately 1% of adults dying by suicide within a year of their previous attempt (Hawton et al., 1993) with the risk remaining increased for several years (Hawton and Fagg, 1992). Similarly, Gunnell and Frankel (1994) found that 1% of those who attempt suicide die by suicide within the following year and that 10% of all individuals who attempt suicide die by suicide eventually.

Hawton, Fagg, Platt and Hawkins (1993) identified factors associated with completed suicide following previous incidents of parasuicide in young adults (15-24 years). Parasuicide is defined as:

> 'A non-fatal act in which an individual deliberately causes self-injury or takes a substance in excess of any prescribed or generally recognised therapeutic dosage. The apparent purpose or motivation underlying the act is not taken into account ..... so that people with differing levels of suicidal intent and ideation

are included' (Hawton et al., 1993, p.1642).

Sixty-two cases and 124 controls were examined and six (out of twenty-eight) variables discriminated between them: unemployment, previous inpatient psychiatric treatment, substance misuse, personality disorder and previous parasuicide. The most significant discriminators were substance misuse and previous psychiatric treatment.

2.8 Factors Associated with Heightened Risk of Suicide: A Summary

To recapitulate, suicidal behaviours are attributed to a number of individual, societal and socio-economic factors. These include social-economic changes, variations in the availability of commonly used methods, psychiatric disorders, particularly depression, exposure to suicide in others, directly or via the media, biological/genetic factors, psychological factors and functioning and demographic factors. Further consideration of the factors specifically related to suicide among prisoners is undertaken in Chapters 3 and 4, all of which inform the development of the research instrument used in the main study. Table 2.3 summarises the main correlates of suicide as outlined in the current chapter.

Table 2.3

Factor	Specific Correlates
Age	Young adults or the elderly
Gender	Male
Family/Domestic Circumstances	Single, widowed or divorced
Social Class/Occupational Status	Unemployed
Domestic Situation	Living alone
Cognitive Characteristics	Hopelessness, cognitive rigidity, problem-solving deficits
Psychological/Psychiatric Illness and related factors	▪ Depression, Schizophrenia, Personality Disorder ▪ Previous in-patient psychiatric treatment ▪ History of attempted suicide and/or self-injury ▪ Alcohol/substance misuse or dependency

Table 2.3 Factors Associated with the Risk of Suicide
Adaptation and revision of Morgan et al. (1998)

2.9 PROTECTIVE FACTORS

Although there is a wealth of research from many different perspectives into factors that appear to heighten or increase an individual's propensity to future suicidal behaviour, there has been relatively little interest into the factors that protect against suicide. As Linehan et al. (1983) note, research into suicide is largely directed at identifying characteristics of suicidal individuals, in order to enhance prediction (see for example, Beck et al., 1974; Kreitman, 1977; Neuringer, 1962 and 1964).

With few exceptions, almost all research focuses on identifying what are perceived to be maladaptive attributes of the suicidal. Little attention has been given to the question of whether suicidal people lack the important adaptive characteristics present among the non-suicidal and, if so, what these characteristics might be (Linehan et al., 1983). Adaptive, life-maintaining characteristics may be rephrased as *protective factors*. The term is not intended to mean simply the reverse of risk factors for, in the majority of cases, such factors are essentially unchangeable, being male for instance. Rather, protective factors are individual characteristics, which act to counterbalance risk factors without altering the presence of the risk factors themselves. In other words, they are factors that prevent high-risk individuals from killing themselves (Appleby, 1991).

Linehan et al. (1983), in their sample of non-clinical individuals, identified six primary factors that may prevent suicide among potentially suicidal people. These were categorised as follows: survival and coping beliefs; responsibility to family; child-related concerns; fear of suicide; fear of social disapproval; and moral objections. From this research, the authors developed the Reasons for Living Inventory, which was distributed to two clinical groups – those who had had thoughts of suicide and those who had injured themselves. In both the samples (i.e., clinical and non-clinical) *survival and coping beliefs, responsibility to family* and *child-related concerns* were the most useful in differentiating the groups (non-suicidal and previous suicidal ideators/previous parasuicides). Of the clinical groups, the only distinguishing factor was related to child

concerns a factor that, suggest the authors, represents a source of protection against suicide/self-injury.

Similarly, Appleby (1996) suggests that there is a low risk of fatal and non-fatal self-harm in childbearing women, despite their high rate of psychiatric morbidity, which is in itself closely linked to suicide/self-injury. This consideration has led to the assumption that pregnancy and motherhood protects against suicide. Importantly, Appleby proposes that the effect of parenthood, in its protection against suicide, is likely to extend to both sexes who have responsibility for young children, thus contributing to the relationship between suicide and marital status and to sex differences in suicide rates (Appleby, 1996).

2.10 FACTORS ASSOCIATED WITH SELF-INJURY

This section focuses on the factors associated with self-injury, as distinct from completed or attempted suicide.

2.10.1 Gender

Both self-injury and attempted suicide are far more common among women than men. Although estimates of the ratio difference vary widely (from 2:1 to 20:1) those who have considered the gender difference are unanimous in their view that women injure themselves more frequently than men (e.g., Pao, 1969; Favazza, 1989; Cross, 1993). As well as the difference in frequency between self-injury among men and women, the *degree* to which they injure themselves also differs. Whilst men injure themselves much less frequently, when they do the injuries they cause are usually more serious (medically) than those inflicted by women (Pao, 1969).

Two main theories have been offered to explain the gender-difference self-injury. Some

focus on the differential effects of gender socialisation of boys and girls (e.g., Burstow, 1992) whilst others focus on anatomical differences (e.g., Cross, 1993). Feminist writers (such as Burstow, 1992) argue that many women are dissatisfied or even embattled with their bodies. Most feel dissatisfied with their weight, shape, size, etc., and may feel alienated from their bodies, which can seem mysterious, frightening or out of control (Babiker and Arnold, 1997). Cross (1993) suggests that the root of women's dissatisfaction with their bodies lies in anatomical differences, with the contrast between boys and girls becoming apparent at a very early age. Boys experience their genitals in a much more direct way; they regularly touch themselves in order to urinate, unlike girls. Boys explore themselves and masturbate more directly and more frequently than girls who may, as a result, find their genitals a source of confusion and anxiety. During puberty, girls' bodies change much more dramatically, with the development of breasts and hips and the onset of menstruation. Later, women may perceive that their bodies are susceptible to control by others. During pregnancy, childbirth or breast-feeding, for example, they may feel that the body is 'taken over' or 'out of control'. For Cross (1993) women who are not able to negotiate the developmental challenges and ambiguities of their bodies, self-injury may become a means of attempting to take ownership, of making them feel more under their own control.

Whilst Cross's theory provides some insight into men and women's differential experiences of their bodies and how these, in turn, may relate to self-injury, it pays scant regard to the social context of these gendered experiences. As Babiker and Arnold (1997) suggest, there are a number of social factors in operation. For example, girls explore themselves less often and masturbate more rarely than boys. This is not because their genitals are any less accessible, but because in Western society, as in many other cultures, women are encouraged not to take control of their sexual pleasure. Further, attitudes towards women's bodies can be contradictory, with many negative overtones. Babiker and Arnold suggest that 'the teaching women receive about their bodies from advertising, magazines and entertainment and often from their families and peers tells them that the female body is something to be controlled and tailored in order to please others' (1997, p.39). Few completely reject the expectation that they should

make themselves 'attractive' for others.

> 'The importance given to attractiveness may explain why self-injury seems to be seen as so 'wrong', so deviant and upsetting..... Mutilation of the body is absolutely the opposite of what an idealized woman is supposed to do: to make great efforts to be attractive and perfect. In injuring her own body, a woman spoils the very thing which society both values and despises. Perhaps this 'spoiling' expresses not just her self-hatred and despair, but also her protest at the contradictory expectations placed upon her, and so contains deliberately proud and angry elements' (Babiker and Arnold, 1997, p.40).

Babiker and Arnold suggest that the many, often contradictory, demands placing stress on women can explain why women injure themselves more frequently than men do. Firstly, women's tendency to suppress their own needs to continually care for, nurture others, to tolerate unfair, unfulfilling or abusive situations is deeply damaging to their self-esteem and psychological health. Secondly, to be involved in a situation in which they cannot win, can foster a sense of frustration, power and despair. As an example of women's 'no win situation' Babiker and Arnold cite society's perception that 'real women' are sexually available, submissive and pleasing to men, yet if she is harassed or raped she has 'asked for it'. Depending on the degree to which a woman's needs are flouted and she is exploited, unexpressed resentment, grief and anger are likely to build up. In the absence of a safe, culturally sanctioned outlet and, exacerbated by low self-esteem, the woman's feelings may be turned inwards, sometimes through self-injury (Babiker and Arnold, 1997).

2.10.2 Age

Although older people (i.e., 50+) do injure themselves, the vast majority who do so are in their teens, twenties and thirties (Favazza and Rosenthal, 1993). An overall increase in rates of self-injury in the population as a whole has been reported (Walsh and Rosen, 1988), the same authors suggest that the increase is most marked amongst younger people, and that risk of self-injury declines with increased age. Babiker and Arnold (1997) outline a number of reasons why younger people injure themselves more

frequently. Firstly, they may be less likely than older people to leave abusive relationships, which could end their abuse, thereby reducing the likelihood of self-injury. Secondly, they are probably more likely than older individuals to have unresolved issues with their sexuality. As will be discussed shortly, gay people are particularly vulnerable to self-injury. Thirdly, they may be more likely to experience bullying or other forms of peer-related abuse. Fourthly, they may not yet have developed the skills to resolve emotional difficulties caused by the kinds of childhood experiences that are frequently associated with self-injury, such as sexual abuse. Finally, they may be particularly concerned with issues of independence and separation, at the very time when they have few choices about work/education or their living situation and little money to be able to live their lives in the way they want to. Indeed, Spandler (1996) suggested that self-injury among young people was often motivated by a desire to feel in control.

Babiker and Arnold (1997) suggest that the reason older people injure themselves less frequently may be related to their emotional maturity and ability to deal with negative situations in other ways. Alternatively, it may be that incidents of self-injury are even more under-reported than in other groups.

2.10.3 Race

Although there is no direct evidence of a relationship between race, culture and ethnicity and self-injury (Babiker and Arnold, 1997), there is some evidence that the incidence of self-injury, as well as attempted suicide, is growing among young Asian women (Soni Raleigh and Balarajan, 1992). The authors conclude that this is likely to be the result of specific pressures from their roles in Indian society, including: 'submission and deference to males and elders, arranged marriages, the financial pressures imposed by dowries, and ensuing marital and family conflicts' (1992, p.367). Arnold (1995) found that the experience of racial harassment, abuse or discrimination had contributed to the distress that led them to injure themselves. Similarly, Babiker and Arnold (1997) suggest that the 'trauma, fear, isolation and alienation which such

experiences may lead to could clearly be expected to lead to self-hatred and thus to self-injury for some people' (1997, p.47).

In summary, although there is no clear evidence of an association between race and self-injury, there are a number of factors specific to minority ethnic groups that may make self-injury more likely. On the other hand, prison-based research has shown an under-representation of minority ethnic groupings in reported self-injury incidents (see Livingston, 1997). Clearly more research is needed to provide further evidence of an association, indeed if there is one.

2.10.4 Sexuality

Davies and Neal (1996) reported that self-destructive behaviours including attempted suicide and self-injury are far more common among lesbians and gay men. Similarly, Arnold (1995) reported that a number of gay women reported having injured themselves as a response to the struggles and distress they experienced because of their sexuality. Babiker and Arnold (1997) suggest that the higher levels of self-injury among lesbians and gay men may be related to the still common discrimination and abuse of gay men and women.

2.10.5 Disability

Walsh and Rosen (1988) identified a strong relationship between self-injury and serious, chronic illness giving rise to temporary or permanent disability in childhood or later life. Although no published research has identified a similar relationship between self-injury and physical disability in adulthood, it is reasonable to assume that such a relationship does exist (Babiker and Arnold, 1997). Explanations for the relationship between self-injury and physical disability rest on the concept of body alienation – i.e., having a confused or distorted body image, and the perception that the body is separate and alien (e.g., Walsh and Rosen, 1988). A number of social factors also arise from physical disability. These include poverty, unemployment social isolation, as well as

powerlessness and stigmatisation. Babiker and Arnold sum up the possible meanings of self-injury in this context:

> 'Self-injury could have many meanings, ranging from punishing one's own body for not confirming to an acceptable and 'desirable' image, to expressing extreme frustration and anger. Perhaps [it] serves to provide a sense of control over a recalcitrant body, or over a life which is severely constrained by society's failure to allow disabled people to play a full part in the life of the community. It may also be an attempt to communicated distress, grief and protest at one's situation' (1997, p.51).

2.10.6 Social Class

Although there is no evidence of a direct-link between class and self-injury, some of the factors that may contribute to it are likely to feature more in the lives of working class individuals (Babiker and Arnold, 1997). These include poor housing and homelessness, unemployment and poverty, educational disadvantage and lower social status. These factors may lead to low self-esteem, feelings of alienation and powerlessness - factors that may, in turn, increase an individual's propensity to injure themselves. This is not to say, however, that those from the middle and upper classes do not injure themselves, the openly acknowledged self-injury by The Princess of Wales being a case in point.

2.10.7 Childhood experiences underlying self-injury

A review of 250 articles on self-injury led Favazza and Rosenthal (1993) to conclude that there exists a broad link between self-injury and 'stressful situations', including physical or sexual abuse in childhood, an early history of medical procedures or hospitalisation, residential in care homes and parental alcoholism or depression. Similarly, Arnold (1995) reported that the childhood experiences most commonly associated with self-injury were sexual abuse (49%) and neglect (49%). Large proportions also reported emotional abuse (43%), physical abuse (25%) or loss/separation (25%). Likewise, Walsh and Rosen (1988) reported that many adolescents who injured themselves had lost a parent though death or divorce. Further,

many had been physically or sexually abused, a factor most strongly associated with self-injury, rather than other self-destructive behaviours. The majority of those who injured themselves had disruptive family-backgrounds characterised by impulsivity, violence and alcoholism. A significant proportion had experienced serious or chronic illness or surgery during childhood. Finally, some reported other losses in adolescence, including the break-up of important peer relationships and separation from family due to placement in residential care.

2.10.8 Adulthood experiences underlying self-injury

Arnold (1995) reported that, when individuals related self-injury to adult experiences or events, these involved similar factors to the childhood experiences reported. The most frequently cited experiences were rape and sexual abuse. Others reported that self-injury was triggered by emotional or physical abuse within their relationships. Others reported lack of support and communication problems, usually within their personal relationships. Other experiences related by the interviewees to self-injury included the loss of a child, through death or separation, and the inability to have children. Some reported that self-injury was precipitated by the break-up of an important personal relationship. Others reported that their self-injury began or became more severe after imprisonment.

2.10.9 The relationship between background experiences and self-injury

Having established that certain background experiences characterise those who injure themselves, a number of authors have attempted to address the links between these characteristics and self-injury. Walsh and Rosen (1988) suggest that such negative childhood experiences may establish a number of attributes that may make some prone to self-injury. These include a 'distorted and alienated body image', a 'predilection towards impulsive and self-destructive behaviour', a 'vulnerability to loss' and the adoption of the role of a 'victim'.

Babiker and Arnold (1997) suggest that negative childhood and adult experiences have two major effects that may give rise to self-injury. Firstly, they enforce the individual to experience complex, distressing emotions in the absence of any autonomous means of coping with them. In this context self-injury may develop as the only alternative to feeling that surviving the experience may not be possible. Secondly, such experiences often result in feelings of guilt, shame, self-loathing and anger; these are feelings that may lead an individual towards self-destructiveness. Babiker and Arnold (1997) also describe a broader range of emotions arising from such experiences. These include a 'legacy of distress', 'abandonment and emptiness', 'powerlessness', 'difficulties in identifying, understanding and verbalising feelings', 'self-loathing', 'difficulties with relationships', 'difficulties with separation' and 'dissociation' (1997, pp.62-71). They support their suppositions with a series of convincing qualitative results following an in-depth survey of 76 women who injured themselves (Arnold, 1995).

2.10.10 Possible Biological Links

A number of biological theories have been offered to explain why people injure themselves. As with biological explanations for attempted and completed suicide, which were reviewed in Section 2.3, biological theories on self-injury have focussed on the role of endorphins, naturally occurring opiates that are implicated in the regulation of emotional states. It has been suggested that the endorphin levels of some have been impaired such that they need external means to simulate their release. Endorphins bring about analgesia, reducing anxiety and maintaining a psychological and biological balance. The physical pain and trauma resulting from self-injury are said to stimulate the release of endorphins, thus advancing the necessary balance.

Van der Kolk, Perry and Herman (1991) take a different stance, suggesting that a degree of biological predisposition to self-injury can arise from maltreatment in childhood. Anatomical pathways set up in response to extreme stress may 'programme' the individual to perform in a biologically similar fashion during subsequent experiences.

Although there is some evidence that biological factors may influence self-injury, the evidence is somewhat speculative, and as such, their precise role awaits full empirical validation (Babiker and Arnold, 1997).

2.10.11 Psychiatric Illness

The major focus in discussions on self-injury takes what Babiker and Arnold (1997) term a 'clinical' approach, that is, one that 'pathologises' self-injury, seeing it as an aberration, a maladjustment, a disorganisation of normal functioning or as an illness in itself. Self-injury has been seen variously as manifestations of personality or character disorder. For example, Walsh and Rosen (1988), Pattison and Kahan (1983), Favazza (1996), and Linehan (1993) understand it as a manifestation of Borderline Personality Disorder. Pattison and Kahan (1983) regard it as an order of impulse control. Lacey and Evans (1986) suggest that it is evidence of Multi-Impulsive Personality Disorder. Favazza (1996) suggests that it is evidence of Obsessive Compulsive Disorder or Anti-Social Personality Disorder. Gardner and Gardner (1975) found that amongst personality disordered individuals, self-injury was more common among those who were obsessional.

Roy (1978) compared personality-disordered self-injurers with depressive, neurotic controls and found greater introversion, neuroticism and hostility in the injurers. Bennun (1983) in a comparison of injuring and non-injuring depressed individuals found that the former had greater outwardly directed hostility, although the groups did not differ in expression of inwardly directed hostility. Simeon, Stanley, Frances, Mann, Winchel and Stanley (1992) compared a group of self-injuring borderline personality disordered individuals with a control group who had not self-injured and found that the former scored higher on one measure of depression but not on two others. Further, they had higher levels of aggression, were more anti-social but less hopeless. Simeon et al. (1992) suggest that their lower hopelessness scores lends support to the hypothesis that self-injury can be seen as an act of healing through the transient restoration of more hopeful affect. They conclude that self-injury is characterised by greater aggression,

rather than impulsivity, which is contrary to some of the findings outlined above. Others have expressed reluctance in associating self-injury with such a broad range of problems, arguing that it should be recognised not merely as a symptom of some underlying disorder, but as an 'illness' in its own right. For example, Favazza and Rosenthal (1993) use the term 'repetitive self-mutilation syndrome' whilst, in the same vein, Pattison and Kahan (1983) use the term 'deliberate self-harm syndrome'.

As this brief overview demonstrates, self-injury is variously associated with a broad range of psychiatric, psychological and cognitive problems. Whilst the studies cited above can provide some insight into the psychological correlates of self-injurious behaviours, the heterogeneity of groups compared and the diversity of the psychological correlates investigated limits the potential for generalising the findings (Simeon et al., 1992).

Further, associations with such a broad range of disorders or 'syndromes' could be taken to imply that self-injury, its purposes, functions and motivations are poorly understood or misinterpreted. Indeed, it has been argued that such 'diagnoses' are used as all-encompassing descriptions of 'difficult' individuals (e.g., Pembroke 1986). Whilst the 'psychiatrisation' of self-injury is understandable, given its commonality amongst those with such disorders, the association has recently come under strong criticism from several quarters. Feminists have long argued against the psychiatrisation/medicalisation of women who do not conform to their prescribed gender stereotypes (for example, Allen, 1987). The 'psychiatrisation' of self-injury may be an extension of this tendency.

Diagnostic criteria for Borderline Personality Disorder include 'recurrent suicidal behaviour, gestures or threats, or self-mutilating behaviour' (DSM-IV, 1994 p.654). This is interesting for a number of reasons. Firstly, the diagnosis and their diagnostic criteria are somewhat circular, in that they consist of descriptive accounts of features associated with the behaviour of individuals who receive the diagnosis (Babiker and Arnold, 1997). Secondly, there is considerable disagreement as to what constitutes the

characteristics of the condition (Gunderson, 1984). Thirdly, the diagnosis is most commonly applied to 'difficult to treat individuals' (Linehan, 1993 p.26), the vast majority of whom are women (Widiger and Frances, 1989).

The commonly made and widely accepted associations between self-injury and various psychiatric disorders have also come under criticism from what may be termed the 'user' or 'survivor' movement. Criticisms have been levelled at what is regarded as the wholly negative understanding of the behaviour, its functions, management and treatment. Authors such as Pembroke (1996) and Harrison (1996) suggest that, at best, the management and treatment of those who injure themselves is degrading and disempowering and reflects more about the power, control and status they wish to attain, rather than a concern of the welfare of those treated.

Consequently, it is argued that there exists a lack of acknowledgement of individual needs and a failure to understand the reasons for the behaviour and the functions it may serve. Rather than regarding self-injury as evidence of 'psychopathology', it can be regarded as a means of 'coping with life in spite of enormous psychological distress' (Babiker and Arnold, 1997 p.73). Babiker and Arnold (1997) suggest that self-injury can also be used to regulate distress, anxiety and tension and, for some, may serve the function of increasing autonomy and control or reducing feelings of dissociation of depersonalization. Similarly, Snow (1997) reported that self-injury may serve to reduce an individual's feelings of anxiety, tension and/or anger and that it may be an important means of communicating distress to others. Indeed, relief of mounting tension and depersonalisation is the single most common clinically identified correlate to self-mutilation (Simeon et al., 1992). Others include venting of anger, establishing control, forming an identity, influencing others, responding to self-hatred or guilt, discharging sexual feelings and seeking euphoria. Psychodynamic hypothesis include: attempts at self-healing, rage towards the self or the internalised bad object, symbolic castration, formation of ego boundaries, autoerotic gratification, mastery of menstruation and procurement of a transitional object (Favazza, 1996).

2.11 CHAPTER SUMMARY

This chapter has examined the various factors associated with completed and attempted suicide and self-injury. The relationship between suicidal ideation, self-injury and attempted or completed suicide is inherently complex. For the purposes of manageability, previously highlighted factors are drawn together in a multi-disciplinary model of suicide termed the 'suicide trajectory' representing a revision and development of the model introduced by Stillion and McDowell, 1996. This model is used to understand the spectrum of suicidal behaviours examined in the current study. For convenience, the factors associated with suicide were categorised into the following groups: biological, psychological, psychiatric, cognitive, environmental/social, demographic factors and previous suicidal behaviour/s. A brief overview of factors that may protect against suicide was provided. Finally, the factors associated with self-injury (as distinct from attempted/completed suicide) were outlined. In order to emphasise the distinctions between these behaviours, the theoretical distinction outlined in Chapter 1 and the epidemiological distinction outlined in Chapter 2, are drawn together into Figure 2.3 shown below. The various demographic, biological, psychiatric, environmental, psychological and cognitive factors associated with the behaviours at different stages of the 'suicide continuum' (Lester and Lester, 1971) are highlighted. For example, being female, having experienced physical or sexual abuse and having a diagnosis of personality disorder are associated with self-injury. In contrast, being male, single, socially isolated, schizophrenic and depressed are associated with completed suicide. Finally, poverty, unemployment, more generalised psychiatric problems and substance misuse are associated with both completed and attempted suicide and self-injury (without suicidal intent).

Having examined the main theoretical approaches to and risk factors associated with the broad spectrum of suicidal behaviours in the general population, the focus in the following chapter is on *completed suicide* in prisons, before turning to the related behaviours (i.e., *attempted suicide and self-injury*) in Chapter 4.

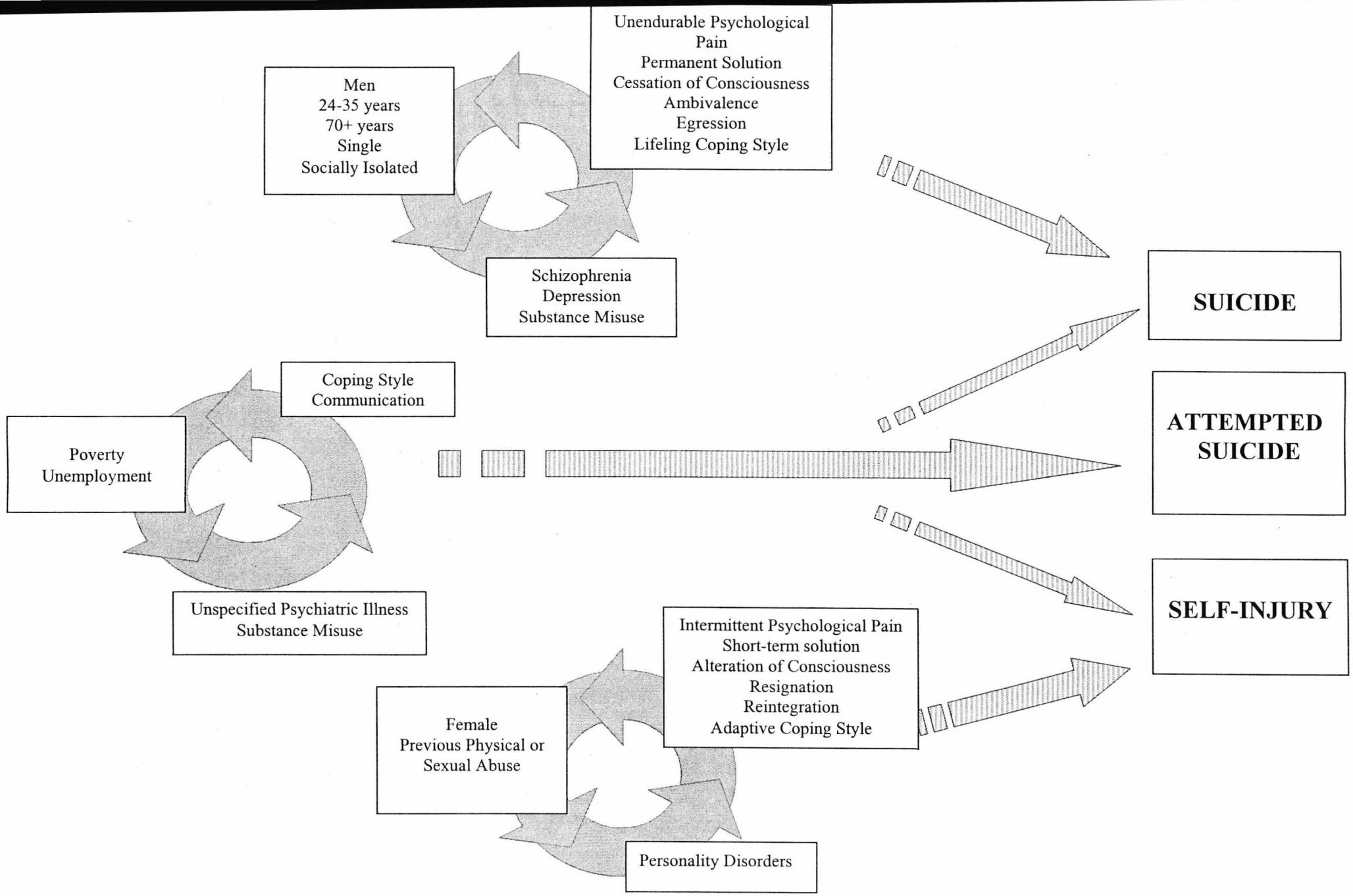

Figure 2.3 Summary of Literature on Factors Associated with Suicide, Attempted Suicide and Self-Injury

CHAPTER 3

SUICIDE IN PRISONS

3.1 INTRODUCTION

The focus in Chapters 1 and 2 was on *completed* and *attempted suicide* and *self-injury* within the wider community. The focus in this and the following chapter is on the broad spectrum of 'suicidal behaviours' as they occur in the prison context. This focus will allow contextualisation of the current research questions, which were outlined in the introduction to this thesis. As the behaviours on the suicide 'continuum' (Lester and Lester, 1971) are perceived to share some commonality (i.e., they are all self-directed and involving the purposive infliction of harm), it is important that the factors associated with all such behaviours are examined. This and the following chapter therefore examine the studied behaviours within their situational context (i.e., prison).

The current chapter begins by providing a brief discussion of the perceived effects or consequences of imprisonment, from psychological and sociological approaches. Attention then turns to the question of prisoners' adaptive responses to imprisonment and their attempts to counteract any negative effects. An examination of the extent of suicide in prisons in England and Wales is then undertaken, followed by a review of previous, retrospective, studies of completed suicide among prisoners. Attention is drawn to the factors associated with risk of suicide. Chapter 4 examines the extent and nature of *attempted suicide* and *self-injury* in prisons.

3.2 THE CONSEQUENCES OF IMPRISONMENT

Research on the effects of imprisonment is vast and well documented, albeit inconclusive. Some studies, for example, suggest that imprisonment is damaging to the extent that it induces extreme negative effects in those held, whilst others suggest quite the reverse, that prison may, in fact, be conducive to good health (Bonta and Gendreau, 1990). Inconsistent findings are further encumbered by methodological problems. Studies have employed contrasting indices and definitions, have varied in the types of

populations/establishments included in the samples and have typically been based on simple correlational or cross-sectional designs (Zamble and Porporino, 1988). Further, there is a paucity of longitudinal research, which makes impossible accurate consideration of the effects of imprisonment over time.

Early, predominately sociological, studies focussed on the unique characteristics of the prison environment that reportedly influenced prisoners' general well being and behaviour both during and after imprisonment. Such studies assumed that certain aspects of prison life exerted negative influences on prisoners' attitudes, values, and modes of interaction and self-concepts. For example, Sykes (1958) characterised the prison experience/environment as one that prevents prisoners from fulfilling certain basic needs. Imprisonment was said to induce extreme material deprivation, and a loss of personal security and autonomy. Such deprivation constitutes what Sykes termed the 'pains of imprisonment'. Similarly, Goffman (1961) suggested that the very structure and organisation of 'total institutions' such as prisons and psychiatric hospitals purposefully made difficult the adaptation to institutional life. Total institutions, argued Goffman, foster dependency by infantilising the incarcerated, undermining their self-esteem and limiting their autonomy. Similarly, Foucault (1979) suggested that these and other effects are intrinsic to the very notion of punishment in what he describes as 'complete and austere institutions' (Foucault, 1970, pp.235-236).

By contrast, analyses of the ostensible harmful effects of imprisonment from psychological, psychiatric and clinical perspectives have sought to quantify a range of cognitive, emotional, attitudinal and personality changes possibly induced or exacerbated by imprisonment, at least for some. At this juncture it is important to emphasise the distinction between pain and harm. 'Pain' is understood as an immediate aversive condition that may or may not result in extended damage. 'Harm', on the other hand, has lasting negative consequences (Goodstein, Layton and Mackenzie, 1989). Prison has been described as 'harmful' by a number of authors who outline variants of the so-called 'psycho-syndrome' (Zamble and Porporino, 1988). These include defects in cognitive functioning, emotional problems, difficulties in relating to others and the appearance of various psychotic characteristics.

However, methodological, conceptual and definitional deficiencies have led to inconsistent and thereby inconclusive findings (Zamble and Porporino, 1988; McKay, Jayewardene and Reedie, 1977; Coid, 1984). For example, Gunn, Robertson, Dell and Way (1978) and Goodstein et al. (1989) reported that the prison population as a whole experienced a high degree of disturbance and psychological discomfort. Levels of distress, that were maximal during the initial phase of imprisonment, remained high even though they diminished following adjustment to prison life. In contrast, other studies (e.g., Banister, Smith, Heskin, and Bolton, 1973; Sapsford, 1978) have failed to demonstrate long-term or overall aversive effects of confinement on cognitive, perceptual-motor and personality functioning

Zamble and Porporino (1988) conducted one of the few longitudinal studies of the effects of imprisonment, concluding that almost half of their sample had experienced difficulties with depression, anxiety and sleep one month into their sentence, whilst more than one third had clinically significant levels of hopelessness. After three months, depression and anxiety levels had decreased significantly, although one quarter of the participants actually had higher levels of depression. After fifteen months, mean depression and hopelessness levels were not significantly different from those recorded after three months in custody. However, anxiety levels and reported sleeping problems had decreased further. Similarly, Toch, Adams and Grant (1989) suggest that, particularly for those experiencing psychiatric difficulties, early periods of incarceration, described as an 'initial transition shock periods', are critical.

Despite differences in the range of psychological disturbances reported, a relatively consistent finding is that any disturbance, distress or psychological discomfort experienced is maximal during the initial phase of imprisonment, but then diminishes following adjustment to prison life (Gunn et al., 1978). This finding is especially pertinent to the study of suicides in prison. Research has consistently shown that the majority of deaths occur shortly after admission to prison, a time when prisoners face the greatest amount of uncertainty (Towl and Crighton, 1998; Bogue and Power, 1995). Similarly, Backett (1987) suggests that imprisonment instigates a continuum of distress that may induce feelings of despair, if a critical threshold is exceeded. Feelings of despair may lead, ultimately, to suicidal ideation. This critical threshold is individually specific and dependent upon a balance between the factors that cause distress and

individuals' resources to cope with distressing situations, both generally and within the prison context (Backett, 1987).

3.3 ADAPTATION TO IMPRISONMENT

The importance of prisoners' successful adaptation has long been recognised (e.g., Clemmer, 1940; Sykes, 1958; Sykes and Messinger, 1960; Goffman, 1961; Cohen and Taylor, 1972; Coid, Wilkins, Coid and Everitt, 1992). These authors suggest that prisoners manage the deprivations imposed upon them through the development of normative systems, adherence to subsequent sub-cultural norms and attitudes and through the adoption of institutional dialect. Affiliation to the consequent 'counter-culture' or 'inmate code' may facilitate prisoners' adjustment to incarceration in two main ways. Firstly, such cultural alliances can oppose the authority exercised by prison staff, allowing prisoners to be accepted by their peers, thereby reducing feelings of isolation. Secondly, by standing in opposition to prison staff, prisoners may regain some sense of control. Combined, these factors may improve individual's self-esteem, promote a sense of autonomy and improve individuals' self-respect (Goldstein et al., 1989).

The issue of prisoners' abilities to cope with the perceived negative effects of imprisonment has recently become the focus of much attention (e.g., Zamble and Porporino, 1988; Liebling, 1992; Power, McElroy and Swanson, 1997). Thus, instead of seeking to demonstrate either the presence or absence of psychological emotional and/or psychiatric consequences, this change of focus is founded on the implicit acknowledgement that any deterioration is not inevitable. Further, if imprisonment does have a negative psychological impact it is individually specific rather than generalised or uniform. A second development relevant to the current research is that individuals' management of the problems they face in prison may be equally or even more important than the frequency or severity of the problems they experience (Zamble and Porporino, 1988).

In a recent study, Power et al. (1997) examined prisoners' perceptions of their abilities of adapting to imprisonment. The authors discuss the complexity of individuals' general coping abilities, suggesting that they are determined by a complex interaction of

background, situational and environmental factors. Effectively coping with imprisonment, however, requires the additional ability of successful socialisation. As Power et al. (1997) remark: 'Coping in a closed, crowded and potentially aggressive environment is determined largely by one's ability to interact successfully, form alliances, establish allegiances, develop social networks and, most importantly, acquire acceptance' (Power et al., 1997, p.390).

An individual's successful adaptation depends on a complex combination of factors, such as: the current demands, previous life experiences, their capacity for managing current demands and resources or acquired techniques of managing distress, the utilisation of which may be curtailed by incarceration. Also important are individuals' current psychological/psychiatric states, their relationships with those outside of prison, the development and continuation of such relationships and the cultivation of relationships and networks with peers. It follows that if integration into a supportive prison-based social network is not achieved the problems or difficulties experienced by prisoners are likely to become intensified. Without adequate sources of social support, feelings of isolation and/or despair are likely to be exacerbated and, ultimately, may lead to the onset of suicidal ideation and/or behaviours. Indeed, as Johnson and Toch (1982) suggest, placing individuals in an incredibly stressful situation with few means to manage this experience may lead an individual to direct their feelings of hopelessness towards themselves. This self-destructive breakdown has been identified as unique to the prison setting and it is seen as an index of the personal difficulties that face prisoners (Johnson and Toch, 1982).

The relationship between suicide and social integration has long been recognised. For example, Durkheim (1887) emphasised the importance of environmental, situational and demographic factors, such as marital status, socio-economic class degree of social integration, on an individual's propensity to suicide.

3.3.1 The Importance of Social Support

Later commentators have highlighted the importance of supportive relationships in the maintenance of physical health and psychological well-being, as well as in reducing the likelihood of psychological distress in response to stressful situations (Cohen and

MacKay, 1984; Cohen and Wills, 1985; Turner, 1983; Brown, Andrews, Harris and Bridge, 1986; Wills, 1991). Generally, the presence of social support appears to partially protect individuals in the experience of stressful life events (Cohen and Wills, 1985). Cohen and Hoberman (1983) introduced the concept of the 'buffer effect' of social support, whereby people who feel supported are less affected by stressful life events and conditions than those who feel unsupported. The relevance of this finding to the situation of prisoners is clear. Since the experience is likely to be perceived to be stressful by at least some, it may be argued that the existence and utilisation of positive supportive relationships is crucial for prisoners' psychological well being. This is a supposition supported by Biggar (1996), Carolissen (1996), Biggam and Power (1997) and Power et al. (1997).

On this issue, Biggam and Power (1997) examined the structure and function of social support, considering self-perceived actual and ideal levels of support and the discrepancies between them, in a group of incarcerated young offenders. The authors concluded that those who reported higher levels of psychological distress (including anxiety, depression and hopelessness) desired higher ideal levels of support (both emotional and practical). In addition, they reported higher discrepancies between overall actual and ideal levels of support. Thus, those experiencing higher levels of psychological distress regarded themselves as more deficient in social support. Similarly, Liebling (1992) argued that, in the case of young offenders 'poor coping skills' (manifested in difficulties adjusting to imprisonment and successfully associating with others) were among the main factors that distinguished between suicidal and non-suicidal prisoners. Others have questioned the accuracy and utility of the term 'poor coping' (Dexter and Towl, 1995; Towl and Forbes, 2000; Crighton, 2000) suggesting that it can lead to inappropriate labelling and stereotyping on the part of some staff.

3.4 Suicide and Self-Injury among Prisoners

Having discussed the possible negative consequences of imprisonment, consideration turns to the issue of suicidal behaviours among prisoners, arguably the most profound outcome of the negative effects of imprisonment. The discussion begins by focussing on completed suicide among prisoners, beginning with a definition of the behaviours included in official statistics, which forms the focus of the following section. A

summary of previous analyses of completed suicide in then undertaken. In the following chapter an examination of the incidence of attempted suicide and self-injury in prisons is undertaken and the relevant literature in the area reviewed.

3.4.1 Definition of Suicide in Prisons (England and Wales)

All deaths that occur in prisons are referred to a coroner who holds an inquest, which is held before a jury. Although the purposes of an inquest are strictly inquisitorial rather than adversarial, the level of evidence required for a suicide verdict is comparable that of a criminal court. In other words, both actus rheas and mens rheas must be established (Dorries, 1999). Prior to 1988, the Prison Service recorded any death in custody as suicide only in cases where a suicide verdict was recorded by a coroner; a factor that is likely to have substantially underestimated the true extent of deaths caused by self-inflicted means (McHugh and Towl, 1997).

In an attempt to standardise the data relating to apparent suicides in prison, the Prison Service introduced the term 'self-inflicted death' as an all-embracing definition to describe deaths from non-natural causes. To fulfil its commitment to openness and ensuring that lessons are learned from such deaths, the Prison Service classifies deaths as self-inflicted for all coroners' verdicts of suicide, death by misadventure, open verdicts and accidental deaths. This broader term captures all deaths that appear to be attributable to the actions of an individual and does not exclude those deaths when an individual's intent is questionable. Adoption of this definition ensures that recent official statistics relating to suicide in custody are likely to be more reliable than those prior to 1988 (McHugh and Towl, 1997). It is important to emphasise that community data are ordinarily based only on suicide and undetermined verdicts (The Samaritans, 2002).

3.4.2 The Rate of Self-inflicted Death in Prisons

Figure 3.1 shows the occurrence of self-inflicted deaths in prison from 1991 to 2001.

Figure 3.1

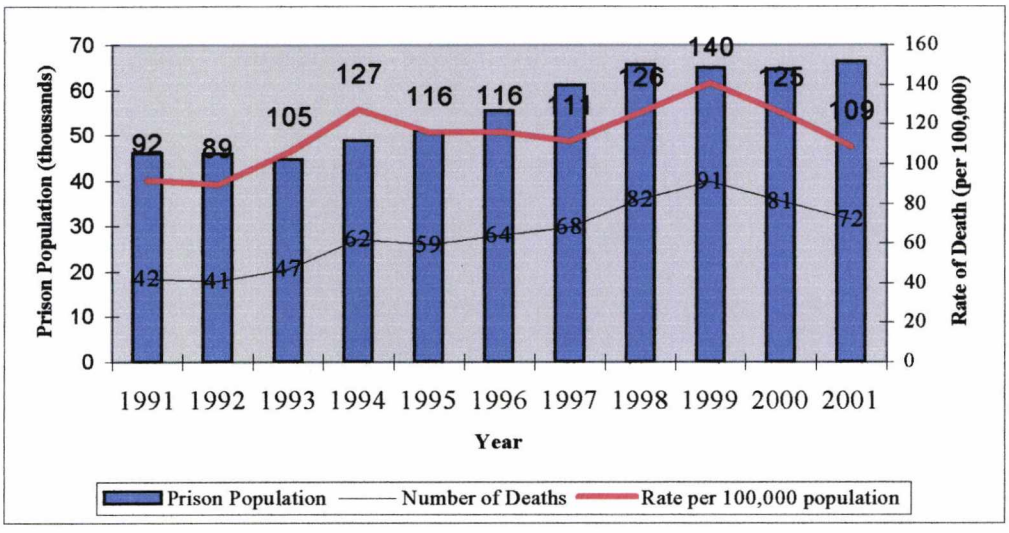

Figure 3.1 Number/Rate of Self-inflicted Deaths in HM Prisons: 1991-2001

Figure 3.1 shows the average prison population as well as the number and rate of self-inflicted deaths, expressed as a proportion of the entire prison population. The population between 1991 and 2001 (as shown by the columns of data) has increased during the period in question. The figures shown in the left-hand y-axis represent the population during this period. As illustrated, there has been a marked increase in both the *number* and *rate* of deaths during the period. The number of deaths (as shown by the black line on the graph) at the beginning of the examined period (1991) was 42. This rose to 72 in 2001, representing an overall increase of 72%. The rate of deaths (as shown by the red line on the graph) at the beginning and the end of the period were 92 per 100,000 and 109 per 100,000 respectively. The overall increase in the rate of deaths, at 18%, was less marked. The figures shown in the right-hand y-axis represent the rate of deaths during this period. As shown, there have been some fluctuations to the number/rate of deaths during this period. The largest increase in the number of deaths occurred between 1993-1994 (of 32%) and 1997-1998 (of 21%). The highest recorded rate of deaths was during 1999 (at 140 per 100,000). The rate during 2001 was 22% lower than the highest recorded rate in 1999. It is notable that most downward fluctuations are followed by upward trends. Despite the recent downturn, the overall trend in self-inflicted deaths in prisons is upward.

Figure 3.2 shows the number of deaths since 1991 against the upper and lower control limits. The mean number of deaths per annum (over the eleven-year period) is used to calculate control limits, which are based on two standard deviations above or below the mean. Control limits are used (usually in industrial settings) to monitor variations in events. When random events (such as deaths) occur, some variation in the overall number is to be expected. In the current example, the average (mean) number of self-inflicted deaths per annum that occurred between 1991 and 2001 was used to calculate the control limits. Any variation outside these limits means that the number is higher or lower than would be expected, given the mean over the period in question.

Figure 3.2

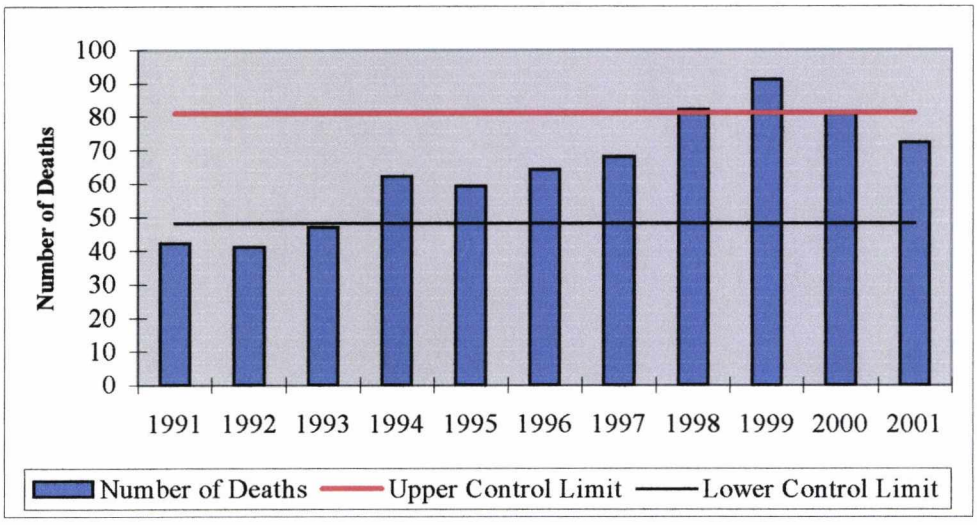

Figure 3.2 Self-Inflicted Deaths Against Upper/Lower control Limits

The method used to calculate the rate of self-inflicted deaths is an important matter, which can affect the size of the overall rates given. The average annual prison population, known as the AAP, and the number of receptions into prison, known as the 'throughput' are both possible denominators.

As an example of the difference in these figures, in 2000 the AAP was 64,602, whilst the throughput was 129,733 (Sattar, 2001). This means that the average number of people in prison was 64,602, although there were 129,733 receptions (i.e., 129,733 people being receiving into and discharged from prison). As remand prisoners have a

high turnover and spend far less time in prison than sentenced prisoners, the reception rate for remand prisoners is very much higher than that for sentenced prisoners.

There are a number of problems inherent to the use of the AAP as a denominator. Firstly, 'local' prisons, where most self-inflicted deaths occur, have the highest turnover of all prisons. Consequently, they hold many more individuals than would be suggested by the overall population figure. Secondly, rates of self-inflicted death, when calculated using the AAP assume that each person is at risk for the whole year, which is not the case. Local prisons hold large numbers of prisoners, either on remand or serving short sentences, who remain in prison for a matter of days, weeks or months. Another assumption of AAP as a denominator is that risk remains constant over time. However, studies have consistently shown that risk of suicide tends to be higher during the early stages of custody. In summary, local prisons hold many more people who are exposed to risk during what is widely regarded as being the most stressful phase of custody (Bogue and Power, 1995, pp. 535-6).

Another problem with the rate of self-inflicted deaths expressed as a proportion of the AAP (for remand prisoners at least) is that it is likely to over-estimate the true rate. In support of this supposition is the finding by Towl and Crighton (1998) that the rate of suicide among remand prisoners, when expressed as a proportion of AAP was found to be very much higher than when the throughput rate was used. Towl and Crighton (1998) suggest that the figures for receptions ('throughput') more accurately reflect the number of individuals at risk in the prison environment over comparatively short periods. On the other hand, death rates based on the number of receptions are likely to *underestimate* the true extent of the problem (Sattar, 2001). This is partly due to the 'double counting' of remand prisoners, firstly when they are on remand and, again, when they are received back into prison following sentencing.

Notwithstanding the problems associated with the use of AAP as a denominator, on balance, it is preferable to comparisons based on throughput as it offers convenience and comparability with previous studies. It is also the most commonly used measure internationally and allows comparisons to be made with rates of suicide in other prison systems.

Despite dispute over what method of calculation should be adopted, when calculating rates of suicide in prisons that have increased significantly in recent years is not in dispute. Based on the number of suicides calculated against the AAP, Topp (1979) reported the rate of suicide to be 42 per 100,000. Backett (1987) calculated the rate as 51.8 per 100,000, while Crighton and Towl (1997) reported rates of 98 (for the period 1988-1990) and 130 per 100,000 (1994-1995). Such substantial increases are disproportionate to the recent increases in the prison population, as illustrated in Figure 3.1. Whilst it is important to acknowledge the potential difficulties in data relating to suicides in prison, as well as in the method of calculation used, it remains the case that prisoners are substantially more likely than non-prisoners to die by suicide. That is, suicides among prisoners are more frequent than might be expected from the age and other characteristics of the prison population generally. Further, prison suicide rates have significantly increased over time.

Partial explanation for what appears, at first sight, to be prisoners' propensity to suicide is found in the nature of the prison population. Prisons contain a high proportion of people who are at elevated risk of suicide (Gunn, 1996). More specifically, prisoners are not representative, demographically, socially or psychologically, of the general community. They contain an excess of individuals who are at heightened risk of suicide. These include men, those with previous psychiatric difficulties, histories of self-injury, alcohol or drug misuse and the socially isolated (Dooley, 1990). As Liebling (1992) remarks: 'Prisons specialise in the 'at-risk' population: the homeless, the unemployed, the poorly educated, the alcohol and drug-dependent, offending males from homes broken by separation, divorce and violence' (Liebling, 1992, p.29).

Rates of suicides in the community were outlined in Chapter 1. As discussed, the average (mean) rate of suicide and undetermined deaths among men and women in England and Wales was 12 per 100,000. The rates for men and women were 18 and 6 per 100,000 respectively. The average rate of self-inflicted deaths among prisoners during the same period was 109 per 100,000. This is about nine times the rate of men and women in the community (when men and women are combined) and about six times the rate for men.

Given that prisons contain a concentration of 'at risk' individuals, some have questioned the validity of comparing suicide rates in the community with those in prison, in the sense that they are not comparing like with like (HM Prison Service, 2001). In an attempt to provide a more valid comparison, Sattar (2001) examined the rate of deaths that occurred during 1996 and 1997 among prisoners, non-offenders in the general community and offenders serving community offences or receiving post-custodial supervision. Sattar's analysis showed that the rates of suicide between offenders serving community sentences and those in prison were very similar, both of which were substantially higher than rates among the general population. Accidental deaths and homicides were substantially higher among community offenders, higher than both the general and the prison populations. Satter (2001) calculated standardised mortality ratios (SMRs) which showed that community offenders aged 15-24 were seven times more likely than the general population to die by suicide and prisoners in this age group were ten times more likely to die by suicide.

Having considered the overall number and rate of self-inflicted deaths in prisons, and compared these with deaths among those in the general community, retrospective studies of completed suicide among prisoners are now reviewed.

3.5 Retrospective Studies of Suicide in Prisons

Researchers concerned with suicidal behaviours among prisoners have, almost exclusively, conducted retrospective analyses based on secondary sources such as written records and interviews with staff, relatives and friends (Crighton, 2000). This approach has largely focussed on identification of the individual characteristics of those who die. Although this approach has led to improvements in the knowledge-base concerning the 'profile' of those who die, it is important to highlight a number of shortcomings with this type of approach.

A problem inherent in records-based research is the potential unreliability of the available data. Records may be incomplete, incorrect, contradictory, subjective or selective (Crighton, 2000). A fundamental issue relates to the accuracy of such data in the sense of whose reality they reflect. An individual's understanding of their current situation or interpretation of recent events, for example, is likely to be different from

those recorded (by staff) in prison records. In this sense, record-based studies have the potential to miss a great deal of valuable information relating to suicidal activities in prison (Liebling, 1992).

A second issue with most previous research is its attempt to identify the 'profile' of high-risk prisoners. In other words, the focus is on the identification of the features common to those who have died, thereby highlighting the factors associated with risk, with the ultimate aim of preventing future suicides. However, suicide is a very rare event, even in spite of the recent increase in the number/rate of suicide among prisoners. Very few prisoners in the total population injure themselves or attempt suicide. Fewer still die by suicide. Any attempt to predict such a rare event on the basis of risk factors that are probably shared by a substantial proportion of the population is likely to be erroneous (Jenkins, 1982; Dooley, 1990). It is probable that there will be a high rate of false positives (identifying prisoners as being at risk who do not attempt suicide) and false negatives (the failure to detect those who do go on to kill themselves). These factors may explain why so few prisoners who subsequently die were identified as being at increased risk of suicide prior to their death (HM Prison Service, 2001).

Another issue relates to the comparisons of suicide rates between different countries, which show substantial variation (Snow, 2000). Variation is accounted for by a number of factors, including social, ethnic and cultural differences between the populations. Of further importance are procedural factors which determine how prisoners are sentenced, a factor that results in differences in the relative size, nature and composition of different prison populations. This means that there are differences in the proportion of prisoners being held on remand, the average length of time they are held on remand and whether prisons hold particular types of prisoners, e.g., young offenders or those with psychiatric problems (Snow, 2000). In addition, the criteria for returning suicide verdicts may vary which can have an impact on the criteria determining what deaths are included in official statistics (Liebling, 1992). For these reasons, current attention is largely focussed on research conducted within prisons in England and Wales and Scotland.

The following review incorporates the major studies of completed suicide among prisoners in the UK. The first UK published study of suicide among prisoners was

commissioned by the first Medical Inspector of the Board of Prison Commissioners, established in 1878. The findings were published in the Third Report of the Commissioners of Prisons (Gover, 1880). The study was initiated following concern about the evident increase in suicides among prisoners between 1873-1879 when 81 prisoners died in local-type prisons (Liebling, 1992). The study concluded that prisoners recently been received into custody, particularly those in custody for the first time and those on remand, were at heightened risk of suicide.

No systematic examination of suicide was conducted for almost a century, until Topp's (1979) study. Topp attempted to replicate the earlier research outlined above and, with only a few exceptions, drew similar conclusions. This is surprising, given the time difference between the studies. Since Topp's study a number of more detailed analyses have been conducted, largely in response to the continually increasing rate of suicide. However, because research has been conducted on different populations, at different times and according to different definitions, their validity and reliability are questionable. It is also difficult to easily compare findings or to replicate studies largely because of the lack of operational definition of the terms used. An example of this is Topp's (1979) study that involved an analysis of suicides and 'probable' suicides. This included deaths that received verdicts of suicide, as well as those with an open verdict that the author considered were probable suicides. Topp's analysis of 'psychiatric' history suffers from similar problems with definition (Crighton, 2000).

In an attempt to organise this disparate and growing body of research, the sample type, period of study and definitions adopted within the main studies on which the review is based are shown below.

Table 3.1

Author	Period	Definition	n	Population
Topp (1979)	1958-71	Official verdict of suicide and some 'open' verdicts	186	Adult/YO* Men
Backett (1987)	1980-82	Suicide	33	Adult/YO Men
Dooley (1990)	1972-87	Suicide	295	Adult/YO Men/Women
Bogue (1995)	1976-93	Suicide	83	Adult/YO Men/Women
Crighton and Towl (1997)	1988-90 1994-95	Self-inflicted Death	100 97	Adult/YO Men/Women
Towl and Crighton (1998)	1988-95	Self-inflicted Death	377	Adult/YO Men/Women

*The abbreviation YO refers to Young Offenders or Juvenile prisoners (i.e., those aged 21 years and under).

Table 3.1 Methodological Issues Regarding Retrospective Studies of Suicide in Prisons (UK)

The reviewed studies have included broad sample sizes, ranging from 33 (Backett, 1987) to 377 (Towl and Crighton, 1998) and different sub-groups of prisoners, in terms of gender and age differentiation. As shown in the final column of Table 3.1, women have only been included in the later studies, probably because of the substantial increase in the female population in recent years which, in turn, has seen an increase in the number of suicide of women (HM Prison Service, 2002). The major problem with most published research is that it includes no statistical analysis. Instead most studies are based on descriptive accounts of the characteristics of prisoners who have died. The exceptions will be highlighted throughout the following discussion.

Whilst these methodological limitations impede comparability and generalisibility of the findings, a number of clear themes have emerged. For the sake of manageability the review has been organised into broad factors commonly associated with increased risk of suicide. The identified risk factors are categorised as follows: demographic; social; crime-related; psychological/psychiatric; and situational/environmental.

3.6 DEMOGRAPHIC CHARACTERISTICS

The main demographic factors associated with completed suicide in the community were outlined in Chapter 2. To reiterate, gender and age were shown to be highly relevant. Although early studies suggested that older people were at increased risk of suicide (e.g., Pritchard, 1992) more recent analyses have shown that adult men between the ages of 25 and 34 are at highest risk (The Samaritans, 2002). Three quarters of deaths occur among men (The Samaritans, 2002). As the following discussion illustrates, the relationship between demographic variables and suicide is less clear for the prison population.

3.6.1 Gender

Published studies are consistent in showing that the majority of self-inflicted deaths in prison occur among men. This is to be expected, given that they comprise the vast majority of the prison population. However, when the proportion of deaths among men and women are compared with their relative proportions in the overall prison population, women are shown to at comparable risk to men.

For example, Dooley (1990) reported that women comprised 3% of the prison population and accounted for 2% of deaths. Similarly, Bogue and Power (1995) found that women accounted for only 1% of deaths but comprised 3% of the prison population. Finally, Crighton and Towl (1997) calculated the rates of suicide among women and men in a two-phase study. The death rate for women in the first period was 57 per 100,000 AAP, compared with 52 per 100,000 in the second. This compares to 98 and 130 per 100,000 AAP respectively for men.

Although these figures suggest that women account for slightly fewer deaths than would be expected from their relative proportion in the prison population, it is important to reiterate that women in the community account for only a quarter of suicides. Further, a recent Prison Service report (HM Prison Service, 2002) showed that the number of rate of suicides among women had increased substantially in recent years. For example, in 2000 and 2001 women accounted for 10% and 8% of all self-inflicted deaths respectively, but only made up 6% of the prison population.

3.6.2 Age

Several studies have found younger prisoners to be at greater risk of suicide (e.g., Wool and Dooley, 1987; Wilkins and Coid, 1991) whilst others have found no such relationship (Crighton and Towl, 1997; Towl and Crighton, 1998). As there is a marked skew towards younger age groups within incarcerated populations generally (Livingston, 1997) it is difficult to assess the impact of age upon suicide and other self-injurious behaviours.

Dooley (1990) reported that prisoners in his sample (mean 32.9 years, range 15-79) were significantly older than the general prison population, of whom 33% were aged over 30, compared with 56% of his sample. Similarly, Bogue and Power (1995) found that prisoners in the 31-40 year age group were significantly over-represented when compared with the mean age distribution of the total prison population. The mean age of prisoners in their sample was 30.2 years (range 16-60). In contrast, Crighton and Towl (1997) argued that no specific age group was substantially over-represented in completed suicide figures. For example, 16% of their 1988-1990 sample was aged between 30 and 39, compared with 22% of the overall prison population. For the period 1994-1995, the relative proportions were 27% (of their sample) and 26% (of the prison population as a whole). In a later study Towl and Crighton (1998) suggested that the average number of deaths within each age cohort were very similar. For example, the rate among 25-29 year olds was 158 per 100,000, compared with 142 per 100,000 for 30-39 year olds. The exception to this finding was for young prisoners aged 15-17, whose rate averaged 239 per 100,000. Recent Prison Service data shows that self-inflicted deaths among prisoners aged 18-20 and 30-39 were slightly higher than would be expected, given the overall proportions of prisoners in these age groups (HM Prison Service, 2000).

As this brief overview has demonstrated, it is not possible to draw unequivocal conclusions from the available research into the relationship between age and suicide.

3.6.3 Ethnicity

Liebling (1992) argues that previous studies have found no specific relationship between ethnic grouping and suicide, even though ethnic minority groups are over-represented in custody generally. This finding is support by Dooley (1990) who reported that the representation of ethnic groups was in line with the numbers in the general prison population. However, more recent research suggests that Afro-Caribbean prisoners may be under-represented. Based on 1994-1995 data, Crighton and Towl (1997) showed that the number and rate of self-inflicted deaths among white prisoners were 55 and 135 respectively. For South Asian prisoners the number and rate were 2 and 148. For Black prisoners the number and rate of deaths were 2 and 35 respectively, suggesting a substantial under-representation of Black prisoners.

That Afro-Caribbean prisoners are under-represented in suicide figures is a consistent finding among all types of prison populations, that is, adult/young offender and men/women (Livingston, 1997). However, the reviewed literature has not considered why this may be the case.

3.7 SOCIAL CHARACTERISTICS

As outlined in earlier chapters, a number of factors relating to an individual's social or personal life have been associated with increased risk of suicide. These include marital status, domestic circumstances and negative life experiences. Although relevant to the prison context, the relationship between these factors and a prisoner's relative risk of suicide is less clear, mainly because such a large proportion of the prison population are similar in their social and personal experience. The reviewed findings support this supposition.

3.7.1 Marital Status and Domestic Circumstances

Community-based studies have shown that people who die by suicide tend to be single (e.g., Appleby, 1991; Charlton et al., 1992). However, because most prisoners are single (Liebling, 1992) marital status is not a reliable indicator of risk. The key issue, rather than the mere designation of marital status, may be the quality of the relationship

in which one is involved (Scott-Denoon, 1984). This is a notion supported by Liebling (1992) who argues that '..... the lack of stable and supportive relationships or the disruption of such relationships may be a precipitating factor, particularly if this isolation extends beyond the most significant relationships' (Liebling, 1992, p.40). Most retrospective studies into completed support the supposition that social isolation may be an important factor.

For example, 79% of Topp's (1979) sample were single or separated and the majority (82%) had given indications that their emotional relationship had been unsatisfactory. Finally, 54% had lived alone, in hostels or lodgings immediately prior to their arrest and 45% had no known contact with friends or relatives. Similarly, Dooley's (1990) sample included few married people. Over half (54%) had never been married; 20% were divorced, widowed or separated; and 21% were married. Like Topp (1979), Dooley (19990) found that, prior to imprisonment, the domestic situations of those in the sample were somewhat erratic. Over a quarter (26%) were of no fixed abode or living alone, 62% were living with others (including lodging and hostels) and in the remaining 12% of cases information was unavailable.

In summary, although the majority of those who die by suicide in prison are not married, this is also true for the general prison population. Consequently, martial status is not a clear indicator of future suicidal behaviour. The strength of prisoners' social networks may be more indicative. Indeed, from the available literature, it appears that those who have died by suicide in custody have tended to be less socially integrated (Jenkins, 1982).

3.7.2 Recent Negative Life Events

A number of researchers have highlighted the importance of recent life events on suicidal behaviour/s, both generally and within the prison context (Wicks, 1972; Wool and Dooley, 1987; Ivanoff and Jang, 1991; Coid et al., 1992). Consistently, studies have emphasised the significance of problems associated with recent interpersonal loss, in terms of actual or potential breakdown of domestic relationships or the death of a loved-one. Such problems are frequently cited as the main precursors to suicidal behaviours (Coid et al., 1992). Whilst the relationship between negative domestic-

related life events and suicidal behaviour/s is relatively clear in the case of adult prisoners (for example Wool and Dooley, 1987) the effects are less obvious in the case of young offenders. It has been argued that recent events in one's immediate environment (such as bullying or intimidation) may be more important than domestic problems (Livingston, 1997; Liebling, 1992).

3.7.3 Motivation

Dooley's study (1990) represents one of the only attempts to ascertain prisoners' main motives for suicide. This was undertaken by reviewing general and medical documentation of those who had died. In 40% of cases the author attributed the suicide to imprisonment itself, in the sense that prisoners found the situation intolerable. Dooley attributed 15% of cases to 'outside' pressures. Thirteen percent of cases were attributed to prisoners' feelings of guilt. Finally, Dooley attributed 22% of cases to prisoners' psychiatric disorders. In 10% of cases no clear motivation could be found.

Although Dooley's study makes a notable contribution in its attempt to understand prisoners' reasons for completing suicide, this type of approach is flawed in the sense that there are often differences in researchers' attributed and individuals' actual motivations (Morgan, 1979).

3.8 CRIME-RELATED FACTORS

Variables included in the 'crime-related' category include prisoners' legal status, offences and sentence lengths. There are a number of relatively consistent findings from the available literature. For example, suicides tend to occur in the early phases of custody. Also, a disproportionate number of suicides occur among remand prisoners and, among those who are sentenced, those convicted of more serious offences are likely to be over-represented.

3.8.1 Legal Status

As discussed earlier, suicide rates are commonly expressed as a proportion of the average annual population (AAP). Earlier studies that used this method consistently

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found that most suicides occurred among prisoners who were on remand. For example, Backett's (1987) reported that 58% of his sample were on remand. Similarly, Dooley (1990) found that 52% were either on remand or convicted awaiting sentence, this compared with 15% of the general prison population.

The method of calculation used in earlier studies, such as those outlined above, has recently been criticised for two main reasons. Firstly, suicide rates expressed as a proportion of the average annual population (i.e., per 100,000 person-years) assume that each person at risk is observed for a whole person-year. While some prisoners are in prison for a year (or more), many more are held for far shorter periods of time (Sattar, 2001). A second assumption is that one person-year shared by several people is equivalent to one-person year relating to only one individual. However, risk of suicide is not static and tends to be higher at particular stages of custody (i.e., the earlier phase). It follows therefore that the accumulated risk during one-person year which is shared by several prisoners (who are each exposed to risk during the most risky period) is likely to be higher than the risk accruing to a person-year spent by only one person. Suicide rates based on the AAP increase the number of people sharing the person-year (Sattar, 2001) resulting in an over-representation of the true rate (Crighton and Towl, 1997).

To illustrate these problems Bogue and Power (1995) calculated death rates as a proportion of the AAP and on the basis of the total number of receptions into prison in a year. Compared with the general prison population based on the mean AAP for the period, remand prisoners were over-represented. However, when comparisons were made using mean annual reception figures, the proportion of remand prisoners dying by suicide did not differ significantly from the proportion of prisoners received on remand.

Similarly, Crighton and Towl (1997) argue that self-inflicted death rates per 100,000 receptions show less pronounced differences between sentenced and remand prisoners. Like Bogue and Power (1995), Crighton and Towl (1997) suggest that rates of death calculated against the number of receptions, rather than the AAP, more accurately reflects the number of individuals placed in the high-risk environment of prison over comparatively short periods of time.

Towl and Crighton (1998) found that rates of suicide among remand prisoners calculated against the AAP were considerably higher than when using the number of deaths by receptions into prison. The rates, calculated according to these two methods, were 238 and 39 per 100,000 respectively. The rate for determinate-sentenced prisoners ranged from 31 and 75 per 100,000 (AAP). Finally, the rate for sentenced reception prisoners was 31 per 100,000. Based on these calculations, the authors argue that remand and shorter sentenced prisoners are at comparable risk of suicide, relative to the remaining population and that those sentenced to terms in excess of 18 months are at heightened risk.

In summary, whether remand or sentenced prisoners are at increased risk of suicide is to some extent dependent on the method of calculation used. Arguably the dispute over what method should be used obscures the reality that all prisoners, but particularly those in the early phase of imprisonment, are at potential risk of suicide.

3.8.2 Offence

It has been argued, relatively consistently, that prisoners accused, charged or convicted of violent offences are more likely to kill themselves. As early as 1880, for example, Gover argued that those who were violent towards others were more likely to be violent towards themselves. This finding is supported within the main literature.

Dooley (1990) found that a higher proportion of those who died by suicide were charged with or convicted of violent or sexual offences, when compared with the prison population as a whole. Similarly, Bogue and Power (1995) found that the majority of their sample had been imprisoned for violent or sexual offences. Further, the difference between the proportion of their sample charged with such offences was significantly higher than in the general prison population. Finally, HM Prison Service (2002) reported that violent offenders had been over-represented in completed suicides in recent years. This was also the case, however, for those imprisoned for relatively minor offence such as theft.

3.8.3 Sentence Length

The literature is largely consistent in reporting that, among sentenced prisoners, those serving relatively lengthy prison terms are at increased risk of suicide. The exception is Backett (1987) who reported that the (unspecified) majority were serving short sentences for non-violent crimes, such as theft. The longest sentence being served was four years.

In contrast, Topp (1979), Dooley (1990) and Bogue and Power (1995) reported that risk of suicide appears to increase in line with sentence-length. For example, Dooley (1990) reported that 27% of his sample were serving between 18 months and 3 years; 25% were serving between 4 and 10 years; 7% were serving in excess of 10 years; and 26% were life-sentenced prisoners. Similarly, Bogue and Power (1995) found that over half of the sentenced adult prisoners in their sample were serving longer sentences (in excess of three years), with 25% serving life. Further a substantially higher proportion of adult sentenced prisoners were serving sentences in excess of 18 months, when compared with the general population.

There is substantial evidence to support the notion that life sentenced prisoners are at increased risk of suicide, when compared with determinate sentenced prisoners (e.g., Dooley, 1990; Bogue and Power, 1995). In support of this finding, Crighton and Towl (1997) found that both the number and rate of self-inflicted deaths among life sentenced prisoners were greater than those for determinate prisoners. Between 1994 and 1995 the number and rate of self-inflicted deaths for among prisoners serving less than 18 months were 6 and 47 respectively. For those serving more than 28 months the number and rate were 20 and 95. These figures increased to 8 and 260 for life sentenced prisoners.

In summary, there is evidence to suggest that prisoners serving longer sentences are more likely than those sentenced to shorter terms of imprisonment to die by suicide. Further, life-sentenced prisoners are at an appreciably higher risk of suicide than determinate sentenced prisoners.

3.8.4 Previous Custodial History

A relatively consistent finding is that is that prisoners who die by suicide are likely to have previous convictions and, to a slightly lesser extent, previously been in prison.

For example, Topp (1979) reported that almost all of those in his sample (98%) had previous convictions and, of these, two-thirds (64%) had previously served prison sentences. Similarly, Backett (1987) found that the vast majority (88%) had a previous criminal history and 73% had previous experience of imprisonment. In contrast, Bogue and Power (1995) found that prisoners who comprised their sample were less likely than the remaining population to have previously served custodial sentences. They reported that 80% of the whole population had previously served a prison sentence, compared with 61% of their sample.

3.9 PSYCHIATRIC FACTORS

As discussed in earlier chapters, completed and suicide are routinely associated with a broad range of psychiatric/psychological disorders. For example, Barraclough et al. (1974) estimated that 90% of those who died by suicide in the community experienced some form of psychiatric illness, the most common being depressive illness (70%). Given the assumed relationship between suicide and psychiatric illness, it follows that prison-based research will reach similar conclusions. Whilst, to some extent, this is the case, it is also true of the prison population generally, a substantial proportion of whom experience some form of psychiatric illness (Coid, 1984). The main problem with the reviewed studies appears to be in the adopted definitions of psychiatric illness.

For example, Gunn, Maden and Swinton (1991) found that 37% of their sample of sentenced prisoners suffered from some form of severe psychiatric illness. More recent studies have reported substantially higher rates. For example, Singleton, Meltzer, Galward, Coid and Deasy (1998) reported prevalence rates of 64% for personality disorders, 10% for functional psychosis and 54% for neurotic disorders. It should be noted that Singleton et al. (1998) adopted a very broad definition of psychiatric illness, which included substance misuse and personality disorders, a factor that may partially account for these very high rates.

Most of the UK-based studies show that around one-third of prisoners who die by suicide had experienced some form of mental illness. For example, Topp (1979) reported that 38% had received psychiatric treatment at some time during their lives, of whom 30% had been psychiatric in-patients. More than two thirds (69%) had consulted a doctor regarding psychiatric difficulties whilst in prison and 39% were receiving treatment as a consequence. Finally, Topp reported that 53% had shown some tendency to depressive episodes, although no operational definitions were provided.

A higher proportion of Backett's (1987) sample (60%) had had some psychiatric contact during their lives and 33% had previously received in-patient psychiatric treatment. Backett found little evidence of depressive illness among his sample, either at the time of death or previously, and suggested that prisoners' levels of distress, rather than psychiatric illness, may be more relevant. Backett argues that prison initiates a 'continuum of distress' and that prisoners may become suicidal if and when a critical threshold is exceeded. The threshold varies and is dependent upon a balance between the stress-related factors and an individual's ability to cope with them. Backett suggests that the clustering of stress factors and absence of adequate coping mechanisms may explain why suicides are more prevalent during the early phases of imprisonment

Dooley (1990) found that 33% of his sample had documented contact with psychiatric services, of whom 27% had a history of in-patient admissions. The primary diagnoses of those who had psychiatric contact were as follows: psychotic illness (22%); depressive illness or reaction (23%); personality disorder (26%); alcohol or drug dependency (13%).

Crighton and Towl's two-phase study (1997) reported different rates at each phase, which is likely to be a result of the adoption of different operational definitions. Of those prisoners in the early phase (1988-1990), 38% had a documented record of prior psychiatric contact, compared with 23% of the 1994-1995 group. For the 1988-1990 group a relatively broad definition was adopted, but for the 1994-1995 period the comparatively strict definition of mental disorder in accordance with that under the Mental Health Act (1983) was applied, thus excluding, for example, those suffering from substance abuse or personality disorders.

Bogue and Power (1995) found less evidence of psychiatric illness than the studies outlined above. Recorded diagnoses were as follows: depressive illness or reaction (13%); personality disorder (2%) and psychosis (5%). Documented in-patient psychiatric treatment was evident in 17% of cases.

That a substantial proportion of the prison population experiences some form of psychiatric disorder complicates the (community) relationship between suicide/psychiatric illness. There is less evidence to support the suggestion that the prevalence of psychiatric illness among prisoners who kill themselves is greater than in than the general prison population or the general community (Lloyd, 1990; Sattar, 2001). The clarity of this relationship is further encumbered by differential definitions of what constitutes psychiatric disorder, as well as different diagnostic instruments and classification systems. These differences hinder generaliasibility of and comparisons between studies.

Turning to psychological factors, hopelessness is consistently linked with suicidal behaviour both within and outside of prison (Beck 1975, 1979; Ivanoff and Jang, 1991). Similarly, Wilkins and Coid (1991) found that increased levels of anxiety were strongly associated with suicide and self-injury. Research supports the notion that acts of self-injury are preceded by feelings of anxiety, followed by reductions in anxiety levels after such incidents (Winchel and Stanley, 1991; Snow, 1997). It has been reported that self-injury is more likely to be used as a method of anxiety reduction in prisons and other secure settings (Ivanoff, Smyth, Grochowski, Jang and Klein, 1992). This is because the availability of more socially acceptable ways of anxiety reduction (such as alcohol and/or drugs) is significantly curtailed (Ivanoff et al., 1992; Porporino and Zamble, 1994).

In summary, the precise nature of the relationship between psychiatric illness/ psychological disorders and suicide in prisons is ambiguous, both in terms of the actual relevance of specific disorders and to what extent they are causative. For example, it may be that depression is 'associated' with suicide. It is not possible, however, to demonstrate that depression *caused* an individual to take their life. Further, it is important to reiterate that different studies employ different measures of diagnosis and use different definitions of what constitutes psychiatric illness. Further they tend to be

based on relatively small sample sizes and on single populations. Such limitations result in an incoherent interpretative framework which, in turn, means that the findings are impossible to reconcile (Livingston, 1997, p.29).

3.9.1 Alcohol/Substance Misuse/Dependence

Community based studies have consistently shown a relationship between alcohol and/or substance dependency and completed and attempted suicide (Barraclough and Hughes, 1987; Morgan et al., 1998). Prison-based studies draw similar conclusions, variously suggesting that between a half and three quarters of prisoners who engage in self-injurious behaviour/s were dependent on illicit drugs prior to incarceration (Haycock, 1989; Wilkins and Coid, 1991). Although alcohol or substance use is common among the general prison population (McMurran and Hollin, 1989; Livingston, 1997; Singleton et al, 1998) there is some evidence of these factors playing a role in suicide among prisoners, as the following review suggests.

Topp (1979) reported that 30% of his sample had had problems with alcohol and 11% had experienced substance-related problems. This compares to 45% of Backett's (1987) sample, of whom 60% died within a week of arrival in custody. Dooley (1990) reported that 29% had a past history of alcohol abuse and 23% of drug abuse. Similarly, around a quarter of Bogue and Power's (1995) sample were reported to have had a history of significant alcohol abuse, a fifth had a history of drug abuse and 10% had a history of both. Later studies (e.g., Crighton and Towl, 1997; Towl and Crighton, 1998) have not included drug/alcohol misuse or dependence as variables in their analyses. It is therefore difficult to assess the precise nature of this relationship. However, given the high frequency of substance use among prisoners (Singleton et al, 1998) and the strong association between substance use and suicide in the community (Morgan et al., 1998) it is reasonable to assume the existence of a similar relationship among prisoners. Livingston (1997) and Liebling (1992) note that most deaths occur during the early phases of imprisonment, when withdrawal effects may be most pronounced, thereby providing some evidence for this supposition. Further, the significance of alcohol/substance dependence is likely to become more important as the frequency of drug abuse in the histories of prison suicides appears to be increasing (Liebling, 1992, p.46).

3.9.2 Previous self-injurious behaviours

There is strong evidence of an association between previous self-harming behaviour and future suicide in the community (Roy, 1982; Hawton et al., 1993; Gunnell and Frankel, 1994) such that it is understood to be one of the most significant indicators of future suicide (Morgan et al., 1998). Prison-based studies have reported a similar finding (Lloyd, 1990; Livingston, 1997). As in the general population (Barraclough and Hughes, 1987) around half of those who die by suicide in prison have a documented history of suicide attempts or self-injury (Liebling, 1992). This is a consistent finding. For example, Topp (1979) found that 51% had made previous attempts or 'threatened' suicide. Similarly, Backett (1987) reported that 45% of his sample had a documented history of parasuicidal behaviour. Further, 39% had given some indication of their suicidal intent; 39% had engaged in self-injury and 18% verbally communicated their intent to either prisoners or staff. Likewise, 45% of Dooley's (1990) sample had a history of previous episodes of self-injury and 22% had intentionally injured themselves during their current prison term. Finally, almost 40% of Bogue and Power's (1995) sample had a documented history of self-injury and almost 20% had made 'verbal threats' or admitted suicidal ideation whilst in prison.

Singleton et al. (1998) reported relatively high levels of suicidal ideation among prisoners, at an average of 45%. Of these 46% had attempted suicide and 7% had injured themselves. Thus, whilst suicidal ideation, suicide attempts and self-injury are relatively common amongst the general prison population, as the reviewed studies have shown, they are possibly more common amongst those who subsequently kill themselves.

3.9.3 Identification of Risk

Although it is evident that a significant proportion of those who die by suicide have a documented history of self-injurious behaviour, research has shown that very few are identified as being at heightened risk of suicide at the time of death. For example, in Backett's (1987) study, only 12% of the sample had been identified as being at increased risk. Similarly, Crighton and Towl (1997) found that an average of only 13%

were identified as being at increased risk at the time of death. The actual proportions identified were 9% in the 1988-1990 sample and 17% of the 1994-1995 sample. A substantially higher proportion of Bogue and Power's (1995) sample (35%) were under some form of observation at the time of death and, therefore, were recognised as being suicidal. Of these, 15% were accorded 'strict suicide observation' status which, in practice means that the prisoner is issued special tear-proof clothing, is located in a specially modified cell and is observed at least every 15 minutes.

Recent Prison Service data (HM Prison Service, 2002) shows that, between 1997 and 2001, an average of 28% of prisoners had been identified as elevated risk of suicide or self-injury at the time of death. This finding suggests that whilst there has been a slight improvement in risk identification in recent years, the vast majority of prisoners who are suicidal are still not identified as such.

3.10 SITUATIONAL/ENVIRONMENTAL FACTORS

The importance of environmental or situational factors in prison-based research into suicide has only recently been recognised (Liebling, 1992). As is evident from the above discussion, most research has been concerned with identifying 'individual' factors that may increase an individual's relative risk of suicide and, to some extent, has underestimated the role that environmental factors or, more precisely, individuals' interpretations of environmental factors, play. As the following discussion illustrates, the main situational factors examined include latency, timing and method of death.

3.10.1 Time in Custody/Time at Establishment

Published studies are consistent in reporting that the likelihood of suicide is inversely related to the length of time prisoners have spent in custody. Indeed, Towl and Crighton (1997) suggest that too much emphasis has been placed on legal status and that a more important factor may be the length of time an individual has spent in custody. The following overview appears to support this suggestion.

Topp (1979) found that 41% of prisoners died within a month of being received into custody and that a further 22% died within four months. Dooley (1990) found that 17%

of suicides occurred within a week of the prisoner's reception, 29% occurred within a month and 51% occurred within three months. Backett (1987) reported that most suicides occurred even earlier. Twelve percent of deaths occurred within 24 hours, 39% occurred within the first week and 60% occurred within the first month. Similarly, Crighton and Towl (1997) reported that 10% of deaths occurred within 24 hours, 28% occurred within 7 days, 45% occurred within a month and 63% occurred within three months.

That the majority of suicides occur during the earliest phases of imprisonment may be explained by the recognition that this is likely to be the most stressful period, after which, prisoners may adapt comparatively well. Backett's (1987) suggestion that the initial phase of imprisonment induces a clustering of stress factors, at a time when individuals may have inadequate mechanisms for dealing with them, supports this notion.

3.10.2 Timing of Death

Given that prisoners are most likely to be alone at night, thereby giving them more opportunity to injure themselves, it could be assumed that most deaths occur during this period. However, published research shows that only around half of suicides occur during the night (Bogue and Power, 1995; Dooley, 1990). Towl and Crighton's (1998) study showed that 71% of prisoners died whilst located in single cells. Although 23% occurred in shared cells, the authors did not stipulate if prisoners were alone at the time of death. In practical terms, Towl and Crighton's finding suggests that one should perhaps be more concerned about prisoners in single cells, rather than time of day per se.

3.10.3 Method

Adopted methods of suicide reflect the availability of options (O'Connor and Sheehey, 2000). Given that access to means other than hanging is largely restricted in prisons (Wool and Dooley, 1987) it follows that most suicides will involve this method. Indeed, research has consistently shown that asphyxia, usually caused by hanging, is the most common cause of death among prisoners. Ninety per cent of Topp's (1979) sample had

hanged themselves. This compares to 85% of Bogue and Power's (1995) sample and 89% of Crighton and Towl (1997) sample. The most common ligature point is the prisoner's cell window bars (Bogue and Power, 1995; Crighton and Towl, 1997).

3.10.4 Establishment Function

A disproportionate number of suicides occur in adult, male 'local' prisons (Sattar, 2001). Towl and Crighton (1998) found that 65% of all suicides occurred in local prisons, although only 37% of the total prison population are held in this type of prison. Prisoners, including most remand prisoners, are initially housed in local prisons, which are very large and more likely to have a high rate of throughput to and from courts, as well as other establishments within the prison estate. The initial stress experienced by prisoners (Backett, 1987) takes place in what are essentially the worst prison conditions with the fewest resources and facilities (HM Prison Service, 2001). This may partially explain why the majority of prisoners who die are held at local prisons at the time of death. Another factor may relate to prisoners' concerns about, for example, court appearances and issues regarding their sentence lengths.

3.10.5 Prison Induced Stress

A number of researchers have criticised the perceived over-reliance on individual factors in the explanation of suicide in prisons. For example, Liebling (1992) argues that scant attention has been paid to individuals' experiences of imprisonment and how those experiences impact on their general wellbeing. Liebling's (1995) study of the relationship between vulnerability and prison suicide highlights a number of important 'situational' factors that may have a bearing on suicidal behaviour/s. These include problems relating to prisoners' charges, frustration and upset at being in prison, bullying and generally feeling unable to cope with imprisonment. Aside from Dooley's (1990) consideration of motivation, no other retrospective, records-based study has considered such factors. Consequently it is not possible to draw any firm conclusions, although their potential importance is acknowledged.

3.11 PROFILE OF COMPLETED SUICIDES IN PRISONS: A SUMMARY

To summarise, the most salient findings of the above review are presented in Table 3.2.

Table 3.2

Pertinent Findings	Topp	Backett	Dooley	Bogue	Crighton & Towl	Towl & Crighton
Over-representation of those serving long sentences	✓		✓	✓	✓	✓
Over-representation of remand prisoners		✓	✓			
Legal status differentiation depends on calculation method				✓	✓	✓
Over-representation of life sentenced prisoners			✓	✓	✓	✓
Over-representation of violent offenders	✓		✓	✓		
Over-representation of sex offenders			✓	✓		
Previous convictions and custodial history frequent	✓	✓	✓	✓		
Under-representation of women			✓	✓	✓	
Over-representation of older prisoners (30 years +)			✓	✓		
No over-representation of particular ethnic groups			✓		✓	
Under-representation of Afro-Caribbean prisoners					✓	
Alcohol/drug related problems	✓	✓	✓	✓		
Previous psychiatric history	✓	✓	✓	✓	✓	
Previous suicidal behaviour	✓	✓	✓	✓		
½ die <1 month after reception	✓	✓	✓	✓	✓	✓
Few recognised as suicidal		✓			✓	
Most occur in local prisons						✓
Most are alone						✓
Most die by hanging	✓	✓	✓	✓	✓	✓

Table 3.2 Summary of Retrospective Studies of Suicide in Prisons

3.12 CHAPTER SUMMARY

Combined, the reviewed studies have highlighted the salient features associated with increased or heightened risk of suicide among prisoners. Consequently, these findings have been drawn-upon in the design of the research instrument used in the current study. These findings will be used to compare the characteristics of the current sample, according to the first broad research question, which was to develop an understanding of the *aetiology* of suicidal behaviours in prisons. The purpose of this research question

was, in part, to identify the contribution of previously identified 'risk' factors to a prisoner's suicidal behaviour. However, rather than basing the current research solely on the previously highlighted relevant factors, a broader approach has been adopted which aims to overcome some of the limitations of these studies, several of which are now outlined.

One of the limitations of the reviewed studies is that they have failed to examine in any detail the role that psychological processes, environmental or situational factors play in influencing suicidal behaviour/s, all of which may have important practical implications for the management of suicidal prisoners. Most fundamentally, the reviewed studies provide little insight into individuals' motivations for killing themselves. It is probable that improving understandings of the possible causes of suicidal behaviours could enhance the management strategies of suicidal prisoners, once they had been identified as such.

A number of other methodological limitations were outlined. These included the lack of operational definitions of key terms and differences in inclusion criteria, as well as the lack (in the majority of cases) of anything other than descriptive analyses. Arguably, the analysis of suicidal and self-injurious behaviours requires an approach that is able to examine both salient variables at the individual level, as well as the relationships between these factors. Before explaining how the current study attempts to overcome these methodological problems, other behaviours on the broad 'suicide continuum' will be overviewed. This is the focus of the following chapter.

CHAPTER 4

ATTEMPTED SUICIDE AND SELF-INJURY IN PRISONS

4.1 INTRODUCTION

The focus in the previous chapter was on *completed suicide* among prisoners. Although the current research is focussed on alternative behaviours within the broad spectrum of suicidal behaviours (i.e., attempted suicide and self-injury) this overview was necessary to put the current research into context. As has been argued, there are some similarities between the behaviours at different points of this continuum thus the issues raised are of relevance. Moving more specifically to the focus of the current research, attention will now turn to the consideration of *attempted suicide* and *self-harm/injury*. The chapter begins by exploring the nature and extent of these behaviours in prisons in England and Wales. A review of the main literature in the area will then be provided. As will become apparent, there is far less literature on attempted suicide and self-injury (when compared with that on completed suicide). Whilst the main focus of this review is on learning from the existing knowledge, the methodological limitations of the reviewed studies will be highlighted. It is useful to emphasise, at the outset that most studies have failed to draw clear distinctions between attempted suicide and self-injury. Rather, the terms tend to be used interchangeably. Given the current study's focus on this issue, the relevant distinctions between these behaviours will be emphasised wherever possible.

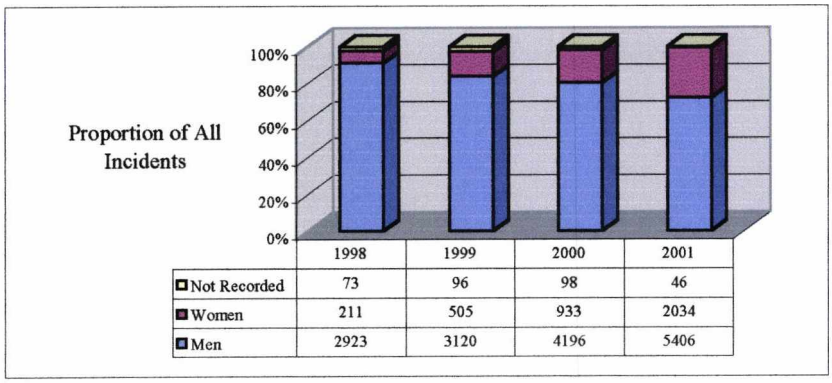
4.2 INCIDENCE OF SELF-INJURY/ATTEMPTED SUICIDE IN PRISONS

A brief discussion of the difficulties associated with official statistics relating to suicide in prisons took place in Chapter 3. It appears that data relating to incidents of attempted suicide and self-injury are similarly problematic, to at least a comparable, if not a greater extent. Indeed, Liebling argues that the figures are so seriously flawed as to be almost meaningless (Liebling, 1992, p.60). There are two main problems with the data. Firstly, there exists no operational definition as to what constitutes self-injury or attempted suicide. A related issue is that no distinction is made between attempted

suicide and self-injury. Whilst this is understandable, given the well-known difficulties in ascertaining an individual's intent, it means that very little is known about the differences between these behaviours in prisons. Secondly, there are three primary sources via which such incidents are reported centrally, which has been shown to result in substantial discrepancies (Snow and McHugh, 1998).

Despite the problems in recording such incidents there has, over the last decade, been a growing awareness of the extent of the problem, to the extent it is now considered to be 'endemic' in some establishments (Howard League, 1999). In support of this notion, Prison Service data on the number of reported incidents of self-injury (by age and gender breakdowns) are given in Figures 4.1 and 4.2. As the data show, even with arguably inadequate data collection procedures, there has been a substantial increase the overall number of reported incidents in recent years.

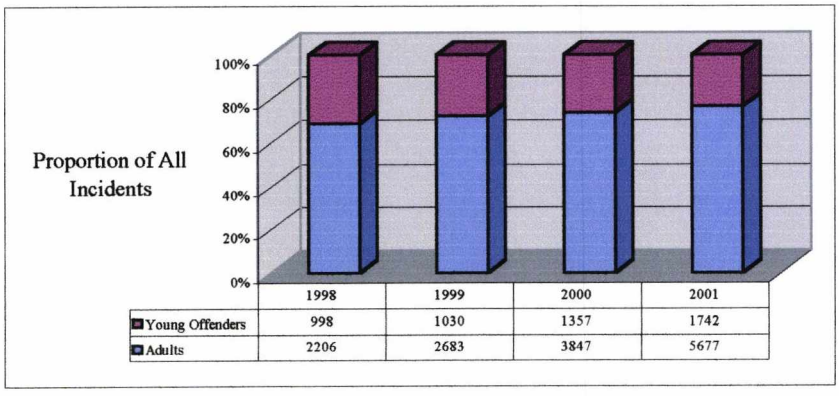
Figure 4.1



	1998	1999	2000	2001
Not Recorded	73	96	98	46
Women	211	505	933	2034
Men	2923	3120	4196	5406

Figure 4.1 Self-harm in Prisons by Gender (1998-2001)

Figure 4.2



	1998	1999	2000	2001
Young Offenders	998	1030	1357	1742
Adults	2206	2683	3847	5677

Figure 4.2 Self-harm in Prisons by Adult/Young Offender (1998-2001)

As these figures illustrate, self-harm incidents are more common among women prisoners and young offenders, when compared with the proportions of these different groups in the overall prison population. This is a consistent research finding (HM Prison Service, 2001).

It is probable that the difficulties outlined above preclude researchers from undertaking estimates of the extent of attempted suicide and self-injury in prisons. Those that have undertaken such studies, however, claim that these behaviours are common. For example, Singleton et al. (1998) reported that almost half of the male remand prisoners included in a large-scale (n=3100) survey of psychiatric morbidity (46%) reported having considered suicide at some point in their lives. Over a third (35%) of this group had experienced such thoughts in the previous year, as had 12% in the week before interview. The proportion of prisoners who had attempted suicide were also high, with 27% of male remand prisoners reported attempting suicide at some point in their lives. Further, 15% had attempted suicide in the year prior to interview, as had 2% in the previous week. Women reported higher rates of suicidal ideation than their male counterparts. For example, over a quarter of female remand prisoners reported trying to kill themselves in the year before interview (twice the proportion of male remand prisoners). Rates of self-injury (without suicidal ideation) ranged from 5% for male remand prisoners and 10% for female sentenced prisoners (Singleton et al., 1998, p.113).

As discussed in earlier chapters, the relationship between suicide, attempted suicide and self-harm/injury is inherently complex. Although, conceptually, there is clear dissimilarity between the behaviours, the empirical definition is far from straightforward. As Clare remarks: 'no-one can ever really say with any certainty whether the failed suicide really wanted to die or live, the successful one to live or die' (Clare, 1975, p.351). As will become apparent, prison-based research into the broad spectrum of suicidal behaviours is limited in its enhancement of our understandings of the relationship between these behaviours. This is largely because the published studies are bedevilled by the use of multiple definitions (Crighton and Towl, 2000). This impedes the distinction between various types of self-injury in terms of, for example, medical severity of inflicted injuries and the motives and intent of the individuals concerned. This issue should be borne in mind when reviewing such studies, of which

an overview of the salient findings now follows. For the purposes of manageability, key UK based studies are reviewed chronologically. Focus is on demographic, social, crime-related, psychiatric and psychological and situational or environmental characteristics. Where possible, distinctions are drawn between studies on attempted suicide and those on self-injury without suicidal intent.

4.3 Overview of Research Findings

Cookson (1977) examined forty-seven incidents of self-injury among a sample of thirty-nine prisoners and a randomly selected control group at a single female establishment. Greater proportions of those who injured themselves were sentenced, were serving longer sentences and were more likely to be in prison for violent offences. Further, they had higher hostility levels, particularly with regards to intro-punitive hostility (guilt and self-criticism).

In an attempt to assess prisoners' motivations, the circumstances preceding the incidents were examined. However, in the majority of cases (57%), nothing of note had occurred or the information was unavailable. The highest proportion of the minority for whom notable events had taken place (17%) had received 'bad news' or had had a 'disappointment' (such as cancellation of home leave). Others (13%) had recently had their routine changed (following disciplinary action, for example). A small proportion (6%) had had quarrels with others and in the remaining 6% of cases 'trivial events' had occurred (e.g., having a request to talk to someone refused).

Despite the large number of cases with no specific precursor (i.e., over half) Cookson (1977) suggests that self-injury occurs, in the context of generalised prison-specific frustration and helplessness, exacerbated by precipitating factors such as those outlined above. The behaviour is said to have two positive effects in this regard. Firstly, it may temporary relief from depression, anxiety or tension. Secondly, it allows individuals to exercise control over their environment. Cookson suggests that the efficacy of self-injury in these respects, coupled with the fact that the behaviour is either positively or negatively reinforced, means it is often repeated. Based on the verbal accounts provided by prisoners and the 'epidemic quality of the incidents', Cookson concludes

that 'conscious manipulation of one's environment' is also an important factor in prisoners' motivations for injuring themselves (Cookson, 1977, p.346).

Cullen (1985) examined both self-injury and attempted suicide among forty female young offenders and fifty controls. The majority (76%) had injured themselves, 9% had attempted suicide and 20% had done both. Nineteen prisoners were interviewed shortly after the infliction of injury. Cullen (1985) classified participants' reported reasons for the incidents as follows: depression (56%) homesickness (27%); escape or avoidance of a problem (18%); a desire for sympathy (11%); and guilt (11%).

A number of differences between the groups on historical, personality and general-environmental factors were found. Those who attempted suicide were significantly more likely to: describe their family as intact; have committed previous violent offences; be childless; describe themselves as introverted; and describe their environment as supportive or orientated towards helping them with their problems. Those who injured themselves without suicidal intent were more likely to have been in custody before; previously injured themselves; describe themselves as 'psychotic' or 'tough-minded'; regard their environment as less supportive and receive reports for serious rule violations. Compared with those who had not injured themselves, these two groups were significantly more likely to have received psychiatric treatment and attempted suicide previously. They were more likely to describe themselves as aggressive, unhappy, nervous or of low self-opinion and they were more likely to regard their environment as over-controlled by staff.

Like Cookson (1977), Cullen (1985) suggested that self-injury fulfils one or more of a number of functions, including anxiety reduction, the attraction of positive attention, self-punishment and manipulation of the environment for escape or avoidance. It is argued that, in the prison context, self-injury shares many characteristics of 'escape' behaviours. Prisoners are restricted in their access to means of escaping/avoiding aversive stimuli, e.g., alcohol or substances. In the absence of alternative 'escape' techniques, they may opt for the tension relief afforded by self-injury (Cullen, 1985, p.142).

Cullen (1985) implemented a prevention/treatment initiative, dictated by assumptions concerning prisoners' reasons for injuring themselves. The initiative consisted of practical assistance following self-injury and attempts at amending others' responses to them. For example, if a prisoner injured themselves in order to attract sympathy or comfort, staff were 'encouraged to control their sympathetic responding ..... and to behave as neutrally as possible' (Cullen, 1985, p.142). Conversely, if it were assumed that a prisoner had injured themselves in order to 'manipulate' their situation, 'staff were advised to ignore consistently the trainees' entreaties and advise them of the official channels through which they could obtain redress' (Cullen, 1985, p.142). Cullen (1985) reported that a small subgroup appeared to be immune to the intervention, although the majority responded well, measured by the fact that they seldom injured themselves again.

Wool and Dooley (1987) conducted a study of attempted suicides in prisons, focussing on prisoners' motives for their behaviour. Their sample consisted of 111 official reports of attempted suicide that occurred among male prisoners during 1983 and 1984. The authors acknowledge the difficulties inherent in the term 'attempted suicide' and suggest that incidents are less likely to be reported if, in the opinion of reporting staff, the individual concerned did not intend to kill themselves. Thus, the number of incidents reported is likely to be an underestimate of the actual number of attempted suicide and self-injury incidents in prisons.

Of the 111 incidents, 58% involved prisoners on remand. The majority of reported incidents (70%) occurred in local-type prisons or Young Offender Institutions (20%). Almost three-quarters of incidents in local prisons (71%) were by prisoners on remand. The majority of incidents (65%) were by young prisoners, aged 16-21 and 80% involved prisoners under 26 years. The methods used in the incidents ranged from cutting, drug overdose and hanging. By far the commonest method was cutting arms, which accounted for 72% of incidents, followed by hanging (18%). The most common reason given by the prisoners for their 'attempt' was a 'domestic crisis' (43%), usually involving threats to a personal relationship. The second most common reason related to the intolerability of the prison environment (22%).

In view of the fact that asphyxiation caused by hanging or strangulation is the commonest cause of death in prisons, the authors conducted a separate analysis of cases involving this method. Similar patters between this group and the remainder of the sample were found on variables relating to penal status, age and explanation given for the attempt. One notable finding was that almost half of the attempts by hanging occurred in young offender institutions, compared with 20% of the total sample.

Acknowledging the importance of maintaining prisoners' personal relationships, as well as their social support more generally, Wool and Dooley conclude that:

> '..... young men are particularly emotionally vulnerable, especially on remand, and the threat to a personal relationship occurring at this time may tip them into a state of mind which causes them to make a suicide attempt..... A further contributor to this state may be the isolation that these men feel .....' (Wool and Dooley, 1987, pp.299-301).

A criticism of Wool and Dooley's study is that their assessment of motivation was based on reports submitted by prison staff and, therefore, inevitably dependent upon individual (staff) perceptions of (prisoners') intent which seem, in turn, to be largely dependent upon the potential seriousness of the method employed. Considering that the range of available methods is limited to potentially more serious methods, the actual outcome may bear little relation to an individual's expected outcome. Consequently, relatively minor stresses may go unnoticed, provoking potentially fatal behaviour (Wool and Dooley, 1987).

Further exploring the relationship between suicidal intent and lethality of outcome, Power and Spencer (1987) conducted an interview-based study of seventy-six Scottish Young Offenders identified as potentially suicidal. The selection criterion included any threatened or actual self-injury irrespective of modality where some degree of suicidal intent had been expressed. Half of their sample (51%) had engaged in such behaviour. Degree of intent was measured by the Beck et al. (1974) Suicidal Intent Scale and medical lethality was assessed according to the degree of care required post-incident. Methods of injury and associated lethality varied considerably. The vast majority (92%) exhibited low lethality, 4% exhibited moderate lethality and 4% exhibited high lethality. The degree of suicidal intent for those exhibiting minimal lethality was low,

to the extent that 94% scored zero on the suicidal intent scale. Two in the 'high' lethality group (5% of the total) had attempted hanging, but exhibited a low score on the suicidal intent scale. Only one participant, who exhibited 'high' lethality, had a high suicidal intent score.

Like Wool and Dooley, Power and Spencer (1987) suggest that, because of the unavailability of alternative methods, as well as ignorance about the potential dangers of their actions, prisoners engage in potentially life-threatening behaviours for a range of reasons other than cessation of life. In consideration of precipitators to the behaviour it was found that 'anticipated friction' (Power and Spencer, 1995, p.231) was present in 50% of cases. Almost a third (28%) were said to have exhibited 'a degree of manipulation', for example, expecting transfer to the prison hospital following their actions. Others (18%) had recently experienced some form of emotional upset such as the breakdown of a relationship. Two (5%) of the total were said to have been motivated by symptoms of psychiatric illness and the motive was unknown in one case. In summary, Power and Spencer (1987) suggest that one would expect the broad range of motivational precipitators for suicidal behaviours to be associated with low intent and low lethality, particularly if prisoners are motivated by avoidance or manipulation, unless the inherent danger of the chosen method was unknown or miscalculated.

Analysis of functional aspects of self-injury among seventy-four women prisoners was undertaken by Coid et al. (1992) using Cluster Analysis. Emphasising the widely documented associations between self-injury and psychiatric disorders, the authors suggest there exists a sub-group of prisoners with a diagnosis of Borderline Personality Disorder who injure themselves specifically for the purposes of symptom-relief (classified as 'endogenous'). Marked differences, in the form of behaviours undertaken, and on a range of different variables, were found between this and a more heterogeneous group who injured themselves in response to external stresses (classified as 'reactive').

Those classified as 'endogenous' were more likely to describe anxiety, tension, irritability, anger, depersonalisation or depression prior to the act and were more likely to report relief of symptoms afterwards. They were less likely to feel pain on infliction of injuries. They were younger at the age of onset of self-injury, they injured

themselves more frequently and used multiple methods (including overdose and fire setting). Finally, they had a history a history of family disruption and physical and sexual abuse in childhood. In contrast, those classified as 'reactive' were more likely to be motivated by external, stressful life-events. They had few previous episodes, but engaged in more serious, potentially life-threatening behaviour. Finally, they were more likely to be charged with theft or burglary, fraud or deception.

Based on these findings, Coid et al. (1992) argued that there exists a subgroup of women who experienced a build-up of aversive symptoms, with no identifiable cause, that were relieved by self-injury. There are two main limitations to this theory. Firstly, the data are retrospective and self-reported, aggregated over a number of episodes. Secondly, the inference of an endogenous origin to affective state is based simply on the inability of the participants to identify external precipitants to their behaviour. However, it does not necessarily follow that being unable to identify a reason for the feelings that resulted in the behaviour is indicative of an affective disorder. Such limitations aside, the study does highlight clear differences between those who attempt suicide and those who injure themselves for the purposes of symptom relief, which raise important questions for the future support and management of such prisoners.

Liebling (1992) examined attempted suicide and self-injury among young offenders at two male and two female young offender institutions in England. Fifty prisoners who had injured themselves to the extent that they required hospital treatment and a comparison group of twenty from the general prison population were interviewed. Almost half the subject group (42%) was considered to have engaged in an unambivalent suicide attempt. Comparisons revealed no differences in terms of age, ethnicity, offence category, social/family situations or educational attainment. The high incidence of general background deprivation was a feature of all participants.

Despite the similarities between subjects and controls, there were very marked differences between the groups in their experience of prison life, levels of activity/inactivity and what are termed their 'coping abilities'. For example, subjects were less likely to be employed in the prison, and those who were, were less likely to describe it as beneficial. More subjects than controls were involved in education, although less described it as enjoyable. Subjects were also less active physically and

less likely to be involved in the more social aspects of prison life. Importantly, they were more likely to report difficulties with others inside of prison, were more isolated and had less outside contact.

Liebling (1992) considered factors precipitating self-injury and attempted suicide and found that the majority could explain their behaviour in terms of identifiable problems, mostly related to their current situations. For example, almost a third reported problems with other prisoners (threats, bullying, arguing, etc.). Alternative explanations included the award/expectation of a lengthy sentence (22%); recent punishment or segregation (24%); the end/anticipated end of a relationship (12%); transfer between locations (8%); parole refusal (4%). In summary, although attempted suicide/injury participants shared many characteristics with prisoners who had not engaged in these behaviours, the main factor that distinguished the former group was their 'resourcelessness and emptiness .... degree of deprivation, ... scale of destructiveness [and] psychological anomie' (Liebling, 1992, p.172).

Criticising traditional methodological (medical/psychiatric) approaches to the study of suicidal behaviours in prisons, Liebling (1995) advocates a more ethnographic approach that enables a fuller understanding of the real-life world of prisoners. This approach was adopted by Liebling (1992, 1995) and Liebling and Krarup (1993). Liebling (1995) reiterates that differences on background factors between those who attempt suicide and others exist only as a matter of degree. However, marked differences were found between attempted suicide and controls in terms of their subjective experience of imprisonment, as Liebling remarks: 'on most questions relating to the prison experience, the suicide attempters both were and saw themselves as considerably worse off than their peers' (Liebling, 1995, p.178).

Liebling (1995) emphasises the complex nature of suicidal behaviours, criticising previous studies for their assumption that it is 'a single problem with a single, identifiable profile and a single explanation' (Liebling, 1995, p.182). Instead a typology is proposed, consisting of three distinct but similarly vulnerable groups: (i) the psychiatrically ill (ii) life sentenced or long term prisoners; and (iii) 'poor copers' (the largest group). Liebling argues that prisoners are already vulnerable by virtue of adverse life experiences, poor economic/social backgrounds and alcohol/drug misuse.

In addition to this they are exposed to 'a highly demanding environment in which survival skills are highly valued and indications of weakness or helplessness may bring about verbal and physical abuse, theft, taxing, sexual violence and psychological torment' (Liebling, 1995, p.181). Those who experience difficulties in adjusting to and managing imprisonment (which may be exacerbated by their negative experiences) are particularly vulnerable to suicide.

Liebling's contribution (1992, 1995) represents a significant improvement on earlier retrospective, records-based analyses. Her emphasis on the complex and heterogeneous nature of suicidal behaviours proves useful, particularly her identification of the 'situational' basis underlying much suicidal behaviours in prisons. However, criticism may be levelled at her adoption of the term 'poor-coping'. Arguably, imprisonment is outside the normal range of experience for most people; it would, therefore, be surprising if some did not experience difficulties in adapting. To dichotomise between good and 'poor' coping, and to label those who do not acclimatise to their current situations as well as their peers is unhelpful, in that it may invite, albeit unwittingly, negative connotations and stereotypes on the part of staff and other prisoners (Towl and Forbes, 2000).

A longitudinal study by Dexter and Towl (1995) focused on role of environmental factors, which were examined in the context of changes in the prison regime. A degree of 'suicidal behaviour' was present in all twenty-two cases, ranging from thoughts indirectly related to suicide to actual suicide attempts. Only two prisoners in the sample (9%) had attempted suicide and four (18%) had injured themselves without suicidal intent.

Immediate antecedents to suicidal behaviours (including ideation, attempts and self-injury) were classified as follows: relationship/family problems; prison pressures; discharge worries; and psychological problems. Although the authors state that the majority of prisoners reported various reasons for their current difficulties, they do not elaborate on this finding. Instead they surmise that '..... for many, various problems contributed to their current distress. In some cases, the immediate antecedent was reported to be the primary reason for the crisis. For others, the immediate antecedent was a trigger at a time when they were struggling to deal with other difficulties' (Dexter

and Towl, 1995, p.48). Like Liebling (1992), Dexter and Towl (1995) found a high incidence of deprivation and negative life experiences among the sample, including sexual, emotional and physical abuse, poor educational and employment attainment and alcohol/drug misuse. All were suffering from some symptoms of depression and the majority had scores on the Beck Hopelessness Scale (Beck et al., 1974) indicative of suicidal intent at all three stages of the interview process.

Dexter and Towl's study suffers from the same methodological limitations as the majority of the other reviewed studies namely its small sample size and the fact that it was based on a single group of prisoners (adult/male) in a single establishment. These factors severely limit the generalisability of the findings. Further, more detailed analysis of the differences and similarities between those who had had thoughts of suicide, injured themselves or attempted suicide, in short, those at various points on the 'suicide continuum' (Dexter and Towl, 1995, p.51) would have been useful.

Inch, Rowlands and Soliman (1995) considered the attitudes/motives of twenty-five young offenders who injured themselves, excluding those who only verbalised intent to injure, and twenty-five controls. Drawing on the work of House (1990), Liebling (1992) and Liebling and Krarup (1993), mindful of the limitations of 'predictive' models of suicide based on retrospective analyses explored psychosocial and situational/institutional factors preceding self-injury. No distinctions in motive, desired outcome or intent were made between attempted suicide and self-injury. Analogous with previous studies, a high degree of general social deprivation was reported, with no significant differences between subjects/controls on a range of measures such as employment history, qualifications and experience of local authority care. Statistically significant differences were found on the following items: past history of self-harm (80% of subjects and 20% of controls), family history of self-harm (24% versus 8%) and mean scores on the General Health Questionnaire (Goldberg, 1988) (20.2 versus. 6.4), indicating higher levels of psychological distress among the subject group. The most common reason given for self-injury was bullying (44%). Different types of bullying were cited, ranging from 'taxing', verbal threats, physical attacks and, in one case, sexual assault. A third (32%) reported injuring themselves because of being 'banged-up', 'locked-in' or feeling 'claustrophobic' and 20% cited family/relationship difficulties as precipitators. The authors describe a commonality between almost all

acts of self-harm as 'a desperate desire to escape from a situation which had become intolerable and which had overwhelmed the coping mechanisms of the individuals concerned' (Inch et al., 1995, p. 168).

Like previous authors, Inch et al. (1995) question others' attempts at distinguishing between 'real' suicide attempts and 'parasuicide' (made by, for example, Power and Spencer, 1987) because of the restriction in prison to potentially more dangerous methods. Thus, in order to communicate their distress, individuals may be drawn into increasingly dangerous methods of self-harm whether 'true intent is present or not' (Inch et al., 1995, p.168). Further, they suggest that the 'risk identification' approach leads to 'excessive bureaucracy, defensiveness and inappropriate responses' (Inch et al., 1995, p.168). More fundamentally, they argue that it will be unsuccessful unless problems underlying suicidal behaviours are tackled. More specifically, they argue that 'the endemic problem of bullying and the stresses associated with isolation from family and friends as well as some of the cultural attitudes present among prisoners and some staff' must be addressed (Inch et al., 1995, pp.168-9).

Stevenson and Skett (1995) conducted a preliminary analysis (in a single Young Offender Institution) of the differences between three groups: Group 1 (n=22) had injured themselves; Group 2 (n=32) had thought of, but not, injured themselves; and Group 3 (n=20) had neither thought of, nor injured themselves. A number of differences between the groups, on demographic, criminological and social variables were found. Those who had injured themselves were more likely to have been in prison previously, to be located in remand units and to have been imprisoned for charges of robbery. They were also more likely to have injured themselves before (either in prison or the community) and have experience of depressive episodes. Finally, they were less likely to have contact with their family, friends and partners, were more likely to have had a stable relationship before prison and were more likely to have been employed prior to entering prison. It is important to stress that these differences were based only on proportions and that no statistical analysis was undertaken.

Although providing no operational definition of what constitutes 'self-harm', Stevenson and Skett (1995) reported that most injury was superficial and not life threatening, despite the majority reporting that they expected to die. The principal motivations for

both those who had injured themselves and those who had considered self-injury were classified as follows: to escape bullies, to leave the present location and to receive help for their problems (Stevenson and Skett, 1995, p.11). Further, the groups who had either thought about or had injured themselves shared a number of characteristics. For example, there were more likely (than those who had not considered or actually injured themselves) to have injured themselves previously; they were more likely to have experienced disturbed sleep; and they were less likely to have contact with friends outside of prison. An important difference between these groups relates to the presence of strong community ties for those who had thought about but not actually injured themselves. Those who had injured themselves were, comparatively, more socially isolated.

Stevenson and Skett's (1995) preliminary study highlights a number of important differences between those who injure themselves and those who do not. There were a number of similarities between those who experienced thoughts of self-injury only and those who actually injured themselves, the most notable of which relates to the comparative lack of family contact/support for the self-injury group. However, the criticisms levelled at the majority of the above studies apply. It is based on a small sample size in a single establishment; there is lack of definition of the behaviour/s under study; and lack of verification of the nature/extent of the factors that are cited as precipitating factors for injury.

Finally, Meltzer, Jenkins, Singleton, Charlton and Yar (1999) conducted a secondary analysis of the earlier study of psychiatric morbidity in prisons (Singleton et al, 1998). The secondary analysis examined in more detail the participants' responses to the following questions:

1. Have you ever thought your life was not worth living?
2. Have you ever wished you were dead?
3. Have you ever thought of taking your life, even though you would not actually do it?
4. Have you ever made an attempt to take your life, by taking an overdose of tablets or in some other way?

If the interviewee answered 'yes' to any of these questions, they were asked when the incident occurred. The original survey of psychiatric morbidity showed that over a quarter of men on remand had attempted suicide at some time in their lives, and one sixth had done so in the year preceding interview. The rates for women on remand prisoners were even higher, with nearly half having attempted suicide at some point in their lives, and over a quarter having done so in the last year. In comparison, sentenced prisoners were less likely to have attempted suicide. The relative proportions of sentenced men and sentenced women who had attempted suicide in the year prior to interview were one twelfth and one sixth respectively.

Logistic regression analyses of various socio-demographic, penal, psychiatric and social factors revealed a number of statistically significant differences between prisoners who had attempted and those who had not. The main socio-demographic differences were that those who had attempted suicide were significantly more likely to be white, single born in the UK and poorly educated. Women who attempted suicide were less likely to have children.

In terms of differences on psychiatric variables, the following disorders were significantly more likely among participants who had attempted suicide: personality disorders, psychosis, neurotic disorders and alcohol abuse. Further, those in the suicidal group were four to five times more likely to have extensive co-morbidity, were three to four times more likely to have experienced psychiatric treatment and were two to three times more likely to be prescribed psychotropic medication.

In terms of social and situational factors, prisoners who attempted suicide were more likely to have very small primary support groups, to have a severe lack of social support and to have experienced victimisation, particularly being threatened with violence. Finally, those who attempted suicide were much more likely to have experienced a variety of adverse life experiences, particularly relating to violence or sexual abuse.

In summary, Meltzer et al. (1999) represents the most comprehensive study of attempted suicide among prisoners. Its sheer scale (which comprised 5% of the prison population) makes it an important contribution to the field. Further, a number of very important differences between prisoners who attempt suicide and those who do not were

found. As outlined, these related mainly to psychiatric, socio-demographic and social-situational factors. However, being a secondary analysis, it is limited by the absence of key areas that may not have been of prime concern to the initial study, a factor that is acknowledged by the authors. This means that fundamental issues such as the reasons that prisoners attempted suicide were not considered. However, the main limitation, for the current purposes, is that no analysis of self-injurious behaviour (without suicidal intent) was provided. Despite these limitations, the analysis provides some very useful information about factors associated with prisoners who have attempted suicide. Further, in contrast to most other documented studies, it includes detailed statistical analyses, thereby providing empirical support for the findings.

4.4 CHAPTER SUMMARY

The literature on completed suicide that was reviewed in the previous chapter highlighted the complex, heterogeneous and multi-faceted nature of suicide. The literature relating to other behaviours on the 'suicide continuum' (Lester and Lester, 1971) further highlights this complexity. The above review has illustrated a number of differences (demographic, criminological and social) between those who injure themselves/attempt suicide and those who do not. To summarise, factors contributing to self-injury/attempted suicide include: situational/environmental problems, such as dislike of being 'banged-up', friction, quarrelling, bullying, and so on; offence-specific problems, such as feelings of guilt, uncertainty, expectation of a lengthy sentence, discharge worries; 'psychological' problems such as anxiety; and external relationship/family difficulties. The functional aspects of self-injury have recently been recognised. The relief it can provide from feelings of anxiety and tension and, more generally, in achieving a sense of personal autonomy, power or control in the context of almost-total control over prisoners' lives is now recognised (Cookson, 1977; Cullen, 1985; Coid et al., 1992).

There are number of methodological and theoretical limitations to the reviewed literature. Firstly, they tend to be based on relatively small sample sizes, in single establishments and on sub-populations (i.e., women or young offenders). These factors seriously impair the generalisability and comparability of the findings. Secondly, there

is diversity in the definitions and terminology used, as well as the range of behaviours studied, which tend to be ill defined and rather broad in their inclusion criteria. Whilst it is acknowledged that this may be partially related to difficulties in interpreting the intended outcome of an individual's behaviour, these factors impede comparisons between studies and simply add to the confusion of the relationship between attempted and completed suicide and self-injury. Further there has, to date, been insufficiently detailed examination of prisoners' expressed reasons for injuring themselves, particularly in terms of situational or environmental factors. It would, for example, be useful to examine in more detail the problems experienced, why they occurred and what may have been done to solve them.

Another criticism is a focus on the so-called 'manipulative element' to self-injury (see Cookson, 1977; Cullen, 1985; Power and Spencer, 1987). Whilst there may indeed be an instrumental element for some prisoners, for example some report having desired a change in location to escape intimidation, to label self-injury as manipulative or 'attention seeking' is singularly unhelpful. Firstly, there is often no clarification of what is meant by the term and no consideration of why some go to such extreme lengths in order to achieve it. Further, such terms can be used in a disparaging sense, serving to legitimise hostile responses to prisoners who injure themselves (Dexter and Towl, 1995) thereby overlooking their needs and leading to the notion that self-injury is a largely exploitative act on the part of the prisoner (Livingston, 1997, p.21).

Finally, the vast majority of the available literature is based simply on descriptive characteristics (including demographic, criminological and individual factors) of prisoners who attempt suicide or injure themselves; the exception to this is the recent study by Meltzer, et al. (1999). It is argued that the overall research base needs to be broadened by the development and testing of theoretical models concerned with the interactions between individual characteristics and the prison environment (Crighton and Towl, 2000).

The current research has learned from the findings that have emerged from the reviewed studies and has incorporated items into the research instrument that were designed to elicit fuller information about attempted suicide and self-injury in prisons in these

regards. This includes, for example, demographic, criminal, social-situational, psychiatric, psychological factors and, most importantly, motivational factors.

As well as incorporating the findings of the previous prison-based studies, the current research has learnt from their limitations and has taken a number of steps in an attempt to overcome them. Firstly, it is based on a comparatively large sample size (n=124) and *compares* different groups of prisoners (i.e., men and women, young and older prisoners), rather than focussing on just one sub-group. Secondly, unlike a number of previous studies, it is based on a clear distinction between attempted suicide and self-injury, and has clear criteria for inclusion in this regard. Its main focus is on the exploration and further development of theoretical models concerned with the meanings, motivations and functions of these different behaviours. It starts from the premise that more should be known about the reasons that some prisoners attempt suicide or injure themselves, as well as the functions it serves. As well as improving overall theoretical understandings of the behaviours, this approach is likely to enable the development of more effective intervention and/or prevention strategies. The following chapter sets out the methodological issues relating to this endeavour.

CHAPTER 5

METHODOLOGICAL ISSUES

5.1 INTRODUCTION

The current chapter focuses on the methodological issues pertinent to the current study. It begins by highlighting some of the general problems associated with research into suicide and self-injury and discusses the approach adopted within the present research. The principal methods of data elicitation, analysis and interpretation that were used are then outlined. The size and composition of the sample and their recruitment to the study are also summarised. Finally, the main obstacles that were faced during the course of the research are discussed.

To reiterate, the research aimed to:

1. Develop an understanding of the *aetiology* of suicidal behaviours in prisons.
2. Explore what *motivated* prisoners to attempt suicide or injure themselves and what functions it serves.
3. Understand the differences/similarities in aetiology and function with regards to different types of prisoners (i.e., men/women and adults/young offenders).

With these aims in mind, potential methodologies are now reviewed and the most appropriate method to address them chosen.

5.2 METHODOLOGICAL ISSUES IN STUDYING SUICIDAL BEHAVIOURS

Suicide, both within the community and in prisons, is an event that has largely been studied retrospectively, after explanations for an individual's actions have been constructed (Douglas, 1967; Atkinson, 1982; Liebling, 1992). The 'psychological autopsy' approach (Shneidman, 1981) is becoming increasingly used in this type of research (Hawton, Appleby, Plann, Foster, Cooper, Malmerg and Simkin, 1998). Its main purposes, strengths and limitations are now summarised.

The overall aim of the psychological autopsy is to gather enough information about the circumstances of an individual's death to gain an understanding of the reasons for the suicide (Hawton et al., 1998). A variety of sources of information are used in formulating this understanding, such as evidence presented at inquests, medical records and information from general practitioners and hospital clinicians. The primary source of information, however, is interviews with relatives of the deceased and other informants. The psychological autopsy has been influential in determining factors that may have been relevant to individual suicides. For example, they have identified the important role of psychiatric disorders, particularly depression, alcoholism and schizophrenia (for example, Barraclough et al., 1974). More recent studies have identified the role of psychiatric disorders amongst young people who die by suicide, with the role of substance misuse and personality problems emerging as especially important (see for example, Shaffer, Gould, Fisher, Trautman, Moreau, Kleinman and Flory, 1996). Overall, this approach is a valuable means of expanding understanding of the factors that may contribute to suicide and can help ensure the correct interpretation of epidemiological investigations (Hawton, et al., 1998).

However, psychological autopsies are beset by a number of methodological limitations. Firstly, they are time-consuming and expensive (O'Connor and Sheehey, 2000). Secondly, they are hindered by their very nature, in the sense that they are retrospective. In general, retrospective studies answer questions and test hypotheses about the relationships between variables, usually comparing two groups, equivalent in all relevant characteristics except the one(s) under investigation, so as to measure the effect of that characteristic (Robson, 1993). However, retrospective research can produce unconvincing evidence about the causal relationships between variables, in the sense that the researcher must impose their view of the relevancy of factors that may have affected the individual. Further, retrospective studies of suicide are often reliant, almost exclusively, upon documentary sources. Such data are limited in the sense that they may be incomplete or may not fully capture all relevant information about the individuals concerned.

Retrospective studies of suicide that involve interviews with relatives and other informants are characterised by two main problems than may affect the validity and reliability of the information gained. Firstly, they can be subject to recall bias. Given

the complex nature of both bereavement following suicide (Snow and McHugh, 2000) and memory for emotion-laden events, the recall of information about a relative or friend who has killed themselves may be distorted. There may, for example, be either negative selective recall of certain aspects (e.g., positive characteristics) and selective forgetting of others (e.g., negative characteristics). The data may also be unreliable for other reasons. The informant may simply be unaware of certain factors, such as substance misuse or relationship problems, or they may deliberately withhold information (Hawton et al., 1998).

The limitations of the psychological autopsy approach, coupled with the shortcomings of the retrospective studies that were outlined in earlier chapters, signifies the need for an alternative approach. The current thesis is based on the premise that it is advantageous to focus on the individuals themselves who have attempted suicide or injured themselves for other reasons. Although there are a number of distinctions between attempted suicide, self-injury and completed suicide, there is clear overlap between the behaviours. Most fundamentally, those who injure themselves or attempt suicide are at far greater risk of dying by suicide, when compared with those who have never engaged in these behaviours. For example, Hawton et al. (1993) found that 1% of those who injured themselves or attempted suicide died (by suicide) within a year. This finding is supported by Gunnel and Frankel (1994) who suggest that 10% of all those who injure themselves will eventually die by suicide.

As discussed in earlier chapters, the main research aims have been framed around the notion that although there are some clear differences between attempted suicide and self-injury, especially in the *motives* of the individuals concerned, these behaviours may be viewed as existing on a continuum (Lester and Lester, 1971). It is argued that self-harm (in its broadest sense as characterised by the definitions outlined in Chapter 1) lies at one end of the continuum, with completed suicide at the other end and attempted suicide and self-injury at different points in between. Research on those who lie at the 'in between' points on this continuum may provide empirical support for this theoretical continuum.

O'Connor and Sheehey (2000) suggest that interviewing people who have attempted suicide or injured themselves is fundamental to the study of suicidal behaviour, in the

sense that resulting data can be used to develop more accurate profiles of suicidal behaviours in general. Collecting data on individuals who have injured themselves and/or attempted suicide may raise concerns over representativeness, if the intention was to extrapolate the findings and apply them to completed suicide. However, in the current case, the intention is to apply the findings to previous and emerging theories on attempted suicide and self-injury and not completed suicide, although reference will be drawn to what is already know about those who kill themselves. In this sense, it is not argued those who attempted suicide and/or injure themselves without suicidal intent are necessarily representative of those who die by suicide.

An alternative approach would be to interview and/or collect information on a broad range of individuals and conduct analyses on either those who subsequently died or injured themselves, or between those who did and those who did not engage in these behaviours. Whilst this may allow the testing of prediction models, as suicide and self-injury occur so rarely, it is quite plausible that nobody would die and few would injure themselves within the study period. Also, given the broad range of factors associated with suicidal behaviours, as outlined in earlier chapters, it would be difficult to decide on what basis participants should be selected.

A second alternative would be to carry out a records-based study of relevant documentation relating to incidents of attempted suicide, self-injury and/or completed suicide. Sources of information could include, for example, investigation reports, medical reports and coroners' records. Whilst such research would be relatively straightforward to undertake, given that access to records containing large amounts of useful information may not be particularly problematic and the data collection would probably be less time-consuming, the advantage of convenience does not compensate for the limitations of this type of approach. The most fundamental issue is that these data are not compiled with scientific analysis in mind and, as a result, are likely to be distorted by various biases, severely limiting the conclusions that can be drawn (O'Connor and Sheehey, 2000).

Possible approaches to collecting information about suicide and self-injury have been outlined. As has been discussed, each is beset by a number of problems. For example, the psychological autopsy is very time-consuming and expensive (O'Connor and

Sheehey, 2000). Further, the reliance on documentary sources of information limits their reliability, in the sense that these sources of information may be incomplete or inaccurate. Retrospective studies that include interviews with the relatives of the deceased, whilst being a rich source of information, can be beset by problems limiting their reliability, such as recall bias. The most fundamental limitation, at least for the current purposes, is that they rely on others' interpretations of an individual's actions. The current focus is on the explanations, precipitating factors and motivations from the perspectives of individuals who engage in these behaviours, not others' interpretations of them. To reiterate, the principal aim of the research was to explore and develop a theoretical understanding of the nature of prisoners' conceptualisations of the factors precipitating attempted suicide and self-injury or, more specifically, to understand what motivates or underlies their behaviour. In-depth interviews with those who have attempted suicide or injured themselves for other reasons was deemed the most appropriate way of eliciting the required information.

5.3 METHODOLOGY

In order to gain the fullest appreciation of participants' *interpretations* of what motivated them to attempt suicide or injure themselves, a series of in-depth interviews was conducted. There were a number of reasons for this methodological approach. Firstly interviews are a very flexible and adaptable way of findings things out about people (Robson, 1993). They give access to knowledge; knowledge of meanings and interpretations individuals give to their lives and events within them (Minichiello, Aroni, Timewell and Alexander, 1990). Further, interviews facilitate interpretations of how individuals perceive social situations and enable the researcher to understand social phenomena from individuals' perspectives (Minichiello et al., 1990). Given that the aim was to *understand* the interpretations participants attached to their current situations, as well as to the factors that had precipitated their behaviour/s, this approach was deemed the most suitable. However, the main reason that interviews were used was that they were judged the most effective way of eliciting information about the types of behaviours examined within the current study. As convincingly argued by Shneidman (1996):

> 'Our best route to understanding suicide is not through the study of the structure of the brain, nor the study of social statistics, nor the study of mental diseases, but directly through the study of human emotions described in plain English, in the words of the suicidal person' (Shneidman, 1996, p.6).

A possible alternative to interviewing participants may be the administration of self-report questionnaires. This may be preferable in the sense that they can be more efficient in terms of researcher time and, as long as they are well-constructed, the time needed to code and analyse the resulting data can be relatively short (Robson, 1993). However, the disadvantages of this method render their use difficult to justify, at least for the current study. For example, the data they elicit are necessarily superficial (Robson, 1993). This makes them unsuitable for the in-depth explanations of behaviours, experiences and emotions required for the current study.

A related issue is that the response-options on questionnaires are usually determined in advance, providing the participants with answer-options that may or may not be appropriate (Robson, 1993). Further, the data elicited from questionnaires can be criticised on the ground of response bias (Hammond, 1995). There can be a number of reasons for this. Participants may, for example, want to deliberately present a good image of themselves, a process known as 'faking good' (Hammond, 1995, p.198), or they may have a tendency to answer 'yes' or 'no' to questions producing a response bias termed 'response set' (Hammond, 1995, p.198). Alternatively, respondents may simply not know the answer to specific questions, either through lack of knowledge or because the question is framed in an ambiguous way. A further reason for not using self-report questionnaires is that the sample was comprised solely of prisoners, who are known to have high levels of illiteracy (Williams, Nooney and Ray, 1987). Using self-report questionnaires may mean that at least a proportion of the sample would have difficulty answering some or all of the questions they contained. Most fundamentally, however, the administration of questionnaires was regarded as inappropriate to the current study given its highly sensitive nature, which including asking prisoners about their negative life experiences. To ask prisoners already vulnerable, by virtue of the fact that they had recently attempted suicide or injured themselves, to describe negative events in their lives and the recent problems that led to their actions, by means of a questionnaire is ethically questionable.

Although interviews were deemed the most appropriate method for eliciting the required information, this approach, like every other knowledge elicitation technique (Breakwell, 1995) is not free from pitfalls. Firstly, the process of interviewing is very time-consuming, both in their actual conduct, but also in terms of coding and analysing the resultant data. Robson (1993) suggests that, optimally, interviews should last between thirty and sixty minutes. Anything under half an hour is unlikely to be valuable and anything over an hour could have the effect of deterring potential interviewees, thereby resulting in sampling biases. Thus, in order to collect data on a reasonable sample, many hours must be spent interviewing collecting data, before analysis can begin.

Further, access can be very difficult (and time-consuming) to arrange, particularly in a 'closed' organisation like the Prison Service, where the current research was conducted. The first step in gaining access, especially in studies involving sensitive topics with potentially vulnerable people, is to gain ethical approval. A fundamental principle that underpins all ethical codes relating to psychological research is that researchers must consider the welfare of their participants and protect them from being either physically or mentally harmed as a result of engaging in the research. Independent committees determine the ethics of the proposed research (Barrett, 1995), a process which can be very time-consuming. Ethical issues relating to the current study are discussed in Section 5.11.

Like other methods that involve the researcher as an overt participant in the data collection process, interviewing involves researcher effects (equivalent to the experimenter effects described by Rosenthal, 1966). Lofland and Lofland (1984) stress the importance of 'starting where you are'. The following quotation summarises their position: 'Remember that who you are has a central place in the research process because you bring your own thoughts, aspirations and feelings, and your own ethnicity, race, class, gender, sexual orientation, occupation, family background, schooling, etc., to your research' (Kirby and McKenna, 1989, p.46). Although such characteristics are likely to influence respondents' willingness to participate and to answer questions, there are a number of steps that can be taken to control for researcher effects. These include ensuring that the same interviewer conducts all interviews, undertaking initial interviewer training and mechanically recording responses (Breakwell, 1995).

As with other self-report methods, interviews rely upon respondents being both able and willing to answer the questions posed to them. For a number of reasons this may not be the case. For example, participants may lie; they may distrust the interviewer; they may be too embarrassed to tell the truth to certain questions; or they may simply not know the answer. One way of minimising these difficulties is to construct a systematic set of questions which, at the same time as helping the respondent to understand, will provide evidence of consistency (or not) across responses. As Breakwell (1995) suggests, having a pattern of questions that allows for internal consistency checking offers the researcher one way of assessing the validity of the data. If the respondent is inconsistent in their pattern of answering, the yielded data may be excluded from analysis. In the current case, in addition to this basic validation (or internal consistency) process, an attempt was made to validate the *content* of participants' responses by cross-referring to their official records. This process was undertaken with what were regarded as the most important types of information, such as offence-type, legal status and sentence-length. It had been intended to also validate participants' psychiatric and substance misuse histories although, in practice, this proved very difficult, as is more fully discussed in Chapter 6.

In summary, although the interview as a method of data collection has a number of limitations, this is true of all methods and there is no evidence to suggest that it is any less reliable. Further, as indicated above, a number of steps were taken to negate what may be perceived as the limitations of the interview method. Before moving on to a more detailed discussion about the content of the interview schedule used within the current study and the interview process, focus will briefly turn towards effective interviewing.

5.4 Effective Interviewing

In outlining the skills of an effective interviewer, Oppenheim (1992) suggests that a neutral presence, a friendly and interested manner and extensive experience are necessary. Further, Oppenheim argues that it is important to:

- Maintain control of the interview;
- Probe gently but incisively;

- Present a measure of authority and assurance of confidentiality;
- Use open and projective questions;
- Exercise a non-directive approach, exercising patience and letting the interview 'run itself';
- Use non-directive probes such as 'uh hum.....', repeat participants' answers to them (for the purposes of clarification) and to acknowledge emotion.

5.5 THE CONTENT OF CURRENT INTERVIEWS

The interviews were conducted according to these guidelines. All participants were interviewed, on a one-to-one basis, using a semi-structured interview schedule derived from the literature reviewed in Chapters 1 to 4 (a copy of which is attached at Appendix C). The interviews were designed to explore the following factors:

1. Background factors, including participants' socio-demographic, health-related and custodial histories;
2. Their experiences of life in prison, including work, education and interpersonal relationships;
3. Participants' availability and utilisation of internal/external social support;
4. Their experiences of negative life events and recent problems;
5. Participants' interpretations of factors relating to the recent attempt at suicide/episode of self-injury;
6. Their stress/problem management, both in and outside of prison;
7. Participants' views regarding the impact of imprisonment on their behaviour.

5.6 PILOTING THE DATA COLLECTION

Given the potential problems in deciding on the inclusion of individual questions, their order and the links between them, the first-draft interview schedule was piloted. A sample of participants was used to test whether the researcher's explanation of the purpose and limits of the interview were understood. The pilot sample consisted of six male young offenders, two male adults and two female adults. As recommended by Breakwell (1995) the following points were emphasised:

(i) The importance of the research;

(ii) The necessity of collecting information from as many respondents as possible;

(iii) Assuring participants that the data would be kept confidential;

(iv) Informing participants that they may withdraw from the research at any time.

The second stage of the piloting process tested participants' comprehension of the questions. In the light of the pilot interviews, the wording of a number of questions was amended and their order changed. It had originally been intended to administer scales to measure suicidal intent, hopelessness and protective factors. It was intended that the following scales would be used: The Scale for Suicidal Ideation (Beck et al., 1979); the Hopelessness Scale (Beck et al., 1974); and the Brief Reasons for Living Inventory (Ivanoff, Jang, Smyth and Linehan, 1994).

The Scale for Suicidal Ideation is an 18-item self-report scale that assesses an individual's intensity of suicidal thoughts. It has strong internal consistency, as measured by good item-total correlations and Cronbach alphas (.89) and high inter-rater reliability (Beck et al., 1979). It is described by Range and Knott (1997) as being a 'reliable and valid instrument' (1997, p.30). Beck's Hopelessness Scale, a 20-item self-report measure, assesses the degree of individuals' positive expectancies about the future. The underlying assumption is that defining it as a system of cognitive schemas whose common denomination is future negative expectations can readily objectify hopelessness. Its validity is deemed sufficient to justify its use (Beck et al., 1974). The Brief Reasons for Living Inventory, a twelve-item schedule, has been found to be internally consistent when completed by college students (Range and Knott, 1997). Its validity is demonstrated by its correlations with the Reasons for Living Inventory (Linehan, Goodstein, Nielson and Chiles, 1983) and with depression and hopelessness (Ivanoff, et al., 1994). Range and Knott (1997) suggest that the main advantage of the scale is in its positive wording, to the extent that simply completing it, they suggest, may have a suicide-preventive impact. For the current purposes, it was intended to be used to explore factors that may protect against suicide.

These scales were administered during the pilot-phase of the research and, as no clear obstacles were identified, they were used for the initial interviews in the main study. However, a number of difficulties soon came to light. In terms of practicality, time

became an issue. As might be expected, prisons are run according to very strict time restraints. The interviews themselves took around an hour and administration of the three scales took around thirty minutes. In addition to the time it took for prisoners to be escorted from their location to the interview room, the whole process took up to two hours. In the context of a busy prison, with its inherent time restraints, it proved very difficult to conduct the interviews themselves, let alone the scales in addition. A second problem related to the high levels of illiteracy among the sample. It was intended that participants would complete the scales independently. However, a good proportion had to have the questions read and explained to them, adding to the time taken for completion. Thirdly, a number of prisoners expressed a reluctance to answer further more questions. Given that the Suicidal Intent Inventory and the Beck Hopelessness Scale were found not to discriminate self-mutilators and controls (Simeon et al., 1992), it was deemed unlikely that it could not discriminate between attempted suicide and self-injury. Combined, these factors led to the decision to discontinue this method of data collection.

5.7 Further Methodological Considerations

The broad content of the research questions, coupled with the potential vulnerability of the participants, both by virtue of the fact that they had engaged in an attempt at suicide or incident of self-injury and because they were prisoners, meant further factors had to be taken into consideration. These are now outlined.

There are a number of problems in operationalising research questions, particularly when they are translated into questions that are to be used on a sample with varying capacities (Breakwell, 1995). This issue was particularly acute in the current example where the same interview schedule was used with all participants, who constituted a broad range of age groupings (from sixteen to fifty-six years of age) with a wide range of psychological and emotional difficulties. In order to maximise the generalisability of the findings, and to ensure that information regarding the required topics was elicited, it was decided to utilise a semi-structured interview schedule. It was semi-structured in the sense that all participants were asked the same questions, although it was unstructured in the sense that participants were not necessarily asked to choose from a

given range of answers. Further, a number of the questions were open-ended and questions were not necessarily asked in exactly the same order across all participants.

Breakwell (1995) outlines the problematic nature of interviewing 'difficult people', which by her definition includes children and those in institutional settings. The particular issues regarding these two groups include acquiescence response bias, the tendency to exhibit 'don't know' responses, the inclination to distraction and the tendency to ask questions of the researcher. Whilst these issues were especially relevant for the youngest participants in the sample, they were not insurmountable. In the case of acquiescence response bias for example, it was stressed that there were no right or wrong answers, or questions were re-posed so that they were not open to yes/no responses. If it was clear that participants were becoming distracted they were asked if they wanted to take a break or terminate the interview. In cases of researcher questioning, questions were answered briefly and without 'exasperation' (as recommended by Breakwell, 1995). In the rare cases where participants asked the researcher questions of a personal nature, the researcher clearly, yet politely declined to answer by saying something along the lines of "I'm sorry but I'm unable to answer that question. As we discussed at the beginning, I'm interested in finding out what *you* think about things".

Due to the potentially distressing nature of some of the information requested during interviews, it was essential that the researcher was sensitive to participants' emotions. If participants became upset or distressed, their feelings were acknowledged and the interview was paused until the participant had calmed. At the end of every interview, participants were asked if they had anything else they would like to say or anything they would like to ask. Everybody was given a list of useful contacts (including various support agencies) and encouraged to speak to staff, friends or other social contacts if they felt upset about what had been discussed. Further discussion of the steps taken to minimise distress to participants is undertaken in Section 5.11.1.

Another issue concerns the actual timing of the interview. It was considered imperative that a reasonable delay between the incident and the interview had elapsed to allow the participants some time to recover from the trauma of what had happened to them. On the other hand, it can be argued that the longer the delay between incident and

interview, the more time the individual has had to re-evaluate and re-construct their behaviour (O'Connor and Sheehey, 2000). The average time that had elapsed between the incident and interview for those in the current sample was six days, although the range was from one day to four months. There were a number of issues that meant the time delay between the incident of attempted suicide or self-injury and the research interview was not consistent across the sample. These included the availability of the facilitators (which included only weekdays and regular working hours), the availability of prisoners (they could not, for example, be interviewed when they were due to appear in court) and the fact that the research was conducted simultaneously in ten establishments.

5.8 THE INTERVIEW PROCESS

Typically, researchers who undertake research into sensitive issues in prisons find it a daunting task (Liebling, 1999). The prison environment itself can be intimidating (Medlicott, 1998). In the current example, the attitudes and behaviours of staff were found to be of utmost significance that affected the ease (or otherwise) with which the interview process developed. The researcher found that, in the main staff were polite, sensitive, interested and keen to facilitate this process. The overwhelmingly majority expressed genuine concern about suicide/self-injury in prisons and a desire for there to be more help and support given to prisoners who they thought needed it. On the other hand, some were very outspoken about what they perceived as the 'manipulative' element of self-injury and gave the impression they doubted that the majority of prisoners were 'genuinely' suicidal. More commonly, however, staff commented that nobody was interested in their views and that 'outsiders' were only interested in prisoners. Liebling (1999) reported a similar finding. Some expressed a concern about suicide/self-injury among prison staff, suggesting that they were not awarded the same level of concern as prisoners. In summary, despite the occasional negative comment, staff members were overwhelmingly positive and constructive.

Medlicott (1998) suggests that no discussion of the interview as a research technique should ignore the implicit dimension of power that exists between interviewer and interviewee. Where the participants are prisoners and where the Prison Service funds the research, this power imbalance is likely to be magnified. Further, it is likely to

become more acute when participants have the potential to experience suffering, given the subject matter and nature of some of the questions asked. Erikson (1967) suggests that if research has potential for harm, the researcher must weigh up the benefits against the possible costs. Undoubtedly, the current research had some potential for harm, since it was framed around the highly sensitive issues of negative life experiences (including various forms of abuse) and suicidal behaviours. Nevertheless, in almost every case, prisoners remarked that they had found the interview 'helpful', even though it was made clear that it was conducted for research purposes and was not 'counselling' in the way that they may have perceived. Many participants reported that the very fact that somebody had sat with them quietly and listened to what they had to say was beneficial to them. One participant, who had been in prison for more than five years, said nobody had spent as much time with him, simply listening to his views and experiences, before our interview. This observation parallels that of Medlicott (1998) who reported that almost all participants in her sample disclosed that they had not had such an in-depth conversation as they had with a researcher since being in prison.

A number of issues arose with regards to the personal security of the researcher. The piloting stage of the research highlighted a number of practical problems around gaining access to prisoners and making the interview arrangements. After careful consideration, it was decided that, where possible, keys would be drawn from the prison gate. This was possible in four of the ten prisons included in the research. In the remaining six prisons, staff expressed concern about an 'outsider' having access to keys. Without the use of keys, a number of hurdles had to be overcome before the interview process could begin. These included passing through security procedures at the prison gate, waiting whilst the facilitator arrived to escort the researcher and passing through a series of gates that were unlocked and re-locked, until arriving at the desired location. This process, which could take up to thirty minutes, was conducted before the interview could begin. In the four prisons where the researcher had access to keys, this process was far more straightforward.

Conducting interviews in private was fundamental. It was felt that participants would feel less able to talk freely in the presence of a prison officer or another member of staff. On one occasion, such was the perceived threat from the individual being interviewed, staff would not permit a one-to-one interview. In the event a (non-uniformed) member

of staff was required to sit in the interview room. In the vast majority of cases, the facilitating member of staff arranged for the interview to take place in a private office on the prison wing. In most cases, the interview room was easily accessible by staff and was secure, in the sense that it had an alarm bell (which was pointed out to the researcher). Staff were generally very conscious of the researcher's security, stressing that they should be called immediately if any problems arose. On the rare occasions that interview rooms had no alarm bell, staff pointed this out and reassured the researcher that a member of staff was in a nearby room should any problems arise.

A number of practical issues came to light during the course of the research. On two occasions the researcher arrived at the establishment (having made the arrangements the previous day) to find that the prisoner who was to be interviewed had been transferred. On two separate occasions, the respondents the researcher had arranged to meet said that they had changed their minds about participating. In both cases, the research facilitator managed to recruit other participants to the study at short notice. A more serious setback arose when a self-inflicted death occurred at one of the ten establishments. Whilst it was not a prisoner who had been interviewed for the current study, it was essential to be sensitive to the needs of the prisoners and staff during what they perceived to be a very difficult time. After lengthy discussions with various Prison Service representatives and establishment staff, a mutual decision was taken to withdraw from the establishment in question. The problem was overcome by approaching the governor of a suggested alternative prison, who was willing to assist in facilitating the research.

5.9 RESEARCH DESIGN

As outlined in the introduction to the thesis, the third research aim was to examine the differences and similarities in motivation and background risk factors between different groups of prisoners (namely adults and young offender, men and women) and different types of suicidal behaviours (self-injury and attempted suicide). In order to undertake this comparison, participants were drawn from eight main groups within the prison population: adult men/women and young offender men/women who had attempted suicide; and adult men/women and young offender men/women who had injured themselves without suicidal intent.

It was envisaged that a comparison between suicidal and non-suicidal participants (who had engaged in an act of self-injury) would improve understandings of the differences and similarities between these behaviours, not only in terms of actual/intended outcome but also in terms of prisoners' motivations. Very little published research has addressed this issue, instead treating all 'suicidal behaviours' (including attempted suicide and self-injury without suicide intent) as if they were the same (e.g., Meltzer et al., 1999). Considering the lack of empirical knowledge regarding these behaviours and because previous studies have shown that subjects/controls are more similar than different (Liebling, 1992) it is argued that it is, potentially, disadvantageous to select a non-injuring group as a comparison/control. The question of precisely what was being controlled for/compared would arise; arguably, not enough is currently known about these behaviours to control for certain variables. Thus, it was decided to select as the comparison group prisoners who had engaged in an episode of self-injury but who were deemed not suicidal, by participants' own volition.

5.9.1 Criteria for Inclusion

The main criterion for inclusion in the study was that participants would have engaged in an act of self-injury or an attempt at suicide (according to the criteria discussed below) within seven days of interview. Liebling (1992) suggests that the complexities of the broad spectrum of suicidal behaviours evades the neatness of categorisation, in the sense that it is difficult to define the nature of what constitutes a suicide attempt before data collection commences. However, given the relatively large size of the sample and number of establishments included in the study, it was necessary to set clear criteria regarding the types of behaviour to be included from the outset. As outlined in Chapter 3, there are a number of difficulties in recording and monitoring suicide attempts and instances of self-injury in prisons. For example, the Prison Service applies no definition of what constitutes an act of self-injury or an attempt at suicide. Secondly, there are a number of channels through which such incidents are reported, resulting in inconsistencies in recording practices. These factors contributed to the necessity of setting clear criteria from the outset.

The following criteria were applied. Those who attempted to hang themselves and had to be cut down by another person and/or those who cut themselves either on one or both of their wrists, their throat or an artery (and required treatment at outside hospital) were regarded as suitable for inclusion. The comparison (self-injury) group consisted of participants who injured themselves less severely, but who still required medical treatment, who were deemed to be not suicidal by their own affirmation (during interview).

At the outset, an attempt was made to identify not necessarily the most seriously suicidal group, but those whose injuries were most likely to result in death. Severity of injury was initially used to categorise participants according to three criteria: superficial, severe and life threatening. However, severity of injury does not necessarily correlate with other combined measures of suicidal activity, such as reported thoughts of suicide or describing the incident as a suicide attempt. In accordance with the literature in the field (e.g., Wool and Dooley, 1987; Liebling, 1992), it was concluded that severity of injury *alone* did not necessarily indicate the severity of an individual's intent. An individual may, for example, attempt to hang him or herself thinking that they may be found. They may lose consciousness and incur serious injuries as a result, but this does not necessarily mean they were suicidal.

Although the concept of suicidal ideation (i.e., serious thoughts about suicide) is relevant, Hawton (1986) suggests that the translation of ideation into 'action' (i.e., a suicide attempt) is not necessarily inevitable. However, as Liebling suggests, this 'translation' is one further step in the direction of death (Liebling, 1992). Consequently, participants were asked the following question: 'would you say then that [the incident discussed] was an attempt at suicide?' Participants' responses were categorised according to 'yes', 'not sure' and 'no'. Some selection was imposed if the researcher felt that all other information in the interview either did or did not indicate a suicide attempt (as opposed to an incident of self-injury). For example, if a prisoner said that they had intended to die but had inflicted very superficial cuts to their forearms, they were excluded from further analysis. In addition, those respondents who said they were 'not sure' if they intended to die were excluded. A further discussion on excluded cases is undertaken in Section 5.13.

5.10 RECRUITMENT TO THE STUDY

It was decided from the outset that the research should be limited to a specific number of establishments. One reason for this was that it was deemed more likely that positive relationships would be formed with facilitating staff if a smaller sample of establishments was included. Selected staff were involved in most stages of the research process, thus their full support was necessary. Also, visiting a smaller number of prisons was preferred from a practical point of view

Senior Prison Service Managers (Area Managers) were given a written outline of the study, including its purposes and expected duration, and asked to contact the researcher if they had any questions or objections to the governors of the prisons in their areas being approached as potential host-establishments. In the meantime, a sample list of ten establishments was selected according to two main criteria. Firstly, they were chosen on the basis of type (i.e., holding a sample of the type of prisoners included in the study). Secondly, only prisons with comparatively high rates of attempted suicide and self-injury were selected. Governors of these establishments were contacted and asked if, in principle, they would be content for the research to be carried out in their prisons and, if so, if they could nominate a liaison officer who would agree to act as the initial facilitator between researcher/participants. All of the prison governors who were approached agreed to participate in the research.

Following governors' agreement, exploratory visits were undertaken as a means of establishing links with staff and prisoners and, in particular, to meet with the identified liaison officer. It was agreed that the Incident Reporting System would be the starting point for the recruitment of participants to the study, as all incidents of self-injury should be reported through this channel. Prisoners who fulfilled the researcher's criteria were approached by the liaison officer, given brief details of the study and given the opportunity to decide if they wished to participate. Upon their agreement in principle, the liaison officer contacted the researcher and a mutually convenient time was agreed for the interview to take place. On introduction to the prisoner, the researcher reiterated the purposes of the study, gave assurances of anonymity and confidentiality and obtained written consent from the individual. Participants were assured that

participation was voluntary and that their agreement or non-participation would have no impact on their treatment in prison.

A pilot study, on two male adults, six male young offenders and two women (of whom one of each group had attempted suicide and one injured themselves) was conducted. It was originally intended to pilot the interview schedule on two prisoners from each group, however, the problems in recruiting female young offenders to the study meant that it was only piloted on the three groups outlined above. The interview schedule was piloted in order to test its suitability (including the comprehension of questions) and appropriateness (i.e., whether or not the schedule was likely be yield data that could address the research questions). A number of minor amendments were made to the interview schedule in the light of the pilot study.

It was deemed essential that a suitable period had elapsed between the time the incident took place and the research interview. Following discussion with the funding body, as well as governors at the host establishments, it was agreed that an optimal period of seven days should have elapsed between incident/interview. As individuals may still be at heightened risk of suicide, consideration was given to their care and support plans and advice from staff sought before the interview took place.

5.11 Ethical Issues

There are a number of ethical issues to be considered when interviewing vulnerable people (Bowen and John, 2001). Given that the current sample was imprisoned and had all attempted suicide or recently injured themselves, coupled with the types and range of questions they were being asked, means that they could justifiably be considered to be 'vulnerable'. The ethical issues relating to the current sample are now outlined.

5.11.1 Participants' Welfare

Guided by the British Psychological Society's codes of conduct and ethical principles (BPS, 2000), researchers have to fulfil their University's or Institution's expectations for undertaking ethical research (Bowen and John, 2001). A fundamental principle that

underpins ethical codes for psychological research is that participants' welfare must be considered, and they must be protected from being physically or psychologically harmed as a result of their participation. Although, obviously, this cannot always be guaranteed, if there are any aspects of the study that may result in harm for the participants, the researcher has a responsibility to identify and remove or correct these consequences (Barrett, 1985).

Given the nature of the research questions, coupled with the fact that all participants had recently engaged in an act of self-injury (either with or without suicidal intent), it was anticipated that some participants would become distressed during interview. Every effort was made to ensure that this distress was minimised. The researcher took the prior step of consulting with members of staff responsible for each participant as to their suitability in undertaking the research interview. In only one case did staff advise against interviewing a participant who had been identified; consequently, they did not participate in the research. In addition, a comprehensive debriefing was conducted (see Section 5.11.3).

5.11.2 Informed Consent

BPS ethical principles state that, where possible, potential participants should be informed of all aspects of the research that might reasonably be expected to influence their willingness to participate and that researchers should explain any aspect of the research about which the participant enquires. Barrett (1995) points out that researchers are often in a position of authority or influence over potential participants and that this must never be used to pressurise or persuade people to participate in, or continue with the research.

In the current case, each participant was given an information/consent form, which they read and signed to say they had understood the purposes of the research and their participation in it. For those participants with reading difficulties, the information was read to them. All participants who read the information/consent form took part in the research. A copy of the information/consent form can be found at Appendix B.

5.11.3 Debriefing

Barrett (1995) outlines the principal elements of debriefing participants after data collection. Firstly, they should be given any information they might need or request about the nature of the study. Secondly, the researcher and participant should discuss the experience of the research process, so that if there are any unexpected or unintended consequences arising from the interview, these can be addressed or monitored. As Finch (1984) suggests, it verges on the unethical for a researcher to address sensitive issues with participants, re-stimulate painful experiences, record them and then simply depart from the interview situation. Researchers also have a responsibility to ensure that, if any active intervention is required to negate the effects of the investigation, this intervention is provided before the participant leaves the research setting (Barrett, 1995).

In the current study, a comprehensive debrief was conducted. All participants were given the opportunity to discuss how they felt about the issues raised and were encouraged to ask questions. Participants were encouraged to access the support of staff, friends or other social contacts, if they felt upset or unduly concerned about the issues raised. In addition, the researcher distributed a list of relevant groups/support networks for the prisoners to contact at a later date if they so wished. Included on the list were contact details for a number of organisations with experience of working with individuals who are suicidal or who injure themselves.

5.11.4 Right to Withdraw

BPS guidelines (BPS, 2002) state that it should be made very clear to participants, at the outset, that they are free to withdraw from the research at any stage of the process. In addition, BPS principles state that participants should always have the right to withdraw their consent which they have previously given to participate in the study, either in light of the experience of the investigation or as a result of debriefing. In such cases, participants have the right to ask that any data pertaining to them is destroyed.

The information/consent form used in the current study clearly stated that participants could withdraw from the study at any time. They were also told that either participating in the research, or choosing not to, would not count for or against them in any way.

5.11.5 Confidentiality

BPS guidelines stipulate that all information obtained about a participant during an investigation must be kept confidential, unless it has been otherwise agreed in advance. In the current case, assurance of confidentiality was given with the following exceptions: if disclosed information had security implications; or if a prisoner disclosed that he/she felt suicidal and/or if they were likely to act on their feelings. In either case, participants were informed that this information would be passed to staff in the establishment in which the research is being conducted (as stated in the information leaflet). Participants expressed suicidal ideation or gave information to suggest that they would injure themselves in five cases. In each of these cases staff were informed and suicide prevention procedures initiated, if there were not already in place. In a further case, a prisoner reported that he intended to seriously injure the person he shared a cell with. Since this clearly had security implications, the information was pass on to the security department of the prison (as had been outlined in the information leaflet).

5.11.6 Anonymity of Data

All participants have a right to expect that the information they provide will be kept confidential and, if published, will not be identifiable as theirs. In addition, when data about an individual are stored on a computer, that person should not be identifiable. If they are, the researcher must comply with the Data Protection Act, 1984. If confidentiality or anonymity cannot be guaranteed, participants must be warned of this in advance so that they can decide if they wish to participate.

All data derived from the interviews in the current study were coded in such a way that participants could not be identified. In addition, any copies of documentation relating to participants (including the interview transcripts) were kept in a locked cabinet, to which nobody else had access.

5.11.7 Ethical Approval

A condition of the Prison Service's agreement to provide funding for the current study was that it met the requirements of ethical approval from the Prison Service Health Research Ethics Committee. The initial application was made in January 1999 (for consideration at the next quarterly meeting which was held in February). The Committee requested that a number of minor amendments were made to the interview schedule and participant information/consent forms. Amendments were made accordingly and the application re-submitted for further consideration. Ethical approval was granted for the study (in July 1999), although it was stipulated that access to prisoners' medical documentation (namely their First Reception Health Screening Forms) could not be granted across all establishments and that this was a matter for local decision. In the light of this decision, Heads of Health Care at each establishment were approached directly for their approval.

5.12 THE SAMPLE

The data derived from interviews with 124 participants were included in the main analysis. The sample included 36 adult males, of whom 20 had attempted suicide and 49 male young offenders, of whom 24 had attempted suicide. A total of 39 women were included in the sample. Of these, 14 had attempted suicide and 25 had injured themselves. Twenty-eight of the women were adults and 11 were young offenders. These proportions are shown in Table 5.1 below. It will be noted that the term 'behavioural outcome' is used to discriminate between participants who had attempted suicide and those who had injured themselves. It is not intended to imply that an experimental paradigm was adopted, but merely acts as a term to signify behaviours that may be the culmination of the combination of the examined events and experiences

Table 5.1

Participant Group	Behavioural Outcome	N	%
Adult Male	Attempted Suicide	20	16.1
	Self-injury	16	12.9
Young Offender Male	Attempted Suicide	24	19.4
	Self-Injury	25	20.2
Adult Women	Attempted Suicide	9	7.3
	Self-Injury	19	15.3
Young Offender Women	Attempted Suicide	5	4.0
	Self-Injury	6	4.8
Totals		**124**	**100**

Table 5.1 Behavioural Outcome, Gender and Age Groupings of Sample

In order to acquire as broad a representation as possible, data were collected from participants in ten different prison establishments. The types of establishments that data were collected from are summarised in Table 5.2.

Table 5.2

Prison	Establishment-type	N	% of Total
1	Closed Young Offender (male)	31	25
2	Closed Category B (male)	5	4
3	Local (male)	6	4.8
4	Closed (female)	4	3.2
5	Closed Category B (male)	11	8.9
6	Closed Young Offender (male)	14	11.3
7	Closed Category B (male)	17	13.7
8	Closed (female)	12	9.7
9	Closed (female)	2	1.6
10	Closed (female)	12	9.7
11	Other (inc. previous establishment)	10	8.1

Table 5.2 Number/Proportion of Sample by Establishment-type

5.13 CASES EXCLUDED

A total of 143 interviews were conducted, although nineteen were excluded from the final analysis. Nine participants were excluded because they were unsure about their intention, in other words they were ambivalent about whether they lived or died. Although ambivalence has been associated with suicide, making it an important issue in

its own right, it was beyond the scope of the current study. Given the current focus on participants' expressed reasons for attempting suicide or injuring themselves, as well as their views regarding the functions of these behaviours, it was considered imperative that they were sure about whether they wanted to end their lives or not.

A further four participants were excluded as the incident of attempted suicide or self-injury had occurred so long ago that (more than six months) that it was deemed unreasonable for them to recall precisely their motivations and associated emotions. Although the research facilitators were informed that one of the research criteria was to interview participants about *recent* incidents, in these four cases they arranged an interview with participants who injured themselves or attempted suicide outside this timescale. In a further three cases, prison staff interrupted the interviews before participants could be questioned about their motivations, which was the main focus of the study. Finally, in three cases, participants had not actually injured themselves or attempted suicide, but had been approached by the facilitator because they had been identified as *potentially* suicidal.

5.14 CHAPTER SUMMARY

This chapter has presented the main methods of data elicitation and related analyses that were selected as being the most appropriate for investigating attempted suicide and self-injury among prisoners. The alternatives to this type of approach were outlined and their main limitations discussed. A discussion of the actual interview process, as well as some of the difficulties faced during the course of the data collection, was undertaken. The main ethical considerations were discussed. Finally, the basic characteristics of the final sample were outlined. Chapters 6 to 11 present the results of the research.

CHAPTER 6

RESULTS I: DESCRIPTIVE AND MULTIVARIATE STATISTICS: THE CHARACTERISTICS OF THE SAMPLE

6.1 INTRODUCTION

This chapter presents a descriptive overview of the characteristics of the current sample in an attempt to determine if there are any differences between the participants in terms of their behavioural outcome, gender or age groupings[1]. It is intended that this analysis will address the first and third aims of the thesis, which are as follows:

- To explore the relationship between suicidal behaviours (within the current sample) and previously identified 'risk-factors';
- To explore the differences/similarities in background risk factors between different groups of prisoners (men/women and adults/young offenders) and different types of suicidal behaviours (i.e., self-injury and attempted suicide).

In addressing the first aim of the thesis, the focus of the chapter is on the sample's demographic, criminological and psychiatric characteristics, as well as on their general physical health and well being; other 'risk factors' are addressed in subsequent chapters. The third aim is addressed by exploring the differences/similarities between the various sub-groups in the analysis (i.e., the behavioural outcome, gender and age groupings).

The chapter begins by outlining the results of a series of univariate analyses. The main focus is on the statistically significant differences that were found between the various sub-groupings in the sample (the full results are summarised in Appendix D). Because (as will be demonstrated) relatively few differences between the groups were identified, multivariate techniques were subsequently used to examine if a more sophisticated approach was able to identify any differences. This approach also has the benefit of representing a useful (partial) replication of Meltzer et al. (1999), as outlined in previous chapters.

[1] It is important to reiterate that the term 'behavioural outcome' is not intended to imply that an experimental paradigm was adopted. It merely acts as a term to signify behaviours that may be the culmination of the combination of the examined events and experiences.

6.2 SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE CURRENT SAMPLE

As discussed in earlier chapters, previous researchers have associated a wide range of socio-demographic factors with completed and attempted suicide and self-injury. For example, some prison-based studies have found that male prisoners who attempt or complete suicide are younger than those who do not (e.g., Backett, 1987; Topp, 1979; Wool and Dooley, 1987; Liebling, 1992). Conversely, some have reported that only very young prisoners (i.e., 15-17 year olds) are over-represented in such samples (Towl and Crighton, 1998), whilst others have found that older prisoners are at increased risk (Dooley, 1990).

Whilst community-based studies have consistently shown that men are more likely than women are to die by suicide, the picture is less clear for prisoners. Although some agree that men are over-represented (e.g., Backett, 1987; Topp, 1979; Dooley, 1997), others argue that the suicide rate for men and women based on their proportional representations within the prison population is similar (e.g., Liebling, 1992; Towl and Fleming, 1997). A relatively consistent finding between prison and community-based studies is that women who do die by suicide tend to be childless (Meltzer et al., 1999; Appleby, 1991, 1996; Linehan, 1993). The purpose of the following section is to present an overview of the demographic characteristics of the current sample. This will examine their age, gender, ethnicity, marital and parental status, and domestic arrangements prior to imprisonment and educational experience.

6.2.1 Age

Community-based studies have shown various associations between suicide and self-injury and particular age groups, depending on the person's gender. Since the early 1980s, the suicide rate for men aged 45 and over has fallen, whilst the rate amongst younger men has increased considerably, such that it now exceeds the rate for all groups of men except the eldest (75+). The increase in the suicide rate has been particularly dramatic for those aged 15-24, amongst whom the rate is now only slightly lower than amongst the oldest group of men (Williams, 1997). Conversely, older women are less likely than younger women to die by suicide and for women aged over 45 there is little evidence of an age-related increase in risk of suicide (Williams, 1997). Self-injury, as

distinct from completed and attempted suicide, is much more common among younger age groups. For example, it usually occurs in women aged 15-19 and in young men aged between 20-24 (Johnstone, 2002).

The prison population is skewed towards younger people (Liebling, 1992). This renders the findings of prison-based studies unclear with respect to the relationship between suicidal behaviours and age, with some arguing that young prisoners are at increased risk (e.g., Backett, 1987) and others arguing that comparatively older prisoners are at higher risk (e.g., Dooley, 1990). Self-injury, on the other hand, is more common among younger prisoners (HM Prison Service, 2001). A comparison of the ages of those in the current sample was conducted to establish if there was any difference in the age of those who attempted suicide, compared with those who injured themselves, and whether there were any gender differences. The ages of those in the current sample ranged from 16 to 56 (mean = 23.85, SD = 7.47), as illustrated in Table 6.1. Overall, women in the sample were older (mean = 27.53, SD = 8.85) than men (mean = 22.19, SD = 6.12), a difference that was statistically significant, (t (N = 9) = -3.368, p = 0.001).

Table 6.1

Age/Gender	Behavioural Outcome	N	Mean Years	Std. Deviation
Adult Male	Attempted Suicide	20	26.84	3.64
	Self-injury	16	28.00	8.87
Young Offender Male	Attempted Suicide	24	18.54	1.28
	Self-Injury	25	18.44	1.03
Adult Women	Attempted Suicide	9	30.50	3.41
	Self-Injury	19	31.32	1.74
Young Offender Women	Attempted Suicide	5	17.60	0.54
	Self-Injury	6	19.83	1.60

Table 6.1 Mean Age of Participants in the Sample by Behavioural Outcome, Gender and Age

A series of independent-samples t-tests was conducted to evaluate if there was any significant difference in the ages of the main participant groupings in the sample and whether they had attempted suicide or injured themselves (i.e., the behavioural outcome). The largest difference found was for young offender women, among whom those who attempted suicide were younger (mean = 17.60 years, SD = 0.54) than those who injured themselves (mean = 19.83 years, SD = 1.60). Whilst this finding was

statistically significant, the small sample size means that the results should be treated with caution ($t (N = 9) = -2.954$, $p = 0.016$).

6.2.2 Ethnicity

As discussed in Chapters 3 and 4, previous prison-based studies have consistently shown that an unrepresentative number of prisoners who both attempt and die by suicide are white (Meltzer et al., 1999; Livingston, 1997; Dooley, 1990; Liebling, 1992). The ethnic breakdown of the current sample showed that 92.7% were white, 5.6% were black and 1.6% were Asian. In terms of the behavioural outcome (attempted suicide/self-injury), 89.7% of those who attempted suicide were white; 6.9% were black prisoners (a slightly higher proportion than their representation in the sample); and 3.4% were South Asian (although they made up only 1.6% of the sample). In contrast, slightly fewer incidents of self-injury were of black prisoners (4.5%); 95.5% were white and none were South Asian. However, there were no statistically significant associations between the behavioural outcome (attempted suicide/self-injury) and ethnic grouping.

6.2.3 Marital Status

As outlined in earlier chapters, community-based studies have shown that married people are less likely than those who are single or divorced to die by suicide. Indeed, Charlton et al. (1992) suggest that the increase in divorce and reduction in marriage among young men is one of the factors that may account for their overall increase in suicide. As discussed in Chapter 4, prison-based studies have also highlighted the apparent relationship between being single and completed suicide (e.g., Dooley, 1990; Meltzer et al., 1999). Whilst this has been a relatively consistent finding, the fact that the majority of the prison population is single should be borne in mind (Liebling, 1992).

As expected, given that most prisoners in the general population are unmarried, the vast majority of the current sample was single (85.6%); 5.6% were married/cohabiting; 7.2% were divorced/separated; and 1.6% were widowed. There were no significant associations between marital status and the behavioural outcome (attempted suicide/self-injury). However, men were statistically significantly more likely than

women to be single (Pearson χ^2 (1, N = 124) = 12.112, p = 0.001), whilst women were more likely to be divorced (Pearson χ^2 (1, N = 124) = 9.660, p = 0.004). As may be expected, adults were significantly more likely to be married (Pearson χ^2 (1, N = 124) = 6.995, p = 0.013) or divorced (Pearson χ^2 (1, N = 124) = 5.399, p = 0.033). Finally, young offenders were significantly more likely to be single (Pearson χ^2 (1, N = 124) = 15.468, p = <0.001). The frequencies are summarised in Figure 6.1.

Figure 6.1

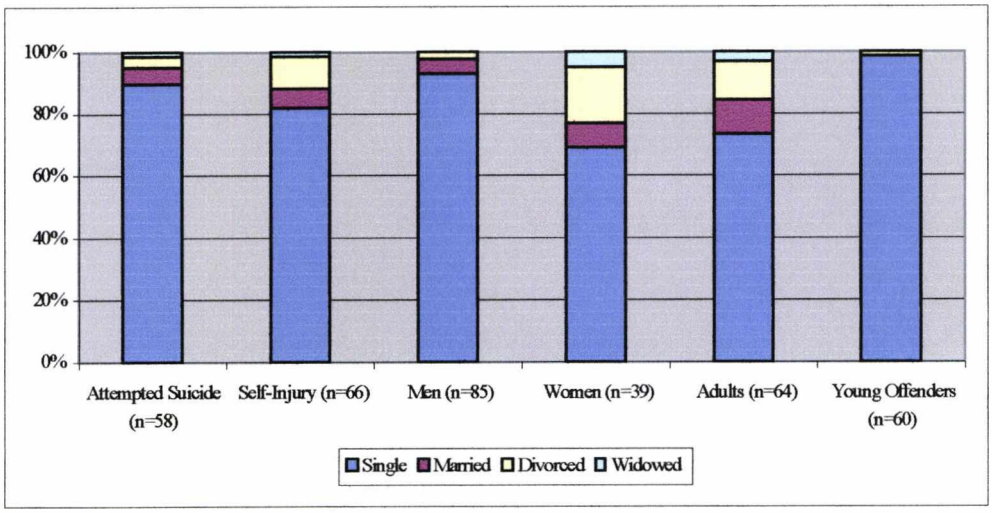


Figure 6.1 Martial Status by Behavioural Outcome, Gender and Age

6.2.4 Parental Status

There is some evidence that parenthood and particularly motherhood acts to protect individuals from suicide (Appleby, 1991; Ivanoff et al., 1992). In support of this hypothesis is the finding by Meltzer et al. (1999) that women prisoners with children are less likely than those without children to have attempted suicide. Similarly, Towl and Hudson (1997) found that prisoners with children had a lower overall risk of suicide than those without. The current analysis revealed no statistical relationships between attempted suicide/self-injury and parenthood or gender.

6.2.5 Domestic Circumstances Prior to Imprisonment

Prisoners tend to be more socially isolated than the general population (Liebling, 1992). This observation is supported by the National Prison Survey (Home Office, 1991) which found that only 19% of prisoners were married (compared with 61% of the general population). A further 40% were single (compared with 21% of the general population) and 31% were cohabiting (compared with 4% of the general population).

The majority of the present sample resided either with their parents or partner/family prior to their most recent imprisonment (58.8%); a fifth (21%) were either of no fixed abode or lived in a hostel; 7% lived with friends and 12.3% lived alone. Participants' domestic arrangements by the three main groupings (outcome, gender and age) are shown in Figure 6.2. As illustrated, there was some slight variation between the groups. Firstly, women were significantly more likely to live alone than men (Pearson χ^2 (1, N = 114) = 5.978, p = 0.020). Secondly, as may be expected, adults were significantly more likely to live with their partner/family (Pearson χ^2 (1, N = 114) = 6.295, p = 0.012).

Figure 6.2

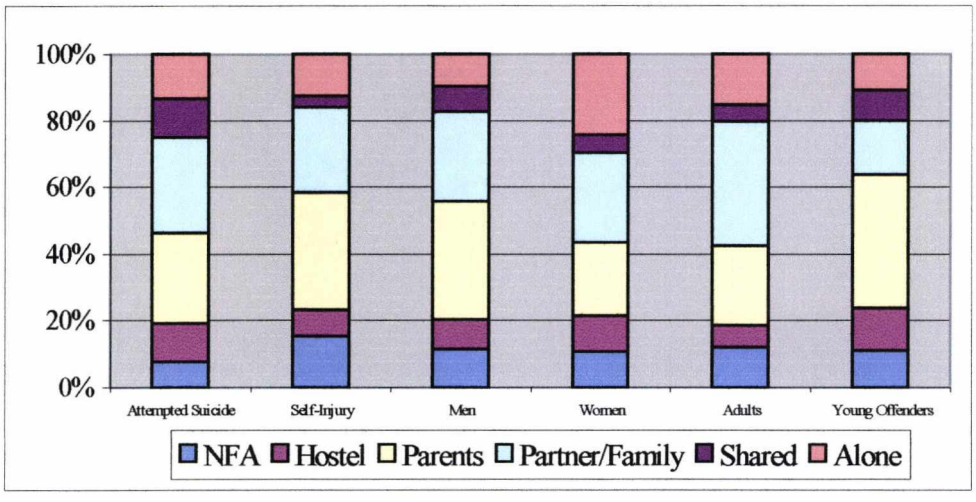


Figure 6.2 Domestic Situation by Behavioural outcome, Gender and Age

6.2.6 Qualifications

Liebling (1992) highlighted the high level of illiteracy and low level of educational qualifications among her sample, 73% of whom had no qualifications. A slightly higher proportion of the current sample (81%) had no qualifications; 15% had achieved GCSEs and 4.3% had achieved A Levels or higher. There were no significant differences in levels of qualifications when comparisons were made on the basis of behavioural outcome, gender and age.

6.2.7 Summary

Univariate analyses conducted on a number of socio-demographic variables revealed a number of statistically significant differences between the various sub-groups in the analysis, as follows:

- Women in the current sample were older than men;
- In the case of young offender women, those who attempted suicide were young than those who injured themselves;
- Men were more likely than women to be single and women were more likely than men to be divorced;
- Adults were more likely than young offenders to be married and young offenders were more likely to be single.
- Prior to imprisonment, women were more likely than men to have lived alone and young offenders were more likely than adults to have lived with their partner/family.

6.3 LOGISTIC REGRESSION ANALYSIS: SOCIO-DEMOGRAPHIC VARIABLES

The findings of the recent ONS survey (Meltzer et al., 1999) into non-fatal suicidal behaviours in prisons were outlined in earlier chapters. A partial replication of this study was undertaken on the current data using Logistic Regression, an analysis that can enable one to predict a discrete outcome (such as group membership) from a group of variables (Tabachnick and Fidell, 1996). In the present case the discrete (dichotomous) outcome was 'attempted suicide' or 'not attempted suicide' (i.e., self-injury).

A replication of the ONS study was conducted partly because, as shown above, few of the univariate tests conducted on these data (namely chi-squared analyses or t-tests) revealed statistically significant relationships or differences between the variables. Whilst this may be due to a relatively small n (n=124), it could be that the participants in each behavioural outcome grouping (i.e., attempted suicide and self-injury) are more similar than they are different. To test this hypothesis a more complex approach, one that examines specific relationships between the variables, is preferred.

The aim of Logistic Regression is to successfully predict a discrete outcome (e.g., group membership) from a set of variables (termed 'predictors' or 'independent variables'). In order to achieve this, a model containing both the outcome (DV) and the predictors (IVs) is compared with a model including only the DV (i.e., without any of the predictor variables) (Tabachnick and Fidell, 1996). The difference in log-likelihood values between the two models is then compared. In direct (standard) logistic regression all predictors are entered into the model simultaneously, as in multiple regression. The contribution of each variable to the overall model is evaluated, and the estimation of the model terminated when the log-likelihood decreases by less than 0.1 percent. Generally, as variables are entered into the model, the log-likelihood value decreases. The chi-square test is used to evaluate the significance of any such change. Beta coefficients and the Wald significance test provide information about the importance and statistical significance of individual predictors within the overall modal (Menard, 1995).

In the current example, a direct logistic regression analysis was performed using attempted suicide group participation as the outcome (DV) on the following demographic predictors: age, ethnicity, family-type and educational qualifications. Of these, age and qualifications were classified as ordinal and ethnicity and family-type as categorical variables. As in the ONS study (Meltzer et al., 1999) the following categorisations were used:

	Predictor Variables	**Categorisations**
1.	Age:	16-20, 21-29, 30-39, 40+
2.	Ethnicity:	White, Black, Other
3.	Family-type:	Has children, does not have children
4.	Qualifications:	None, GCSE/O Levels, A levels and higher

To ensure maximum comparability between the current research and Meltzer et al. (1999) separate analyses were undertaken for male remand and male sentenced participants, as well as for women.

6.3.1 Male Remand Prisoners

Of the 44 male remand prisoners in the overall sample complete information was available in 38 cases, hence 38 cases were included in the model. The test of the full model with all four predictors against the constant-only model was not statistically significant, χ^2 (5, N = 38) = 6.286, p =0.279. This result indicates that none of the independent variables (either as a set or individually) could reliably distinguish between men on remand who had attempted suicide and those who had not.

6.3.2 Male Sentenced Prisoners

Of the 41 male sentenced prisoners in the sample, 39 (those with complete information) were included in the logistic regression analysis. The test of the full model with all four predictors against the constant-only model was not statistically significant (χ^2 (6, N = 39) = 7.090, p = 0.313). This non-significant result indicates that the predictors (either as a set or individually) could not reliably distinguish between sentenced men who had attempted suicide and sentenced men who had not.

6.3.3 Women Prisoners

Thirty-eight of the 39 women in the overall sample (those with no missing data) were included in the analysis. In this case, the test of the full model with all four predictors against the constant-only model approached statistical significance (χ^2 (6, N = 38) = 12.171, p = 0.058).

A test of the goodness-of-fit of the model, the Hosmer and Lemeshow test, was not significant, indicating that the model was not reliably different from the perfect (hypothetical) model: χ^2 (7, N = 38) = 10.784, p = 0.148 (Tabachnick & Fidell, 1996, p. 598). The model after inclusion of the predictor variables was not particularly accurate

at classifying group membership, with an overall success rate of 63%. A far higher number of attempted suicide participants were successfully classified, with proportions of 88% and 15% respectively. The Nagelkerke R Squared result (0.379) indicates that 38% of the variance in the dependent variable is explained by the covariates. According to the Wald criterion, none of the variables (independently) reliably predicted attempted suicide group membership. Thus, although the overall model approached significance, this is not accounted for by any of the variables independently. Table 6.2 shows the regression coefficients, Wald statistics, degrees of freedom, significance levels and odds ratios for each of the predictors.

Table 6.2

Variables	*B*	Wald Test	Df	Sig.	Exp(B)
Age	-0.761	1.565	1	0.211	0.467
Ethnicity (1)	-18.172	0.030	1	0.863	0.000
Marital (1)	8.159	0.056	1	0.813	3493.377
Marital (2)	9.754	0.080	1	0.777	17227.075
Children	0.430	0.202	1	0.653	1.537
Qualification	0.159	0.047	1	0.828	1.173
Constant	10.579	0.011	1	0.915	39303.822

Table 6.2 Logistic Regression Coefficients, Wald Tests and Odds Ratios of Logistic Regression Analysis on Socio-demographic Factors: Women Prisoners

6.3.4 All Prisoners

For completeness, a final analysis was conducted amongst all prisoners in the sample, for whom there was complete information in 115 cases. Again, the test of the full model with all four predictors against the constant-only model was not statistically significant, χ^2 (7, N = 115) = 6.791, p = 0.451, indicating that the independent variables in the analysis did not successfully predict group membership.

6.3.5 Summary

A series of logistic regression analyses examined the relevance of socio-demographic variables on attempted suicide and self-injurious behavioural outcome. None of these successfully distinguish between participants who attempted suicide and those who

injured themselves. Possible explanations for this are offered in section 6.11, as well as in Chapter 12.

6.4 Criminological Characteristics of Current Sample

As outlined in Chapters 3 and 4, a broad range of crime-related factors have been associated with suicidal and self-injurious behaviours in prisons. These include a prisoner's offence-type, their legal status, their sentence length, the length of time they have been in custody and whether or not it is their first time in prison. The purpose of the following section is to examine if there are any criminological-specific differences between the sub-groups within the current sample.

As with previous measures, the criminological characteristics of participants in the sample were collected by means of self-report. In this case, each participant was asked to provide information about their legal status, their offence-types and their sentence length, as well as more general questions about their previous dealings with the criminal justice system. The data arising from these questions were then cross-referenced the sample's official records. This process was undertaken in ninety-one cases (which represented 74% of the sample). In no case did the information that participants gave concerning their offence type or legal status contradict that found in their official records.

The reasons that participants' responses were not cross-referenced in every case were two-fold. Firstly, prisoners' records were not always complete, in that they sometimes lacked precise or accurate information about their legal status, their offence or their sentence length. Secondly, there was a practical issue, in that prisoners' records were not always easily available. For example, in some cases records were being used by staff in different departments for the collation of reports. Nevertheless, that participants' responses were successfully cross-referenced in almost three-quarters of cases provides some verification of the validity of the data. Having outlined the steps that were taken to validate the data, the main findings are now presented.

6.4.1 Legal Status

As discussed in Chapter 4, one of the most consistent findings of prison-based research is that a disproportionate number of those who die by suicide were unsentenced at the time of death (for example, Backett, 1987; Dooley, 1997; Lloyd, 1990). A possible explanation for this is that although remand prisoners spend less time in custody than sentenced prisoners they are more frequently received into and discharged from custody. Thus, remand prisoners are received more regularly into prison during what is considered to be the most risky phase of custody, i.e., the earliest days. Slightly less than half (43.5%) of the current sample was unsentenced, with the remainder (56.5%) being sentenced. A comparison between participants who had attempted suicide and those who had injured themselves revealed no difference in their legal status. Women were more likely than men to be sentenced (Pearson χ^2 (1, N = 124) = 7.421, p = 0.006), as were adults when compared with young offenders (Pearson χ^2 (1, N = 124) = 12.799, p = <0.001).

6.4.2 Offence-type

Previous studies have highlighted associations between specific offence-types and suicide. More specifically, it has been noted that a disproportionate number of those who die by suicide were convicted of or charged with violent or sexual offences. Indeed, Gover (1880) suggested that prisoners capable of being violent to others were also likely to be violent towards themselves (cited in Liebling, 1992, p.43). Later studies have provided evidence that supports this finding. For example, Dooley (1990), Bogue and Power (1995) and Crighton and Towl (1997) all reported that a disproportionate number of prisoners who died by suicide had been charged with or convicted of violent or sexual offences. There is, however, some evidence of an age bias to these findings. Indeed, it has been argued that young offenders who die are less likely than adults to be convicted of or charged with violent or sexual offences (e.g., Liebling, 1992).

Figure 6.3 shows the offence-categorisations of participants in the current sample by behavioural outcome, gender and age. As indicated, the most common index offence category is violence against the person (which accounts for 26.6% of all participants).

This is followed by burglary (21.5%), other offences (19.4%) and theft or handling stolen goods (at 11.3%).

Figure 6.3

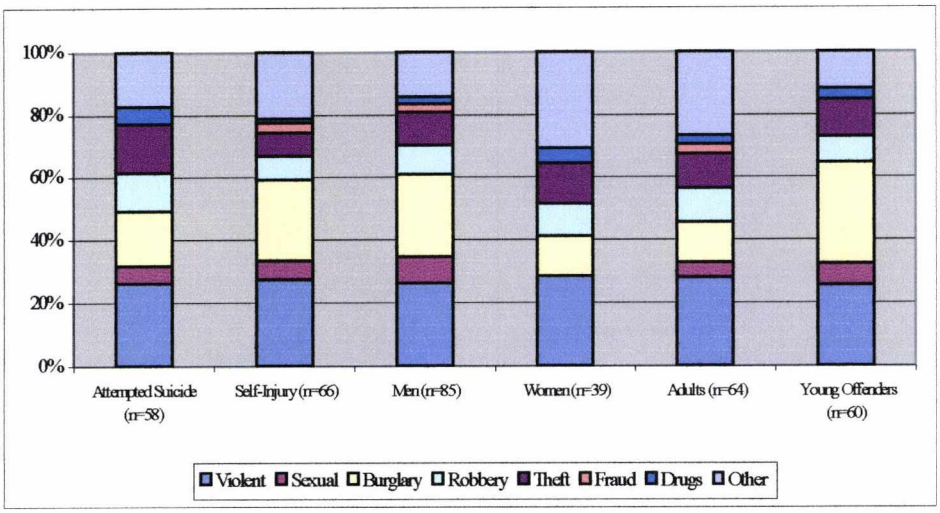


Figure 6.3 Offence-Type by Behavioural Outcome, Gender and Age

As Figure 6.3 illustrates, there is some variation between the groups in the type of offences they were convicted of or changed with. Firstly, women were significantly more likely than men to be charged with offences that were not in the above mentioned categories (Pearson χ^2 (1, N = 123) = 4.608, p = 0.032), of whom the majority (75%) were charged with arson. Young offenders were significantly more likely to be charged with burglary (Pearson χ^2 (1, N = 123) = 6.956, p = 0.008), whilst adults were significantly more likely to be charged with 'other' offences (Pearson χ^2 (1, N = 123) = 4.223, p = 0.040). There were no statistically significant differences between the offences of those who attempted suicide and those who injured themselves.

6.4.3 Sentence Length

It is widely reported that (among those prisoners who are sentenced) completed suicide is disproportionately high among those who are serving relatively lengthy prison terms, i.e., in excess of three years (Towl and Crighton, 1997; Liebling, 1992). Of the seventy participants in the current sample who were sentenced, most had been awarded relatively lengthy terms. For example, 28.6% (n=20) were sentenced to terms up to

twelve months; 31.4% (n=22) were sentenced to between one and three years; 31.4% (n=22) were sentenced to terms in excess of three years; and 8.5% (n=6) were sentenced to life. Women in the current sample were significantly more likely than men were to be sentenced to life (Pearson χ^2 (1, N = 124) = 7.872, p = 0.012). Similarly, adults were significantly more likely than young offenders to be sentenced to life (Pearson χ^2 (1, N = 124) = 5.911, p = 0.028). There were, however, no statistically significant differences between participants who had attempted suicide and those who had self-injured.

6.4.4 Prior Dealings with the Criminal Justice System

A relatively consistent finding of previous research is that those who die by suicide are likely to have had both previous convictions and to have spent previous periods in custody (Topp, 1979; Backett, 1987; Dooley, 1990). Although figures on the proportion of those with previous custodial histories vary (from 60% to 75%) the evidence is that the majority were not new to prison (Topp, 1979; Backett, 1987; Dooley, 1990). Consistent with these findings, the majority of the current sample had spent previous periods in custody (71%). When comparisons were made between attempted suicide/ self-injuring participants and men/women, no statistical associations were found. Young offenders, however, were more likely than adults to be in prison for the first time (Pearson χ^2 (1, N = 124) = 9.007, p = 0.003).

6.4.5 Length of time in custody at time of incident

A consistent finding of previous research is that the highest risk period for suicide is in the very early stages of custody, with the risk reducing consistently thereafter (Topp, 1979; Dooley, 1990; Crighton and Towl, 1997). In the current sample, the length of time spent in custody at the time the incident occurred ranged from one day to in excess of twelve months. While there was a general tendency for attempted suicide participants to have spent less time in custody than self-injuring participants, there was no statistically significant relationship between the variables. Interestingly, women were more likely than men to have spent longer in prison when the incident occurred (Pearson χ^2 (1, N = 124) = 5.624, p = 0.018). Similarly, adults had spent longer in

custody than young offenders at the time of the incident (Pearson χ^2 (1, N = 124) = 5.623, p = 0.018).

6.4.6 Summary

The criminological characteristics of the current sample were outlined and a number of differences between the groups revealed, as follows:

- Women in the sample were more likely (than men) to be sentenced;
- Adults were more likely (than young offenders) to be sentenced;
- Women and adults were more likely (than men and young offenders) to be charged with 'other' offences;
- Women were more likely than men to be sentenced to life imprisonment, as were adults when compared with young offenders;
- Young offenders were more likely (than adults) to be in prison for the first time.

6.5 LOGISTIC REGRESSION ANALYSIS: CRIMINOLOGICAL VARIABLES

As outlined above, the univariate analyses conducted thus far have revealed a number of significant differences between the main participant groupings. The next stage in the analysis was to examine the data using a multivariate analysis that takes account of the simultaneous impact of these criminological variables on behavioural outcome, gender and age. The choice of which variables to include was informed by the results of the univariate analyses discussed above, as well as the literature discussed in previous chapters (notably Meltzer et al., 1999).

A direct logistic regression analysis was performed on attempted suicide group participation as the outcome variable on four criminological predictors. These were as follows: offence categorisation, whether or not it was the participant's first time in prison, location at the time of the incident and the period of time spent in custody when the incident occurred. The first three of these variables were treated as categorical and the final (time spent in custody) was treated as ordinal, as shown below:

	Predictor Variables	Categorisations
1.	Offence-Type	Violent, Sexual, Acquisitive, Drug-related, Other
2.	First time in prison?	Yes/No
3.	Location	Ordinary/Other
4.	Length of time in prison	> 3 months, < 3 months

As in the above analysis on socio-demographic variables (and in accordance with Meltzer et al., 1999) separate analyses were undertaken for male remand and male sentenced participants, as well as for women.

6.5.1 Male Remand Prisoners

Of the 44 male remand prisoners in the overall sample, complete information was available in 43 cases. The test of the full model with all four predictors against the constant-only model was statistically significant (χ^2 (7, N = 43) = 18.265, p = 0.011) indicating that the predictors, as a set, reliably distinguished between men on remand who had attempted suicide and those who had not. The model after inclusion of the predictors was reasonably accurate at classifying group membership, with 78% of attempted suicide and 65% of non-attempted suicide participants correctly predicted, with an overall success rate of 72%. A further test of the goodness-of-fit of the model, the Hosmer and Lemeshow test, was not significant, indicating that the model was not reliably different from the perfect (hypothetical) model: χ^2 (7, N = 43) = 2.74, p = 0.91 (Tabachnick & Fidell, 1996, p. 598). The Nagelkerke R Squared result (0.462) indicates that 46% of the variance in the dependent variable is explained by the covariates.

Table 6.3 shows the regression coefficients, Wald statistics, degrees of freedom, significance levels and odds ratios for each of the predictors. According to the Wald criterion, none of the variables (independently) reliably predicted attempted suicide. Thus, although the overall model is able to predict participant grouping this is not accounted for by any of the variables independently.

Table 6.3

Variables	*B*	Wald Test	Df	Sig.	Exp(B)
Violent Offences	-.451	0.141	1	0.708	0.637
Sexual Offences	7.493	0.020	1	0.887	1796.274
Acquisitive Offences	-.438	0.153	1	0.696	0.646
Drugs Offences	9.074	0.003	1	0.956	8722.745
First time in prison?	-1.148	1.683	1	0.194	0.317
In prison for < 3 months?	16.102	0.047	1	0.828	9837844.2
Location	1.145	1.859	1	0.173	3.142
Constant	-14.970	0.041	1	0.840	0.000

Table 6.3 Logistic Regression Coefficients, Wald Tests and Odds Ratios of Logistic Regression Analysis on Offence-Related factors: Male Remand Prisoners

6.5.2 Male Sentenced Prisoners

Of the 41 male sentenced prisoners in the sample, 36 were included in the criminological logistic regression analysis. In this example, the test of the full model with all four predictors against the constant-only model was not statistically significant (χ^2 (7, N = 36) = 13.077, p = 0.070).

6.5.3 Women Prisoners

Of the 39 women in the sample, 36 (for whom complete information was available) were included in the criminological logistic regression analysis. The test of the full model with all four predictors against the constant-only model was not statistically significant (χ^2 (6, N = 36) = 5.639, p = 0.465) indicating that none of the predictors reliably distinguished between attempted suicide and self-injuring participants.

6.5.4 All Prisoners

Finally, an analysis was conducted on the entire dataset. Of the 124 participants in the overall sample, 115 were included in the analysis. The test of the full model with all four predictors against the constant-only model was not statistically significant (χ^2 (7, N = 115) = 6.956, p = 0.433) indicating that none of the predictors reliably distinguished

between attempted suicide and non-attempted suicide (i.e., self-injuring) participants in the sample.

6.5.5 Summary

A series of logistic regression analyses examined the relevance of criminological variables on attempted suicide and self-injurious behavioural outcome. None of these analyses was successful at distinguishing between participants who had attempted suicide and those who injured themselves. Although, in the case of male remand prisoners, the model including the independent variables was significantly different from the constant-only model, none of the variables (independently) was able to successfully predict group membership.

6.6 PSYCHIATRIC ILLNESS AND SUBSTANCE MISUSE

The present section focuses on the nature and extent of the psychiatric problems between participants within the current sample, and draws attention to any differences between the various sub-groups. Similar to the approach taken by Singelton et al. (1998), the present study adopts a comparatively broad definition of psychiatric illness including, for example, substance misuse. This is in contrast to the approach taken by Towl and Crighton (1998), but similar to latter studies, such as Meltzer et al. (1999).

6.6.1 Psychiatric Illness

Data on participants' current and previous psychiatric illnesses were collected by means of self-report. It was initially intended to verify participants' accounts by examining their medical records, however, in practice they proved very difficult to obtain and, when available, were shown to be inconsistent in the diagnoses made. Consequently, it was decided to rely solely on a self-report measure.

The vast majority of the sample (77.2%) reported current or previous episodes of psychiatric illness, whilst slightly more than a fifth (22.8%) reported that they had never had any psychiatric problems. This information was unavailable in one case (0.8% of the total) as the participant declined to answer the question. The range of psychiatric

problems reported varied and included depression, personality disorders, anxiety, and psychosis. Participants' self-report descriptions of their psychiatric problems are shown in Table 6.4.

Table 6.4

Psychiatric Problem	N	Percent
No Reported Problems	28	22.8%
Anxiety	1	0.8%
Depression	23	21.1%
Psychosis	5	4.1%
Personality Disorders	10	8.1%
Multiple/Dual Diagnoses	29	23.6%
Unspecified/Unknown Problem	24	19.5%

Table 6.4 Psychiatric Disorders (Total Sample)

Analyses were conducted to ascertain whether presence of psychiatric illness was more or less likely to be associated with any particular participant grouping. Despite slight variations between the groups in the type of problem reported, there were no statistically significant differences between them. In other words, none of the psychiatric problems examined was associated with behavioural outcome, age or gender categorisations.

Participants were asked if they had ever been resident in a psychiatric hospital or unit, of whom over a third (38.2%) reported that they had. None of the specific groups was statistically more likely than the others to have been resident in a psychiatric hospital.

6.6.2 Support for Psychiatric/Psychological Problems in Prison

Given that such a high proportion of participants in the sample had experienced some form of psychiatric problem, it follows that a high proportion would have received some form of therapeutic or psychiatric intervention since being in prison. Indeed, of the 120 participants for whom full information was available, 70.8% of those with psychiatric problems had received therapeutic input from psychologists, outreach workers, counsellors, psychiatric nurses or psychiatrists. The remaining 29.2% had received no such support. In two cases (1.7% of the population), transfer to a psychiatric hospital had been arranged and was imminent, indicating that they were detainable according to the criteria of the Mental Health Act. There were no differences between attempted

suicide/self-injury, men/women or adults/young offenders in terms of receipt of support for psychiatric problems.

A substantial proportion of participants (62.5%) were receiving some form of medication for psychiatric/psychological problems at the time of interview, only slightly less than those who self-reported psychiatric problems. Comparisons to determine if there were any notable differences between attempted suicide and self-injury participants, men and women or adults and young offenders revealed that women were significantly more likely than men to be receiving medication (Pearson χ^2 (1, N = 120) = 11.184, p = 0.001).

6.6.3 Alcohol Intake

A self-report measure was also used to gauge participants' alcohol intake prior to imprisonment. Each participant was asked to describe their level of alcohol consumption according to the following three-point scale: none, drank socially, drank heavily or was an alcoholic. Almost a third of the sample (28%) reported that they consumed no alcohol. A third (35.6%) reported that they drank socially and the remainder (36.4%) drank heavily or described themselves as alcoholics. This information was not available in 6 cases (5%) as these participants declined to answer the question.

Figure 6.4 shows participants' level of alcohol consumption according to the main groupings in the analysis.

Figure 6.4

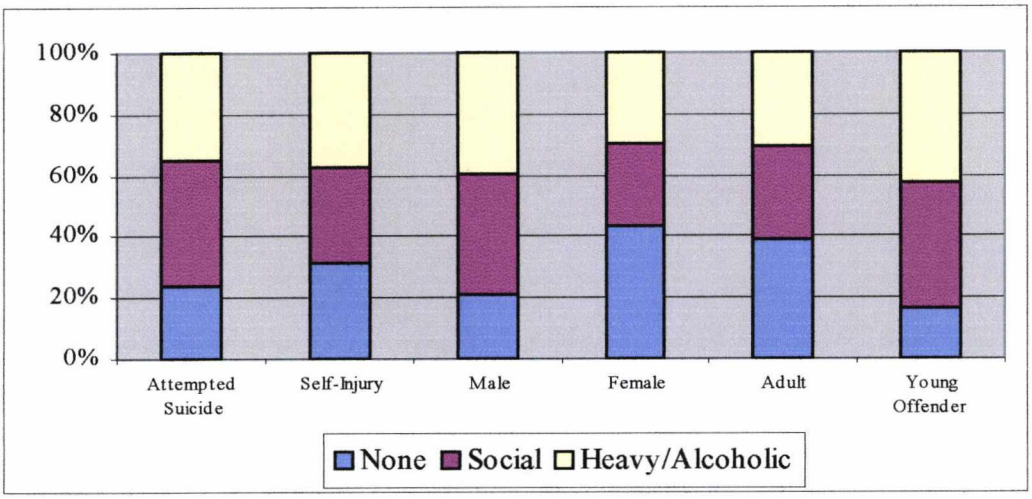


Figure 6.4 Alcohol Consumption by Behavioural Outcome, Gender and Age

As Figure 6.4 illustrates, participants who had injured themselves were slightly more likely, than those who had attempted suicide, to consume no alcohol. The reverse was true in the case of 'social' drinking. Similar proportions of both groups described themselves as heavy drinkers or alcoholics. Women were significantly more likely than men to consume no alcohol (Pearson χ^2 (1, N = 118) = 6.245, p = 0.012), as were adults when compared with young offenders (Pearson χ^2 (1, N = 118) = 7.485, p = 0.006). There were no other statistically significant differences between the groups.

6.6.4 Drug Use

Although the association between substance misuse and suicide in the community is well established (e.g., Harris and Barraclough, 1997), prison-based studies have tended to focus on substance use per se, without discriminating between specific drug types. There is, however, emerging evidence to suggest that the relationship between suicide and substance use is dependent on the type of drug in question. For example, Meltzer et al. (1999) found that when considering *any* type of drug dependence (e.g., cannabis, opiates, stimulants) there were no differences between attempted suicide and non-attempted suicide participants. However, a separate analysis on stimulant-dependence

(either alone or with opiates) showed that women on remand who had attempted suicide were almost twice as likely (as women on remand who had not attempted suicide) to be dependent. Meltzer et al's study (1999) is one of the few to examine the differences between men and women in this regard. They did not, however, consider the differences between young and old or between attempted suicide and self-injury. In order to provide a fuller picture, the current study examined the differences between the groups in this respect.

The nature and extent of participants' drug use in the current sample was collected via a self-reported measure. All participants were asked if they used drugs on a regular basis, i.e., not just as a one-off or an experiment. Table 6.5 summarises participants' responses on this issue. As illustrated, less than a fifth (17.2%) had never used drugs. Of those who had, by far the largest category was multiple drug use including opiates, accounting for over half of the sample.

Table 6.5

Drug-Type	N	Percent
None	21	17.2%
Opiates Only	5	4.1%
Stimulants Only	5	4.1%
Cannabis Only	12	9.8%
Multiple (including Opiates)	62	50.8%
Multiple (excluding Opiates)	16	13.1%
Yes, but type unspecified	1	0.8%

Table 6.5 Self-Reported Drug Use (Total Sample)

Between-group comparisons revealed very few differences. Consequently, none of the univariate statistics conducted on these data was statistically significant.

6.6.5 Drug Dependency

Participants were asked a series of questions regarding their previous and current drug dependency. Slightly more than half of the sample (54.7%) stated that they had, at some time been dependent on drugs. Between-group comparisons revealed that men were far more likely than women to report that they had been drug-dependent in the

past, a difference that approached statistical significance (Pearson χ^2 (1, N = 117) = 3.603, p = 0.058). When questioned further, the majority (41% of the whole sample) reported that they were dependent on opiates. Further, a third of the sample (33.3%) said that they were dependent on opiates at the time of their most recent imprisonment. Eleven participants (9.3% of the total) were receiving detoxification medication at the time of the interview. Of these, a statistically significantly higher proportion were women (Pearson χ^2 (1, N = 11) = 5.873, p = 0.034).

There were no other statistically significant differences between the groups in terms of drug dependency, its type and whether or not they were receiving detoxification medication.

6.6.6 Summary

Univariate analyses conducted on the psychiatric histories of the main participant groupings in the sample revealed that:

- Women were significantly more likely than men to be receiving medication for psychiatric or psychological problems;
- Women and adults (when compared with men and young offenders) were significantly more likely to have consumed no alcohol prior to imprisonment;
- Women were significantly more likely than men to be receiving detoxification medication for drug-dependency at the time of interview.

6.7 LOGISTIC REGRESSION: PSYCHIATRIC ILLNESS AND SUBSTANCE USE

The comparisons outlined above (using univariate analysis) revealed a number of significant differences between the three main groups in the analysis. In order to ascertain if any of these relationships could successfully predict group membership, a direct logistic regression was performed on attempted suicide group participants as the outcome on three psychiatric morbidity variables, as follows: psychiatric illness; drug use; and alcohol use. The first two of these variables were treated as categorical and the third (alcohol consumption) was ordinal. The following categorisations were used:

Predictor Variables	Categorisations
1. Psychiatric Illness	None, depression, personality disorders, dual diagnosis
2. Drug use	None, cannabis, stimulants, multiple (exc. opiates), opiate use.
3. Alcohol use	None, social drinking, heavy drinking, alcohol dependent

As in previous examples, separate analyses were conducted for men (remand and sentenced) and women.

6.7.1 Male Remand Prisoners

Of the 44 male remand prisoners in the overall sample, complete information was available in 39 cases. The test of the full model with all three predictors against the constant-only model (i.e., with no predictors) approached statistical significance (χ^2 (10, N = 41) = 18.039, p = 0.054) indicating that, as a set, the predictors reliably distinguished between men on remand who had attempted suicide and those who had self-injured. The model was reasonably accurate at successfully classifying group membership, with 91% of attempted suicide and 63% of self-injuring participants correctly predicted, for an overall success rate of 79.5%. A further test of goodness-of-fit is the Hosmer and Lemeshow test, was not significant, indicating that the model is not reliably different from the hypothetically perfect model: χ^2 (8, N = 41) = 6.017, p = 0.645. The Nagelkerke R Squared result (0.499) indicates that 50% of the variance in the dependent variable is explained by the covariates. Table 6.6 shows the regression coefficients, degrees of freedom, Wald statistics, significance levels and odds ratios for each of the predictors separately. According to the Wald criterion, none of the individual variables reliably predicted participant grouping. Thus, although the overall model including the covariates was reasonably good at predicting group membership, this was not accounted for by any of the variables independently.

Table 6.6

Variables	*B*	Wald test	Df	Sig.	Exp(B)
No psychiatric problems	2.052	2.060	1	0.151	7.785
Depression	-.206	0.034	1	0.855	0.814
Personality disorders	.280	0.036	1	0.850	1.323
Dual diagnosis	.038	0.001	1	0.979	1.039
Level of alcohol consumption	-.307	0.310	1	0.577	0.736
No drug use	1.409	1.033	1	0.310	4.092
Cannabis only	-9.110	0.042	1	0.838	0.000
Stimulants only	-1.683	0.905	1	0.341	0.186
Multiple (exc. Opiates)	.517	0.144	1	0.704	1.676
Multiple (inc. Opiates)	-1.073	0.824	1	0.364	.342
Constant	1.683	1.233	1	0.267	5.377

Table 6.6 Logistic Regression Coefficients, Wald Tests and Odds Ratios of Logistic Regression Analysis on Psychiatric Variables: Male Remand Prisoners

6.7.2 Male Sentenced Prisoners

Of the 41 male sentenced prisoners in the sample, 37 were included in the logistic regression analysis. The test of the full model with all predictors against the constant-only model was not statistically significant (χ^2 (10, N = 37) = 14.912, p = 0.135) indicating that the predictors, either as a set or individually, did not reliably distinguish between sentenced men who had attempted suicide and those who had self-injured.

6.7.3 Women Prisoners

Of the 39 female participants in the sample, 36 were included in the logistic regression analysis. Again, the test of the full model with all predictors against the constant-only model was not statistically significant, χ^2 (12, N = 36) = 15.693, p = 0.206, indicating that the predictors, as a set, did not reliably distinguish between women who had attempted suicide and those who had self-injured.

6.7.4 Total Population

Finally, an analysis was conducted on all participants. Of the 124 prisoners in the sample, 112 were included in the analysis. The test of the full model with all predictors against the constant-only model was not significant, χ^2 (12, N = 112) = 11.222, p = 0.510, indicating that these predictors could not reliably classify attempted suicide participants correctly.

6.7.5 Summary

A series of logistic regression analyses examined the relevance of psychiatric variables and substance misuse on attempted suicide and self-injurious behavioural outcome grouping, none of which successfully distinguished participants who had attempted suicide from those who injured themselves. Although, in the case of male remand prisoners, the final model including the independent variables was significantly different from the constant-only model, none of the individual variables reliably predicted participant grouping.

6.8 SELF-REPORT MEASURE OF GENERAL HEALTH

A number of studies have found a relationship between physical illness and completed suicide in the general community (see Williams, 1997). Similarly, Meltzer et al. (1999) reported substantially higher prevalence of long-term physical illness among participants who had attempted suicide. Little attention has been focussed on the role of physical illness in self-injury as distinct from attempted suicide. Studies which have (e.g., Arnold, 1995) have not been conducted in prisons. The current study considered this issue by measuring participants' perceptions of their general health and well being, using a three-point scale. In addition, participants were asked to disclose any physical illnesses.

Participants were asked to classify their health as good, fair or poor. Overall, only a minority (13.9%) responded that they were in poor health. Slightly more than a third (34.8%) described their health as fair, whilst around half (51.3%) said that they were in good health. In addition, participants were asked to disclose any physical health

problems. Two-thirds (67.5%) reported no health problems. The problems of the remaining third of participants included the following: epilepsy (3.3%); asthma (9.8%); diabetes (0.8%); multiple problems (5.7%); and 'unspecified' (13%).

Participants' responses on these general health questions were compared according to their behavioural outcome, gender and age categorisations. Firstly, women were statistically significantly more likely than men to complain of physical health problems (Pearson χ^2 (1, N = 123) = 5.524, p = 0.019). Given that more women reported physical health problems, it was expected that more women would describe their physical health as poor, as was the case (Pearson χ^2 (1, N = 123) = 4.524, p = 0.033). Finally, men were significantly more likely than women to describe their health as good (Pearson χ^2 (1, N = 123) = 4.751, p = 0.029). There were no significant differences between participants who had attempted suicide/injured themselves or adults/young offenders.

6.9 SUMMARY

The focus in the current chapter has been on the background characteristics of the current sample. A range of univariate and multivariate statistical techniques have been conducted in order to establish the differences and similarities between the main behavioural outcome, age and gender groupings on their socio-demographic, criminological and psychiatric backgrounds, as well as their general health and well being. Having established a number of differences between the groups in these terms (which are summarised in section 6.12), attention now turns to participants' most recent suicide attempt of incidents of self-injury. Participants' histories of previous suicidal behaviours are then described.

6.10 THE CURRENT INCIDENT OF ATTEMPTED SUICIDE/SELF-INJURY

Participants' chosen methods of attempted suicide and self-injury are shown in Table 6.7 below. As illustrated, the most common method was the relatively minor (in terms of medical severity) and involved the cutting of various body parts. The second most common method was cutting of the wrists, throat or an artery, followed by attempted hanging or strangulation. A small number of participants injured themselves in other ways, such as purposefully taking overdoses of prescribed medication, fire setting or

swallowing various objects. Few engaged in multiple methods, such as cutting and hanging.

Table 6.7

Drug-Type	N	Percent
Hanging/Strangulation	26	21.0
Drug Overdose	3	2.4
Cutting of throat, wrists or artery	32	25.8
Cutting elsewhere on the body	48	38.7
Multiple methods	5	4.0
Swallowing of various objects	2	1.6
Fire-setting/self-burning	5	4.0
Injecting oneself with air	1	0.8
Hit self so as to cause injury	1	0.8
Suffocation	1	0.8
Total	124	100%

Table 6.7 Method of Attempted Suicide/Self-Injury

As expected, the vast majority of participants who attempted to hang or strangle themselves were classified as having attempted suicide (Pearson χ^2 (1, N = 124) = 27.397, p = <0.001). However, two participants who reported that they were not suicidal had engaged in these highly lethal behaviours. The vast majority of those who cut themselves in a less serious way medically were classified as having injured themselves (Pearson χ^2 (1, N = 124) = 35.162, p = <0.001). Adults were far more likely than young offenders to have cut their wrist/s, throat or an artery (Pearson χ^2 (1, N = 124) = 5.072, p = 0.024) whilst young offenders were far more likely to have attempted hanging or strangulation (Pearson χ^2 (1, N = 124) = 5.723, p = 0.017).

As discussed in Chapter 5, if participants' injuries were potentially life threatening and they reported that they had intended to die, they were classified as having attempted suicide. Those whose injuries were not life threatening and reported that they had injured themselves for reasons other then ending their lives, were classified as having injured themselves without suicidal intent. Overall, 52.9% of participants' injuries were potentially life threatening (n=63). As would be expected, the vast majority of those who knew that their life was at risk had attempted suicide (Pearson χ^2 (2, N = 119) = 93.449, p = <0.001). Interestingly, nine participants who said that they were not suicidal had engaged in these potentially life-threatening behaviours. Of these, five

were aware of the potential of their actions although they said that they had not intended to die.

The vast majority of participants were alone at the time of the incident (81.1%). Some (n=24) were in the presence of others although they were not in their direct vicinity. This included cases where, for example, the participant was sharing a cell but their cellmate was asleep and would, therefore, be unlikely to intervene. Finally, a small proportion (n=14) was in the presence of others when the injuries occurred. Contrary to expectations, there were no differences between attempted suicide and self-injuring participants in terms of the presence or absence of others at the time of the incident: it had been expected that those who attempt suicide would be more likely to be alone at the time. Women were statistically significantly more likely to be alone (Pearson χ^2 (1, N = 121) = 12.723, p = <0.001). There were no differences between adults and young offenders in this case.

6.11 PREVIOUS INCIDENTS

In order to examine if attempted suicide and self-injury were common behavioural patterns for the participants in the sample, each was asked a number of questions about previous incidents. This group of variables included the number of previous incidents, the age at which the first incident occurred and whether or not this was a conscious suicide attempt or an incident of self-injury for some other reason. As with the above comparisons, there were relatively few differences between the groups.

6.11.1 Number of Previous Incidents

The vast majority for whom complete information was available (88.7%) had injured themselves on at least one previous occasion. Of these, the majority (86.3%) had injured themselves on more than three occasions (rather than just once or twice). There were no differences between the participants when comparisons were made on the basis of behavioural outcome, i.e., neither attempted suicide or self-injuring participants had engaged in the behaviour more frequently. Similarly, gender and age-based comparisons revealed no differences between the groups.

6.11.2 Age at First Injury

The age at which participants first injured themselves varied from 3 years to over 40 years. The majority for whom information was available (42.5%) had injured themselves when they were aged between 15 and 19. A Mann-Whitney U test was conducted to evaluate whether attempted suicide or self-injury participants first injured themselves at a younger age. This test was used because the participants in the sample were assessed on a dependent variable (AGE) measured on an ordinal scale. According to Green, Salkind and Akey (1997) the Mann-Whitney test is more appropriate than a t-test since it measures differences between median scores on a test variable, a more meaningful measure of central tendency for ordinal data. Following the exclusion of cases with missing data, as well as those who had not injured themselves prior to the most recent episode, ninety-nine cases were included in the analysis. The test was statistically significant ($z = -2.036$, $p = 0.042$) indicating that attempted suicide participants were slightly older when the first incident occurred, with an average rank of 55.87, compared with 44.91 for self-injury participants.

A second Mann-Whitney U test, conducted on the basis of gender, showed that there was no significant difference between men and women in terms of the age at which they first injured themselves ($z = -1.231$, $p = 0.218$). Finally, an age-based comparison showed that adults had a mean ranking of 56.89, while young offenders had a mean ranking of 43.25, indicating that young offenders had first injured themselves at a younger age. This difference was statistically significant ($z = -2.539$, $p = 0.011$).

6.12 CHAPTER SUMMARY

This chapter has provided an overview of the characteristics of the current sample. Where appropriate, comparisons with other research into suicidal and self-injurious behaviours, both in prisons and the general community, were drawn. These comparisons have shown that the current sample is, in the main, representative of attempted suicide and self-injury, as defined by previous studies.

The initial (univariate) analysis revealed that, although a number of age and gender differences were found, there were very few differences between participants who had

attempted suicide and those who injured themselves. The overall differences (based on behavioural outcome, age and gender distinctions) are now summarised.

- Participants who had attempted suicide were (when compared with those who had injured themselves) slightly older when the first incident of self-injurious behaviour occurred;
- Men were more likely than women to be single;
- Women were more likely than men to be divorced and to have lived alone prior to imprisonment;
- Women were more likely than men to be sentenced;
- Women were more likely than men to be sentenced to life imprisonment;
- Women were more likely than men to be on medication for psychiatric problems and were more likely to be detoxification medication for drug withdrawal;
- Women were more likely than men to describe their physical health as poor;
- Young offenders were less likely than adults to be sentenced;
- Young offenders were more likely than adults to be charged with burglary;
- Young offenders were more likely than adults to be in prison for the first time at the time of interview.

As indicated above, relatively few of the univariate tests conducted on these data (namely chi-squared analyses or t-tests) revealed significant relationships or differences between the groups. Whilst this may be due to a relatively small n (n=124), another explanation is that single variables are simply not able to distinguish between the various sub-groups in the analysis.

To test this possibility, a multivariate technique (Logistic Regression) was performed on the data. This technique also represents a useful replication of the study conducted by Meltzer et al. (1999) that has been outlined in earlier chapters. In accordance with Meltzer and colleagues, analyses were conducted on prisoners' socio-demographic, criminological and psychiatric-related backgrounds. However, unlike their findings, none of the analyses conducted on the current data significantly differentiated between prisoners who had attempted suicide and those who had not (i.e., those who had injured themselves without suicidal intent). There are two main possibilities for this, which are discussed more fully in the discussion to this thesis (Chapter 12). Firstly, the current sample size is, comparatively speaking, very small. A large sample size is much more

likely to yield significant results (Tabachnick and Fidell, 1996). Secondly, it could be argued that the two behavioural outcome groups (i.e., attempted suicide and self-injury) are more similar than they are different, at least in terms of the variables examined within this chapter, that is socio-demographic, criminological and psychiatric/psychological factors.

The analyses summarised in this chapter have identified relatively few differences between the main sub-grouping in the analysis – that is, participants who attempted suicide and participants who had injured themselves without suicidal intent. This finding partly corresponds with the work of Liebling (1992) who reported that differences on background factors between prisoners who attempt suicide and those who do not exist only as a matter of degree; conversely, however, Liebling found that they had very different experiences of prison life. The day-to-day experiences of prison life among the current sample forms the focus on the following chapter, which aims establish if similar differences exist between participants who attempt suicide and those who injure themselves.

CHAPTER 7

RESULTS II: THE PRISON EXPERIENCE

7.1 INTRODUCTION

This chapter reviews the differences between the participant sub-groups in terms of their experiences of prison life. As discussed in Chapters 3 and 4, experiential factors are hypothesised to play a significant role in the aetiology of suicide and self-injury in prisons. Environmental psychology literature has argued (e.g., Canter, 1983) that when evaluating a person's experiences within a place, consideration needs to be given to individuals' interpretations of the social, situational and behavioural aspects of that place. These aspects are considered in the current study to assess whether they characterise participants' likelihood to attempt suicide or self-injure, as well as if there are age or gender differences.

Initial focus is on participants' experiences of the physical aspects of prison and, more precisely, if any specific groups tended to be housed in 'special' locations which, for the current purposes, means anything other than ordinary location. Attention then turns to participants' compliance with the overall prison regime. A number of researchers have noted that a higher number of disciplinary infractions distinguishes prisoners who injure themselves from others (Jones, 1986; Lester, 1991), suggesting that such behaviours may be the product of raised inter as well as intra-punitive hostility levels (Shea, 1993). The current study used, as a measure of prisoners' compliance, the number of offences against prison procedures with which they had been charged. This included, for example, whether or not a prisoner was 'on report' having broken prison rules or had earned certain privileges under the 'incentives and earned privileges' policy. Focus then turns to consideration of participants' social and situational context and, more precisely, perceptions of their availability and utilisation of social support.

7.2 LOCATION, SPECIAL ACCOMMODATION, AND DISCIPLINARY PROCEDURES

A number of studies have reported that self-injurious behaviours are more likely to occur in areas other than normal location, on for example, segregation units, Vulnerable

Prisoners Units (VPU) or in healthcare centres (Ross et al., 1978). This finding has some resonance with the Jones's (1986) suggestion that those who injure themselves are more prone to disciplinary infractions. Similarly, Toch, Adams and Grant (1989) hypothesised that the category of prisoners who were 'maladaptive' – within which they including those who injure themselves/attempt suicide - are dealt with by medical or disciplinary domains of the prison, depending on whether their behaviour is viewed as psychiatric or volitional. These theories were tested on the current data by examining prisoners' locations at the time of the incident and undertaking a comparison between those who had attempted suicide and those who had injured themselves.

Figure 7.1 shows participants' locations when they attempted suicide of injured themselves.

Figure 7.1

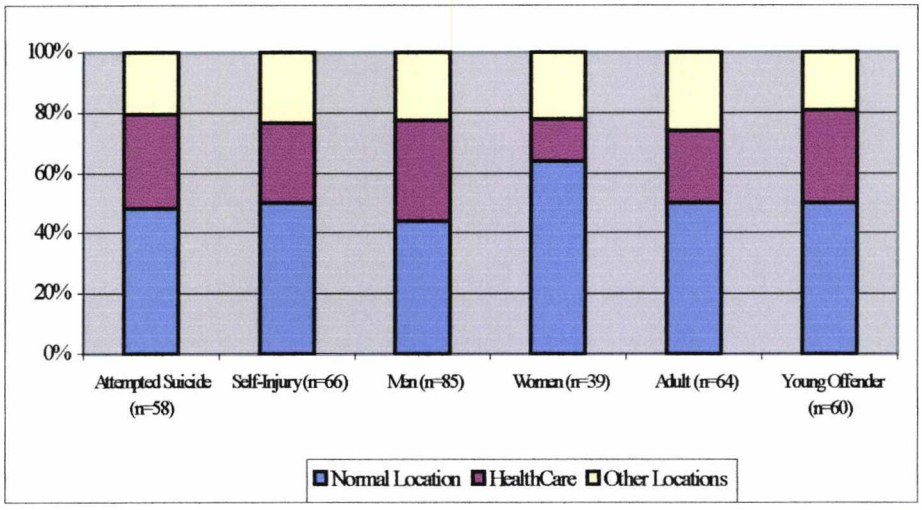


Figure 7.1 Location by Behavioural Outcome, Gender and Age

As Figure 7.1 illustrates, there were some variations between the groups, particularly in terms of the gender distinction. Men were statistically significantly more likely than women to be held in healthcare centres (Pearson χ^2 (1, N = 116) = 4.903, p = 0.027). Similar proportions of attempted suicide and self-injuring participants, as well as adults and young offenders, were housed on 'normal' location. Slightly fewer were held in healthcare centres and fewer still were held in 'other' locations, which included vulnerable prisoner and psychiatric units. By way of comparison, the locations of prisoners who died in custody in recent years are shown in Table 7.1 (HM Prison Service, 2002).

Table 7.1

Year	Normal	Healthcare	Segregation	VPU	Other
1996	59%	27%	8%	2%	5%
1997	56%	24%	9%	6%	6%
1998	68%	13%	6%	10%	2%
1999	66%	11%	5%	10%	8%
2000	56%	22%	14%	5%	4%
Mean	**61%**	**19%**	**8%**	**7%**	**5%**

Table 7.1 Prisoners' Locations at Time of Death (HM Prison Service, 2002)

As Table 7.1 illustrates, the majority of prisoners who died (61%), were housed on 'normal' location. However, a disproportionate number, when compared with the general prison population, were housed on 'special' units, including health care centres and vulnerable prisoners' units (HM Prison Service, 2002).

7.2.1 Special Accommodation

In 1999, the Prison Service ended the practice of placing prisoners at elevated risk of suicide or self-injury in what are commonly known as 'strip cells'. Such cells have fewer means of injury, in terms of ligature points, and are where prisoners would have all their normal clothes removed and replaced with 'protective' clothing. It is surprising, therefore, that almost half of participants in the current sample (45.8%) had spent at least some time in such accommodation in the three months prior to interview, given that the data collection was undertaken some months after the policy was abandoned. Further, 14% had been in a strip cell on more than two occasions in the month preceding interview. Comparisons revealed no statistically significant associations between the various sub-groups and their experience of being placed in such accommodation.

7.2.2 Compliance with Prison Regime

Three separate measures were used to assess participants' compliance with prison regimes. These were as follows:

1. The number of times they had been placed 'on report' for disciplinary infractions;
2. The number of times they had been placed in the prison's segregation unit for punishment (rather than their own protection);
3. Their regime level at the time of the incident.

7.2.3 Time Spent Segregated from Other Prisoners

A quarter of the sample (25%) had been segregated from others on at least one occasion prior to interview. Of these, 11% had been segregated on more than two occasions. A comparison showed that being segregated on at least two occasions was statistically more likely among prisoners who had injured themselves (Pearson χ^2 (1, N = 116) = 5.716, p = 0.017). No age or gender differences were found.

7.2.4 Disciplinary Infractions

The second measure of participants' compliance with the prison regime was the frequency with which they had been on report. A wide variety of reasons for being placed on report were given by participants including disobeying orders, fighting, suspicion of having taken drugs, damaging property and having received a positive mandatory drug test. A third of participants (34.4%) had been placed on report in the three months preceding interview. Of the remainder, 19.6% had been on report once and 14.8% had been on report more than twice. No specific gender, age or behavioural outcomes were associated with frequency of being placed on report.

7.2.5 Regime Level

The final indication of participants' general compliance was their regime level when the incident occurred. The Prison Service introduced the 'incentives and earned privileges' system in the early 1990s, as a system of 'rewarding' prisoners who comply with the overall prison regime. There are three levels, basic, standard and enhanced, which determine the level of privileges prisoners are entitled to. Those on the lowest (basic) regime are entitled to far fewer privileges than those on the medium (standard) and high (enhanced) regimes, such as extended time out of cell and access to telephones.

Although there has been very little research into the relationship between suicide/self-injury and regime level, given the association between boredom and self-injurious behaviours (Liebling, 1992), it makes intuitive sense that there would be higher levels of these behaviours amongst those on basic regimes. This hypothesis was tested on the current sample by examining regime level at time of incident.

The vast majority of the current sample (79.6%) was on the standard regime at the time of the incident; 8.3% were on the basic regime; 7.4% were on the enhanced regime; and 4.6% did not know their regime level. Level of regime at the time of the incident was not associated with behavioural outcome, age or gender.

7.3 Activities in Prison

Elements of the literature reviewed in Chapters 3 and 4 indicated that those who attempt suicide are typically worse off than other prisoners in terms of their general social situation, including social-support networks, work, education and other activities. For example, Liebling (1992) reported that prisoners who had attempted suicide (when compared with a group who had not) were less likely to work, had fewer rewarding things to do in prison, and were less physically active and more bored. The current analysis examined these factors and, as a further measure of prisoners' situational context, explored their relationships with others inside of prison, as well as their perceived levels of victimisation.

7.3.1 Employment Status

Liebling's finding that prisoners who engage in suicidal behaviours are inactive in terms of work and education is partially supported by the current research. Overall, only a quarter of participants were employed at the time of interview. Of these, a substantially higher proportion had injured themselves (32% compared with 17% of those who had attempted suicide). This association approached statistical significance (Pearson χ^2 (1, N = 116) = 3.742, p = 0.053) indicating that participants who had attempted suicide were less likely than those who had injured themselves to be employed. Secondly, women were statistically significantly more likely than men to be employed (Pearson χ^2 (1, N= 116) = 5.370, p = 0.02). No age difference was found.

7.3.2 Education

Slightly less than half of the sample (43%) was actively involved in education. Whilst there was no difference between attempted suicide and self-injuring participants or men and women, a significantly higher proportion of young offenders, when compared with adults, attended education (Pearson χ^2 (1, N = 116) = 12.510, p =<0.001). This was expected given that a substantial proportion of the sample were young offenders, for many of whom education is mandatory.

7.4 PARTICIPANTS' RELATIONSHIPS WITH OTHERS IN PRISON

Previous research suggests that prisoners' positive association with their peers is advantageous to successful adaptation to their environment, particularly in the early stages, when prisoners' usual support networks may be unavailable (Goldstein et al; 1989; Biggar, 1996; Carolissen, 1996). This section considers the nature and quality of participants' relationships with others in prison and examines if there are any differences between those who attempted suicide and those who injured themselves. Gender and age differences are also examined. The variables included in this sub-set are as follows: participants' cell-type preferences; their relationships with other prisoners and with staff; and the extent to which they felt threatened by other prisoners or staff.

7.4.1 Preference of cell-type

When questioned, slightly more than half of participants for whom information was available (51.6%) reported that, given the choice, they would share a cell with another prisoner; 37.7% said they would prefer a single cell; 10.76% had no preference. Information was missing in two cases (1.6%). There were no differences between the sub-groups in the analysis in their preferences for specific cell-types.

7.4.2 Participants' Relationships with Other Prisoners

A three-point scale was devised to measure the quality of participants' relationships with other prisoners. The range was from 1 to 3, with a score of 1 indicating that they never got on with other prisoners, 2 indicating that they sometimes got on with other prisoners and 3 indicating that they always got on with other prisoners.

Overall, very few (1.6%) reported that they never got on with others; 19.5% reported that they got on with others only sometimes; whilst the vast majority (78.9%), said that they always got on with other prisoners. There were no significant associations between participants' relationships with other prisoners and their behavioural outcome, gender or age.

7.4.3 Participants' Relationships with Staff

The same scale was used to measure participants perceived relationships with staff. Similarly, very few participants (4%) said that they never got on with staff; 26% reported that they only sometimes got on with staff; and the remaining majority (69.6%) reported that they always got on with staff. Adults and young offenders differed in their perceptions of their relationships with staff. Adults were more likely to get on with staff 'sometimes' (Pearson χ^2 (1, N = 123) = 4.843, p = 0.028) and young offenders were more likely to get on with staff 'always' (Pearson χ^2 (1, N = 116) = 5.117, p = 0.024). There were no other statistically significant associations between the groups.

7.4.4 Participants' Fear of Other Prisoners

A three-point scale was devised to measure the extent to which participants' felt threatened by, or fearful of, other prisoners. The range was from 1 to 3 (with a score of 1 indicating they never, 2 that they sometimes and 3 that they always felt threatened). Two-thirds of respondents (66.1%) reported that they never felt threatened by other prisoners; a quarter (25.1%) felt threatened 'sometimes'; and 7.8% felt threatened 'always'. In terms of the extent to which they felt threatened by other prisoners, there were no behavioural outcome, age or gender differences.

7.4.5 Participants' Fear of Staff

Finally, the same three-point scale was used as a measure of the extent to which participants felt threatened by prison staff. The vast majority of participants (87.8%) reported that they never felt threatened; few (11.3%) felt threatened sometimes; and one participant (0.9%) felt threatened 'always'. As in the above case, there were no distinctions between attempted suicide and self-injury participants in the extent to which they felt threatened by staff. Neither were there any age or gender differences.

Although not statistically significant, these findings are meaningful in that they suggest that the tendency to attempt suicide or self-injure is not related to threats from staff or prisoners. This finding is contrary to previous studies (such as Liebling, 1992). If suicidal and self-injurious behaviours are not influenced by the behaviours of other prisoners or staff, it suggests that other factors, such as psychological, social and/or situational, may play a more fundamental role.

7.5 SOCIAL SUPPORT

A number of studies, both prison-based and those conducted in other settings, have highlighted the importance of social support in protecting individuals against negative life situations (see for example, Cohen and Wills, 1985; Snow, 2000). As a measure of the current sample's availability and utilisation of social support networks, the following questions were included in the interview schedule:

(1) Whether or not they had friends in prison within whom they could confide;
(2) If they had spoken to anyone about their recent problems;
(3) and, if so, whether or not this had made them feel any better;

In order to measure other types of social contact, participants were asked the following:

(4) Are you in contact with: family/partner/friends/solicitor/nobody/other;
(5) Would you say keeping in touch with people outside makes your time: easier/more difficult/neither.
(6) Would you say that not keeping in touch with people outside makes your time: easier/more difficulty/neither.

Of the 124 participants in the sample, there was missing data in 25 cases on one or all of the variables in this subset, leaving 99 participants in the analysis. The behaviour/gender and age proportions of these participants were as follows: attempted suicide/self-injury, 44% and 56%; male/female, 68% and 32%; and adult/young offender, 59% and 51%. In accordance with the overall aims of the thesis, behavioural outcome, gender and age-based comparisons were made.

The majority of participants (81%) reported that they had at least one friend in prison in whom they could confide. However, the majority (75%) had not discussed with anyone the problems that had precipitated their most recent episode of attempted suicide/self-injury. Of those who had, three (12%) had talked to a friend, whilst the remaining 88% had spoken to somebody in a position of authority, for example, a prison officer or a nurse. Discussing their problems had made no difference (either positively or negatively) to the majority (85%), whilst 8% felt better and 8% felt worse after discussing their problems. In terms of external social support, the majority (94%) were in contact with at least one person outside of prison, predominately friends or family; a further 4% were in contact with professionals (either individuals or organisations), whilst 5% had no external contact at all. Of those with contact, 69% felt that they benefited, whilst the remainder felt no benefit. The majority of those with no outside contact (60%) had chosen not to have any contact.

7.5.1 Social Support Within Prison

Diagrammatic representations of participants' availability and utilisation of internal social support are shown in Figures 7.2, 7.3 and 7.4, by the main sub-groups in the analysis. Figure 7.2 shows the *behavioural outcome* distinction. The figures in bold type show the number and proportion (in parentheses) of attempted suicide participants who responded positively to each item. Figures in italicised font show equivalent numbers/proportions for self-injury participants. Figure 7.3 shows participants' responses according to *gender* breakdown. Men's response categories are shown in bold typeface and those for women are shown in italics. Figure 7.4 shows an *age-grouping* breakdown. The figures for adults are shown in bold type and those for young offenders are shown in italic font. Given the very small numbers in some categories, it was not possible to conduct any statistical analyses, thus only proportions are shown.

Figure 7.2

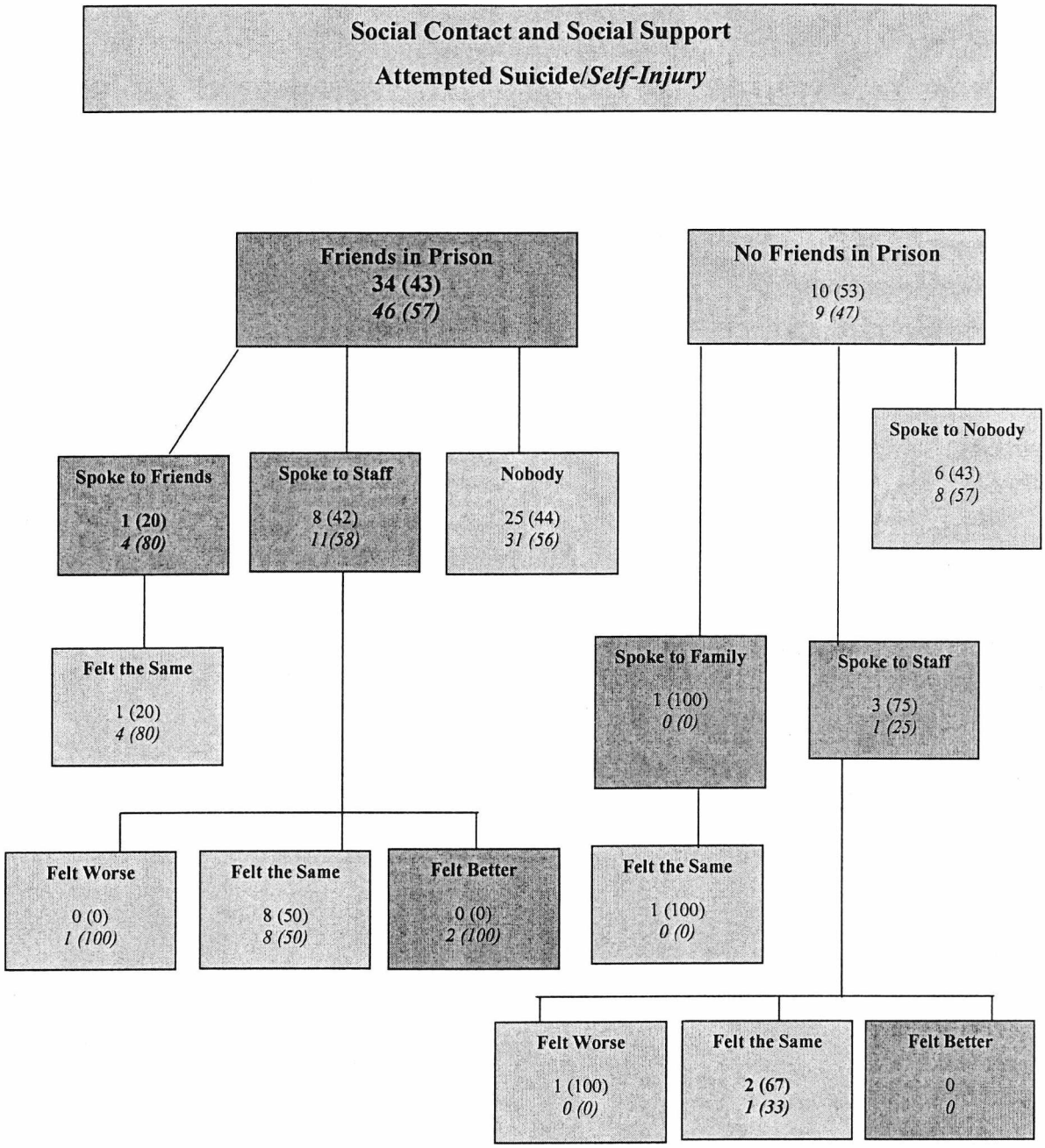


Figure 7.2 Social Contact and Social Support by Behavioural Outcome Attempted Suicide N=58 (47%) and Self-Injury N=66 (53%)

Figure 7.3

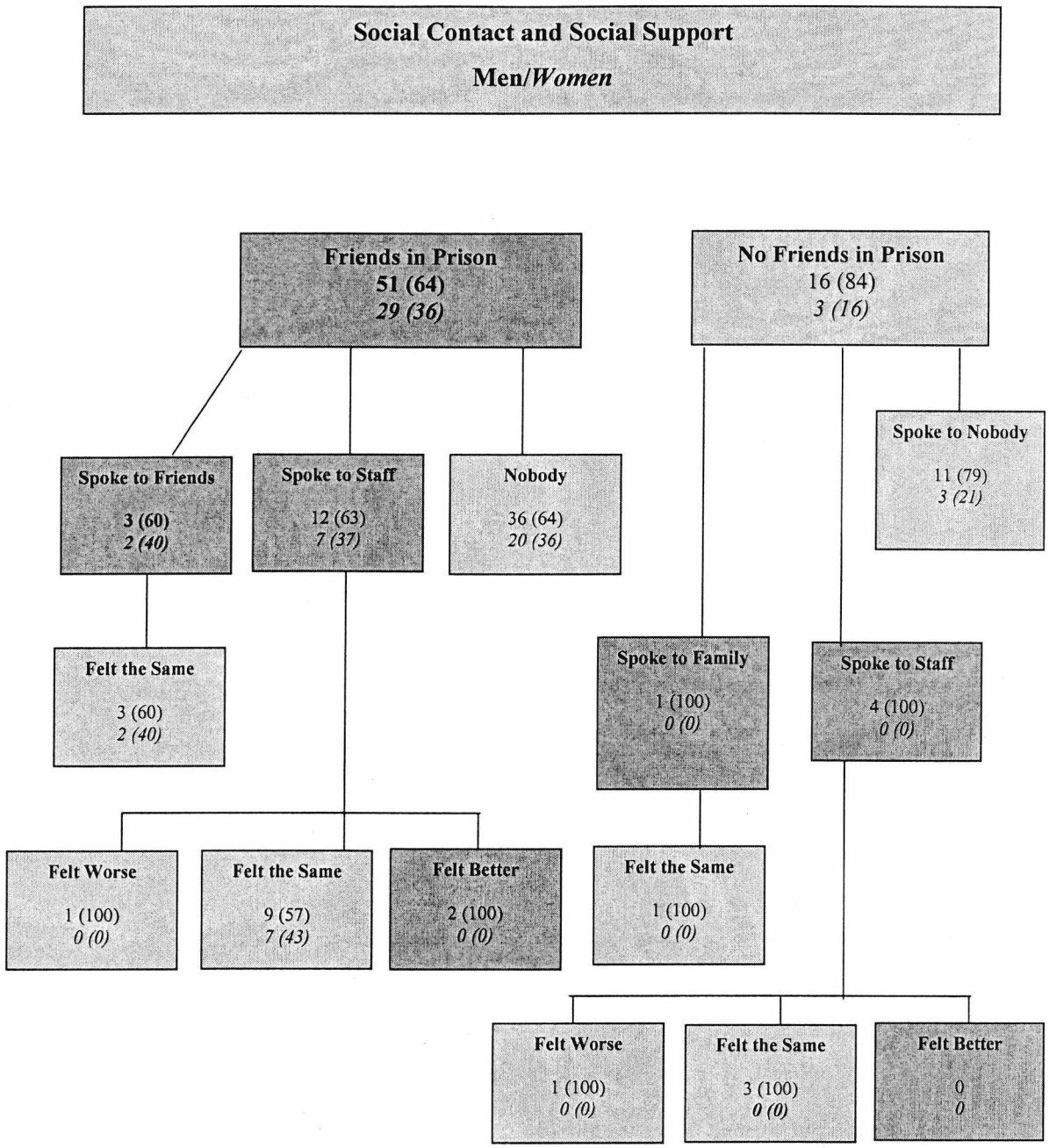


Figure 7.3 Social Contact and Social Support by Gender
Men N=85 (69%) and Women N=39 (31%)

Figure 7.4

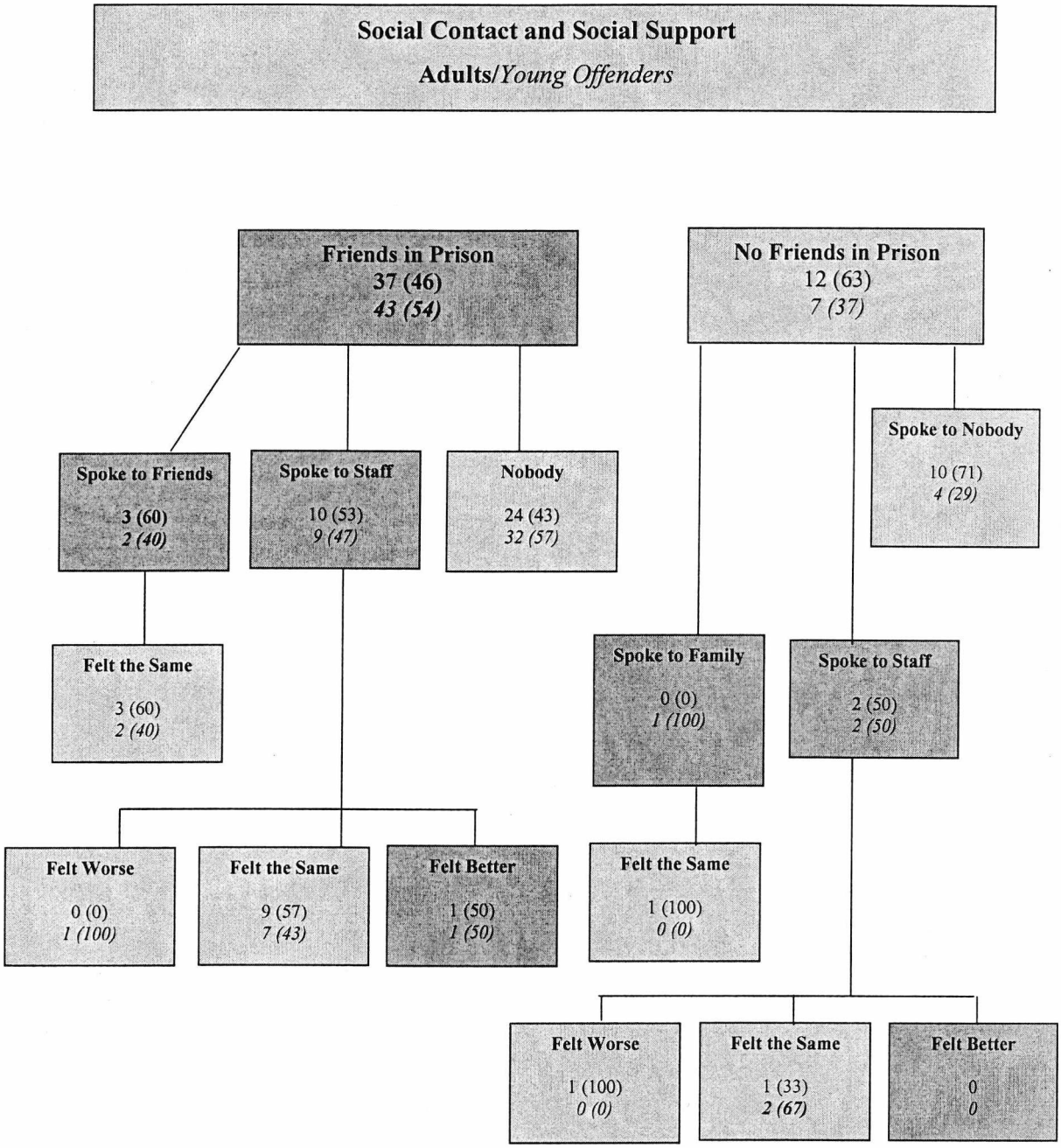


Figure 7.4 Social Contact and Social Support by Age Grouping
Adult N=60 (48%) and Young Offender N=64 (52%)

As shown in Figures 7.2, 7.3 and 7.4, nineteen participants reported that they had no friends in prison to confide in. Of these, ten (53%) had attempted suicide (see Figure 7.2); sixteen (84%) were male (see Figure 7.3); and twelve (63%) were adults (see Figure 7.4). Compared with the relative ratios of these groups in the overall sample, attempted suicide participants, men and young offenders were more likely (than their counterparts) to report having no friends. Of the remaining 80 participants who had friends, thirty-four (43%) had attempted suicide (see Figure 7.2); fifty-one (64%) were male (see Figure 7.3); and thirty-seven (46%) were adults (see Figure 7.4). These latter proportions are broadly equivalent to the ratios in the overall sample.

Of the small number of participants with no friends, there were similar proportions from both of the behavioural outcome groupings. A substantially higher proportion of these were adult men. Of those with no friends, a quarter (26%) had discussed their problems with somebody else; in most cases, they had spoken to prison staff. Of these, three felt the same after having discussed their problems, one felt worse and nobody felt better. The only participant who spoke to a family-member reported feeling no different (either positively or negatively) afterwards. The majority of those with no friends and who had not discussed their problems had self-injured and were adult men.

As mentioned above, only a small minority of participants (3%) had discussed with a friend or relative the problems that had precipitated their injury. Two of these (67%) had attempted suicide (see Figure 7.2) and both were male (see Figure 7.3) and young offenders (see Figure 7.4). Although it should be acknowledged that the numbers involved are very small, it can be inferred that again, when compared with their ratios in the overall sample, attempted suicide and male participants dominated, although in this case young offenders outnumbered adults.

Twenty-three participants spoke to people in authority about their problems. Of these, slightly more than half had injured themselves (see Figure 7.2). Most were male (see Figure 7.3) and slightly more than half were adults (see Figure 7.4). Finally, of the seventy-three participants who did not discuss their problems with anyone, slightly less than half (42%) had attempted suicide (see Figure 7.2); forty-nine (67%) were male (see Figure 7.3); and thirty-six (49%) were adults (see Figure 7.4). As shown, the effect of discussing their problems seemed to have had little impact on the majority of

participants. Very few (n=2) felt better afterwards; both of those who did had spoken to somebody in a position of authority about their problems, rather than a friend. Both had self-injured rather than attempted suicide (see Figure 7.2) and were male (see Figure 7.3). One was an adult and one a young offender (Figure 7.4). Twenty-one participants felt 'the same' after discussing their problems. Of those who felt the same after speaking with staff, equal proportions had attempted suicide and injured themselves (Figure 7.2). Most were male (see Figure 7.3) and most were adults (Figure 7.4). One participant (a male young offender who had injured himself) felt worse after speaking to staff. All of those who discussed their problems with friends reported feeling the same afterwards (n=5). Most of those had injured themselves (see Figure 7.2); most were male (see Figure 7.3) and slightly more than half were adults (see Figure 7.4).

7.5.2 External Contact

The vast majority of participants (95%) were in contact with somebody outside prison. Of the ninety who had contact with family or friends, slightly less than half had attempted suicide (see Figure 7.5); two-thirds were male (see Figure 7.6) and half were adults (see Figure 7.7). Of the four participants in contact with professionals, three (75%) had attempted suicide; all were male; and two were either adults or young offenders. Thus, in this instance, attempted suicide and male participants were over-represented. Finally, of the five participants with no outside contact, two (40%) had attempted suicide; three (60%) were male; and two (40%) were adults. These proportions are shown below in Figures 7.5, 7.6 and 7.7. Also shown are participants' views on the benefits of external contact. As illustrated, most (69%) felt it was beneficial. Of these, 42% had attempted suicide, 68% were male and 52% were adults. A slightly higher proportion of those who did not find contact beneficial had attempted suicide and slightly more than half were young offenders. Participants with no outside contact were asked if this was their preference. Of the three who reported it was, two (67%) had injured themselves; both were male young offenders. Equal proportions of participants who felt they would benefit from external had attempted suicide and injured themselves. Similarly, equal proportions of men, women, adults and young offenders felt they would benefit from external contact.

Figure 7.5

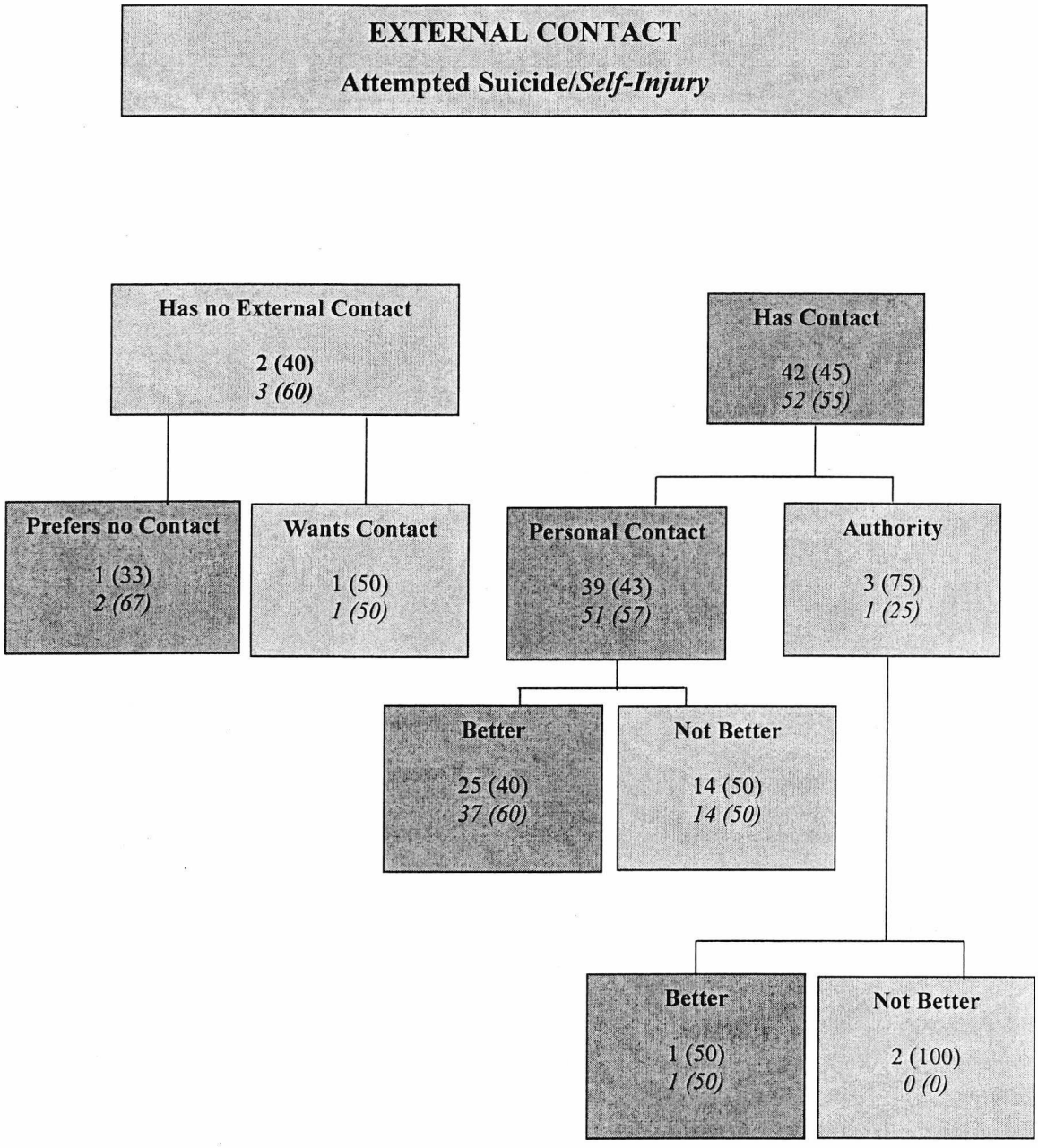


Figure 7.5 External Contact by Behavioural Outcome
Attempted Suicide N=58 (47%) and Self-Injury N=66 (53%)

Figure 7.6

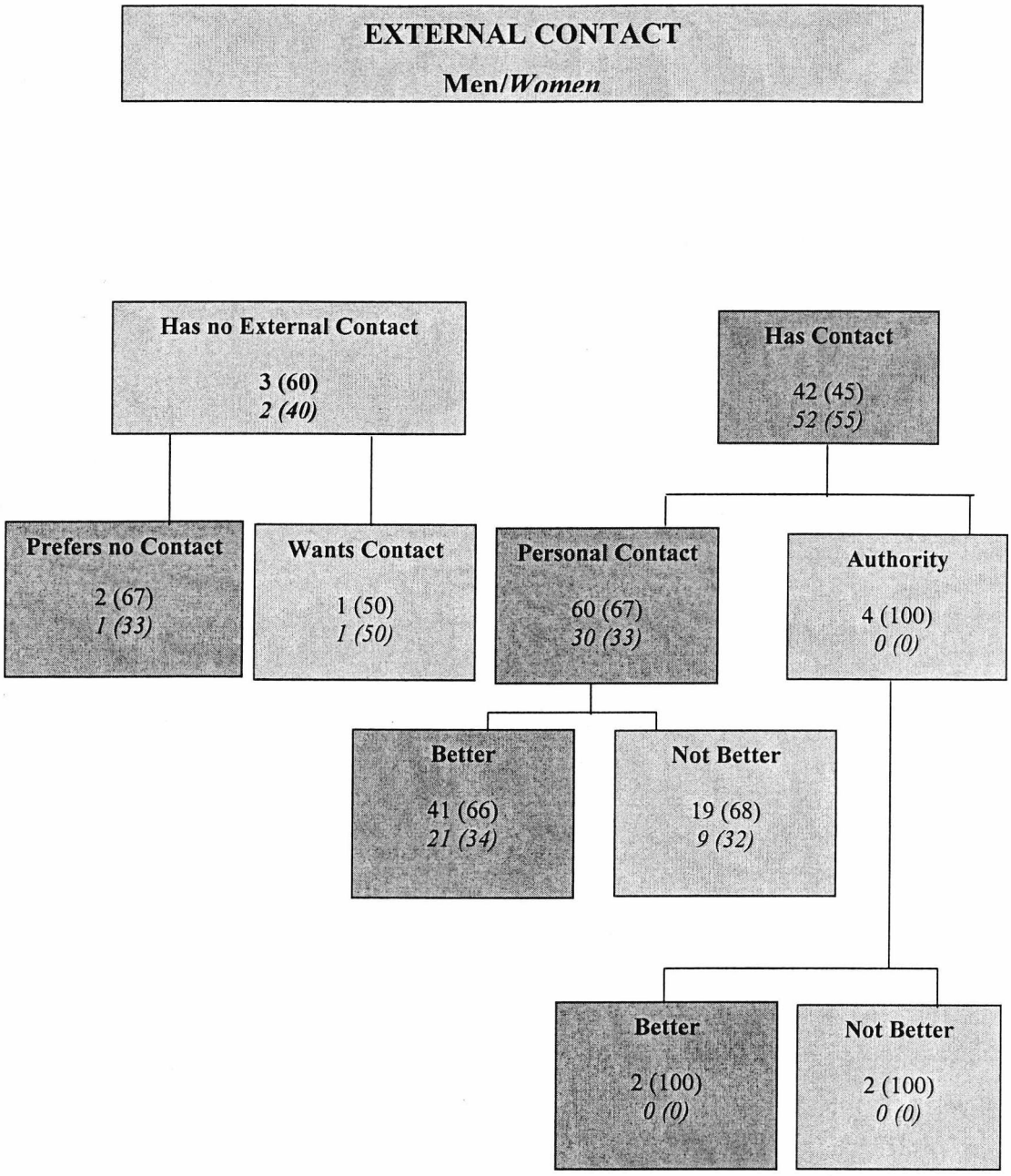


Figure 7.6 External Contact by Gender
Men N=85 (69%) and Women N=39 (31%)

Figure 7.7

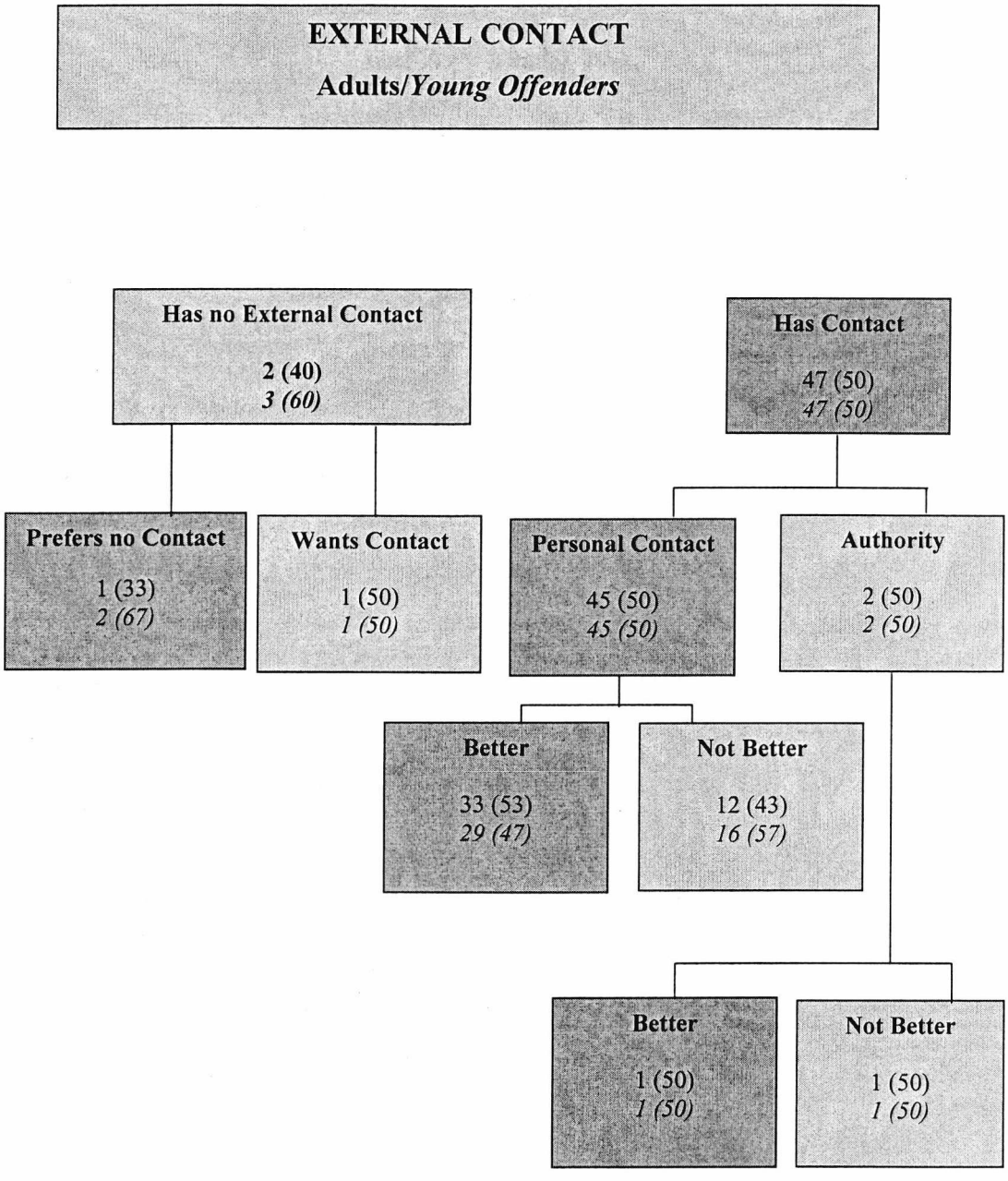


Figure 7.7 External Contact by Age
Adult N=60 (48%) and Young Offender N=64 (52%)

7.5.3 Summary

To recapitulate, participants were asked a series of questions in order to measure their availability and utilisation of social support and external contact. Although it should be acknowledged that the figures are, in some cases small, a number of inferences can be drawn. Firstly, a slightly higher percentage of those who reported having no friends had attempted suicide, were male and were adults. Those who had discussed their problems with family/friends were more likely to have attempted suicide, and were male young offenders. A slightly higher ratio of those who felt no impact from having discussed their problems had attempted suicide. All of those who felt worse were male and all of those who felt better had injured themselves. Higher proportions of those in contact with professionals outside of prison had attempted suicide and were male. A slightly higher proportion of those without any outside contact were adults. Finally, a slightly higher proportion of those who had outside contact but did not find it beneficial had attempted suicide and was a young offender.

As mentioned earlier, due to the very small frequencies in some instances, it was not feasible to conduct any statistical tests. Nevertheless, this overview has provided some interesting details about the samples' internal and external social support networks. As illustrated, the vast majority had supportive relationships with either friends, family or prison staff, although most chose not to utilise them.

7.6 CHAPTER SUMMARY

This chapter has examined participants' day-to-day experiences of prison life. The factors examined included participants' locations, the extent and type of rule-breaches with which they had been charged, the number of times they had been segregated from other prisoners and the quality of their relationships with other prisoners and staff. The results of a series of univariate analyses revealed a number of statistically significant differences between the sub-groups in the analysis. However, as with the analyses presented in Chapter 6, more differences were found when comparisons were conducted on the basis of *age* or *gender*, than when they were based on the behavioural outcome categorisation., which suggests that the examined background characteristics and day-to-day experiences of prisoners who attempt suicide are very similar to those who injure

themselves. The statistically significant differences found in the current sample are now summarised:

- Prisoners who injured themselves (when compared with those who attempted suicide) were more frequently segregated from other prisoners;
- Men were significantly more likely than women to be housed in healthcare centres;
- Women were more likely than men to be employed;
- Young offenders were significantly more likely than adults to be involved in education;
- Young offenders were significantly more likely than adults to describe positive relationships with staff.

The chapter also examined participants' availability and utilisation of social support networks. As discussed, the vast majority of the sample reported that there were people in whom they could confide although, in practice, very few did. Further, of those who did, very few felt better afterwards. These findings are in contrast to the perceived value of peer support (see for example, Biggar, 1996; Carolissen, 1996), but add support to Snow's (2000) observation that, although available, prisoners do not always utilise the support available to them.

In keeping with the focus on participants' background characteristics in this and the previous chapter, the following chapter focuses on participants' experience of negative life events, which are themselves widely-documented risk-factors for suicidal and self-injurious behaviours.

CHAPTER 8

RESULTS III: LIFE EVENTS AS RISK FACTORS

8.1 INTRODUCTION

This chapter focuses on the previous life experiences of participants in the sample. Previous studies have identified a number of specific life events that tend to be associated with prisoners in general, as opposed to civilian populations (e.g., Towl and Crighton, 1998). These include disrupted family backgrounds, familial histories of suicide, poor school performance, unemployment and depression.

In identifying life events which relate to attempted suicide or self-injury in prison, research has shown that a disproportionate number of prisoners who injure themselves and/or attempt suicide have been raised in dysfunctional and/or abusive environments (Livingston, 1997). In addition, Lester (1991) found that parental separation and divorce were commonplace among the parents of self-injuring prisoners. The most striking factor in distinguishing self-injuring from other prisoners is a history of previous abuse, whether physical or sexual. Research clearly indicates both adult prisoners (Wilkins and Coid, 1991) and young offenders (Liebling, 1991) who injure themselves are more likely to report having been physically abused as children. A history of sexual abuse in childhood is associated with self-injury amongst adult women in prison (Wilkins and Coid, 1991; Coid et al., 1992). Similarly, Meltzer et al. (1999) reported that men and women who had attempted suicide were significantly more likely than a control group who had not attempted suicide to have been both physically and sexually abused. There is also strong evidence in the clinical literature of an association between physical and sexual abuse in childhood and self-injurious behaviours in adulthood (Gelles, 1980).

The aim of the current chapter is to examine the background life experiences of prisoners who have attempted suicide *or* injured themselves. While there is evidence that the pattern of life events of those who engage in 'suicidal behaviours' differs from those who do not, there is no research to indicate whether there are any differences in the pattern of negative

life events *between* those who attempt suicide and those injure themselves for other reasons.

8.2 METHODOLOGY

As part of their analysis into non-fatal suicidal behaviours among prisoners, Meltzer et al. (1999) collected data on participants' experience of fifteen key life events, which were categorised into three broad groups: personal, relationship and educational/economic, as replicated in Table 8.1. Meltzer et al. (1999) reported that the proportion of prisoners who had experienced such events during their lifetime was nearly always greater among those who had attempted suicide, compared with those who had not. The largest differences were on 'personal' factors, particularly having experienced violence or sexual abuse. For example, two-thirds of female participants who had attempted suicide in the previous year had experienced violence at home and about half had been sexually abused. The proportions for female participants who had not attempted suicide were a third and a quarter respectively.

Table 8.1

Personal	Relationship	Educational/Economic
Bullying	Relationship breakdown	Expelled from school
Violence at work	Death of spouse or child	Dismissed or redundancy
Violence at home	Death of a parent or sibling	Ran away from home
Sexual abuse	Death of a close friend	Been homeless
Serious illness	Stillbirth	Had serious money problems

Table 8.1 Key Life Events as proposed by Meltzer et al. (1999)

Meltzer et al. (1999) also found a quantitative difference between prisoners who had engaged in suicidal behaviours and those who had not. Participants who had attempted suicide were more likely to have experienced *more* events in these three categories. The proportion of those who had tried to kill themselves in the past year who had experienced seven or more events was approximately three times that of those who had never attempted suicide, with actual proportions of 46% and 15% respectively.

An adaptation of Meltzer at al's (1999) key life event categorisation was used in the current study. For reasons of sensitivity and ethics, the following four items were deleted: sexual abuse, stillbirth, relationship problems and serious illness. The remaining eleven key life events were incorporated into the interview schedule to form Part 3 (see Appendix C) and every participant was asked directly if they had experienced each event or not, their answers being coded dichotomously (yes or no). During the course of the interview a relatively high number of participants (n=28) disclosed that they had been sexually abused. Therefore, this variable was incorporated into the analysis of key life events. It is important to reiterate, however, that participants were not asked about their sexual abuse history directly. Therefore, a higher number of participants may have been sexually abused, but simply not volunteered this information. The inclusion of this additional variable meant that twelve items were included in subsequent analyses.

The data used for the analysis in the current chapter were derived from participants' responses on the eleven questions they were directly asked, as well as the additional item of sexual abuse (if voluntarily disclosed).

8.3 Frequency of Participants' Experiences of Negative Life Events

Owing to missing data on one or more of the variables in this analysis, fourteen cases were excluded, leaving a total of 110.

All of the key life events examined were experienced by at least some participants. The events most commonly experienced were:

- Having run away from home;
- Having been homeless, and;
- Having experienced violence at home.

Almost three-quarters of the sample had experienced the first of these three events, and over-two thirds had had experienced the second two. The events least commonly experienced events were as follows:

- Violence at work (n=9), and
- The death of a spouse or child (n=11).

That so few of the sample had had these experiences was not unexpected, given their relatively young age (as outlined in Chapter 6). Participants' experience of all the life events included in the analysis are shown in Table 8.2.

Table 8.2

Key Life Event	%	n
Ran away from home	74.5	82
Been homeless	68.2	75
Violence at home	67.3	74
Expelled from school	57.3	63
Had serious money problems	50.9	56
Bullied at school	48.2	53
Dismissed or made redundant	45.5	50
Death of a parent or sibling	25.5	28
Sexual abuse	25.5	28
Death of a close friend	15.5	17
Death of spouse or child	10.0	11
Violence at work	8.2	9

Table 8.2 Key Life Events among Participants in the Sample

Tables 8.3, 8.4 and 8.5 show participants' experience of all the examined negative life events by behavioural outcome grouping, gender and age. The shaded rows in each of these tables highlight the largest differences between each of the sub-groups in the analysis. For example, over three quarters of prisoners who had attempted suicide had experienced violence at home, compared with less than two thirds of those who had injured themselves (see Table 8.3).

As shown in Table 8.3, there were relatively few differences between attempted suicide and self-injuring participants in their experience of these key life events. In most cases, the proportions that had experienced each event were split relatively evenly between the two groups. The exceptions are the sample's experience of violence at home and sexual abuse: (i) participants who had attempted suicide were more likely to have experienced violence at

home prior to imprisonment. This relationship approached statistical significance (χ^2 (1, N = 110) = 3.654, p=0.056); (ii) participants who reported sexual abuse were more likely to have injured themselves, although there was no significant association.

Table 8.3

Key Life Event	Attempted Suicide (n=51)		Self-Injury (n=59)	
	%	n	%	n
Expelled from school	58.8	30	55.9	33
Dismissed or made redundant	41.1	21	49.1	29
Ran away from home	72.5	37	76.2	45
Been homeless	66.6	34	69.5	41
Had serious money problems	58.5	30	44.1	26
Bullied at school	43.1	22	52.5	31
Violence at work	7.8	4	8.5	5
Violence at home	76.5	39	59.3	35
Death of spouse or child	13.8	7	6.8	4
Death of a parent or sibling	25.4	13	25.4	15
Death of a close friend	19.6	10	11.7	7
Sexual abuse	17.6	9	32.2	19

Table 8.3 Key Life Events by Behavioural Outcome

Table 8.4 shows the experience of key life events by gender. As with the behavioural outcome comparison outlined above, there were few differences between the groups in their experience of the life events examined. There were, however, two main exceptions. Firstly, men were significantly more likely than women to have been dismissed or made redundant from a job (χ^2 (1, N = 110) = 5.560, p=0.018). Secondly, women were significantly more likely than men to report that they had been sexually abused (χ^2 (1, N = 110) = 6.687, p=0.010).

Table 8.4

Key Life Event	Men (n=73)		Women (n=37)	
	%	n	%	n
Expelled from school	61.6	45	48.6	18
Dismissed or made redundant	53.4	39	29.7	11
Ran away from home	71.2	52	81.1	30
Been homeless	67.1	49	70.3	26
Had serious money problems	50.7	37	51.4	19
Bullied at school	49.3	36	45.9	17
Violence at work	8.2	6	8.1	3
Violence at home	64.4	47	73.0	27
Death of spouse or child	6.8	5	16.2	6
Death of a parent or sibling	23.3	17	29.7	11
Death of a close friend	16.4	12	13.5	5
Sexual abuse	17.8	13	40.5	15

Table 8.4 Key Life Events by Gender

Table 8.5 shows the same comparison, but conducted on the basis of participant age grouping. As illustrated, young offenders were significantly more likely than adults to have run away from home (χ^2 (1, N = 110) = 5.270, p=0.022). Young offenders were also more likely to have experienced the death of a close friend (χ^2 (1, N = 110) = 4.385, p = 0.036) and to have disclosed sexual abuse (χ^2 (1, N = 110) = 4.362, p=0.037).

Table 8.5

Key Life Event	Adults (n=58)		Young Offenders (n=52)	
	%	n	%	n
Expelled from school	51.7	30	63.5	33
Dismissed or made redundant	39.7	23	51.9	27
Ran away from home	65.5	38	84.6	44
Been homeless	63.8	37	73.1	38
Had serious money problems	50.0	29	51.9	27
Bullied at school	43.1	25	53.8	28
Violence at work	12.1	7	3.8	2
Violence at home	69.0	40	54.4	34
Death of spouse or child	12.1	7	7.7	4
Death of a parent or sibling	24.1	14	26.9	14
Death of a close friend	8.6	5	23.1	12
Sexual abuse	17.2	10	34.6	18

Table 8.5 Key Life Events by Age Grouping

8.3.1 Summary

In summary, a number of differences between the groups were found when analyses on individual life events were conducted on the basis of behavioural outcome, gender and age. Those who attempted suicide were more likely (than those who injured themselves) to have experienced violence at home. Men were more likely than women to have been dismissed or made redundant from a job. Women were more likely to report having been sexually abused. Young offenders were more likely than adults to have run away from home, experienced the death of a close friend and to have reported sexual abuse.

The next stage of the analysis involved an examination of the structure of these key life events and their co-occurrence, in order to establish if there was any pattern to the range and type of negative life events experienced.

8.4 THE STRUCTURE OF NEGATIVE LIFE EVENTS

In order to capture the complexity of the structure of participants' experiences and the interrelationships within this structure, the data were analysed using Smallest Space Analysis (SSA-1), one in the family of multidimensional scaling techniques. All MDS procedures have essentially the same purpose, which is to represent empirical relationships in a data set as points in geometric space, with the aim of making aspects of the data that may be obscured in the original matrix more apparent (Donald and Cooper, 2001). Its function is to test the relationship each variable has to every other variable in the analysis. The technique is increasingly used to examine psychological concepts (such as emotion) that have traditionally been examined using factor analysis (see for example, Plutchick and Conte, 1997). SSA-1 is preferable to factor analysis as it does not assume that the dimensions or structures are linear. This is important as there is a growing number of studies suggesting that many people's experiences cannot be adequately displayed using linear dimensions (Donald and Cooper, 2001). As outlined by Guttman (1968), SSA-1 was so called because, when compared with other MDS techniques, it produces a solution of smallest dimensionality. This is primarily because it operates on the rank order of original correlations rather than their absolute values (Canter and Heritage, 1990).

The SSA-1 programme computes association coefficients between all variables, transforming an original rectangular data matrix into a triangular matrix consisting of association coefficients for each variable with all other variables. SSA-1 offers a number of association coefficients to represent similarity between variables, the choice of which varies depending upon the nature of the data and the type of analysis undertaken. In the present case, the G index was used because it overcomes the problem of skewed dichotomies. The G index is equal to the phi coefficient or, more precisely, the Pearson Product Moment correlation coefficient as applied to dichotomous data (Hammond, 2000).

In SSA-1, as with other multidimensional scaling procedures, a geometric representation of the relationships between the variables, as derived from the association matrix, is generated. The algorithm attempts to find the best representation of the data, such that the higher the association between any two variables, the closer together the points representing them will be. Alternatively, two variables with no, or negative, relationships are assumed to be spatially distant from each other. SSA-1 operates on the ranks of the distances between the points and the ranks of the association coefficients. Thus it captures the relative sizes of associations, making it appropriate for the examination of the dominant themes in the present data. The SSA-1 programme provides a coefficient of alienation (Guttman, 1968) which is a measure of the goodness of fit between the rank order of the association coefficients and the rank order of their spatial representations. The smaller the coefficient the better the fit, i.e., the fit of the plot to the original correlation matrix (Shye, Elizur & Hoffman, 1994). The coefficient of alienation ranges from 0 to 1, with zero indicating a perfect fit between the geometrical representation and the data. Whilst there is no simple answer to the question of how small this coefficient must be (Borg & Lingoes, 1987) a guideline of 0.2 or under is deemed acceptable by most researchers (Shye et al., 1994).

The SSA-1 plot is interpreted by examining if there are any meaningful regions containing specific variables (in this case, specific negative life events) which might indicate or explain the structure underlying participants' overall experience of key life events. This interpretation of regional contiguity patterns is known as exploratory SSA-1 (Shye et al., 1994) and requires a clear statement of what the variables in each region have in common with one another (Canter & Herigate, 1990).

In the present example, twelve negative life experiences were included in the SSA-1 analysis, permitting the data to be considered in structural terms. These items were as follows: (i) having been bullied at school; (ii) having been expelled from school; (iii) having run-away from home; (iv) having been homeless; (v) having been dismissed from employment; (vi) having experienced violence at home; (vii) having experienced violence at work; (viii) having had serious financial problems; (ix) having experienced the death of a partner or child; (x) having experienced the death of a parent or sibling; (xi) having experienced the death of a close friend; and (xiii) having experienced sexual abuse.

Each participant is coded for the presence or absence of each of these events, scoring either 2 or 1 respectively. Participants' responses to the twelve items for all 124 participants were submitted to SSA-1. The programme carries out case-wise deletion of cases with missing data, which left 110 cases for analysis. The first stage in interpretation is to examine the inter-item correlation matrix produced by the SSA-1 programme, which in this case, indicated a high level of negative correlation between the items. Specifically, items 3 and 7 and 4 and 7 correlate negatively, which means that these items co-occur relatively infrequently. Item 3 relates to having run away from home, item 4 relates to homelessness and item 7 relates to having experienced violence at work. Conversely, items 7 and 9 (having experienced violence at work and the deaths of a partner or child) are very highly correlated ($r = 0.71$). Thus, those who experienced violence at work were also likely to have experienced the death of a child or partner.

The SSA-1 produced a three-dimensional solution, with an acceptable coefficient of alienation of 0.15. Figure 8.1 below shows vectors 1 and 2 of the resultant solution.

Figure 8.1

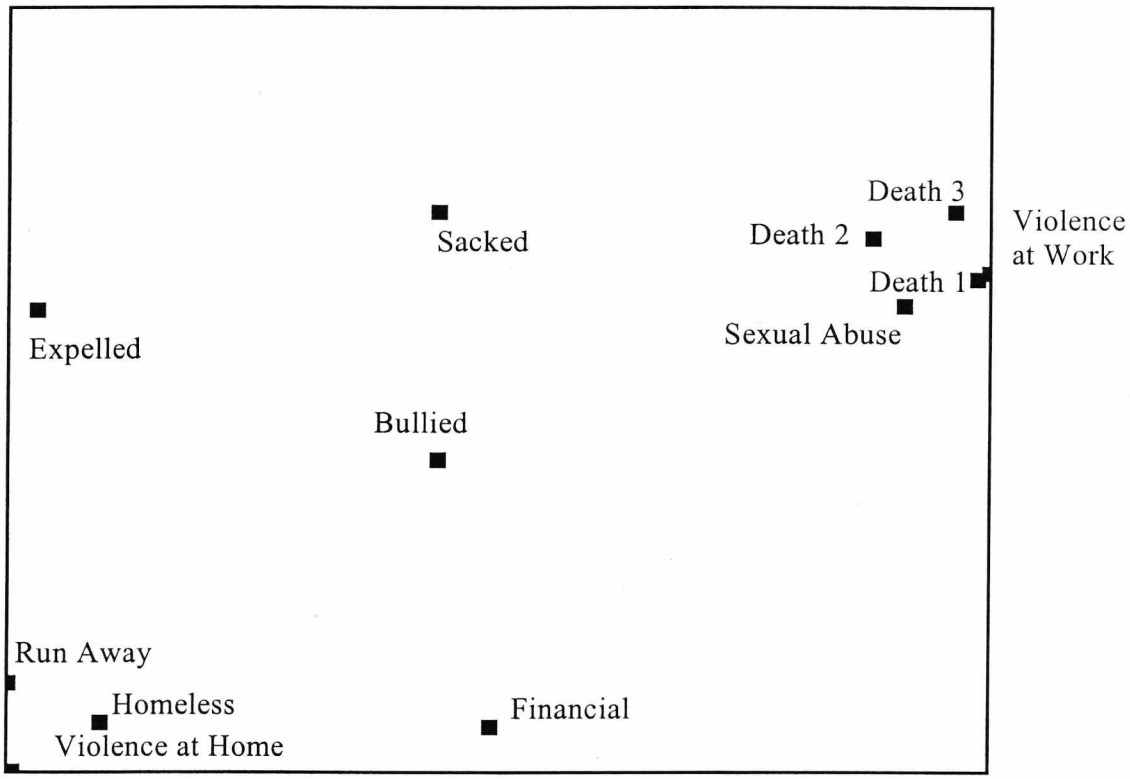


Figure 8.1 2-D representation of 3-D SSA-1 of Prisoners' Experiences of Negative Life Events, Vectors 1 x 2 (Coefficient of Alienation = 0.15)

As indicated, each of the negative life events in the analysis is plotted as a point in the space. Co-occurrence of the life events is represented as the distance between the points on the plot, such that the pattern of participants' negative experiences is revealed, indicating any shared or dominant structures amongst the group.

As shown in Figure 8.2, the plot has been partitioned into three clear regions. The first region, which has been termed 'rejection experience', contains three items: dismissal from work; expulsion from school; and having been a victim of bullying at school. The second region, termed 'negative home life', contains the following four items: having run away from home; having been homeless; experienced severe financial problems; and been a victim of violence at home. Finally, the third region, entitled 'personal violence and loss',

contains the following items: violence at work; the death of a child or partner; the death of a parent or sibling; the death of a close friend; and having been sexually abused.

Figure 8.2

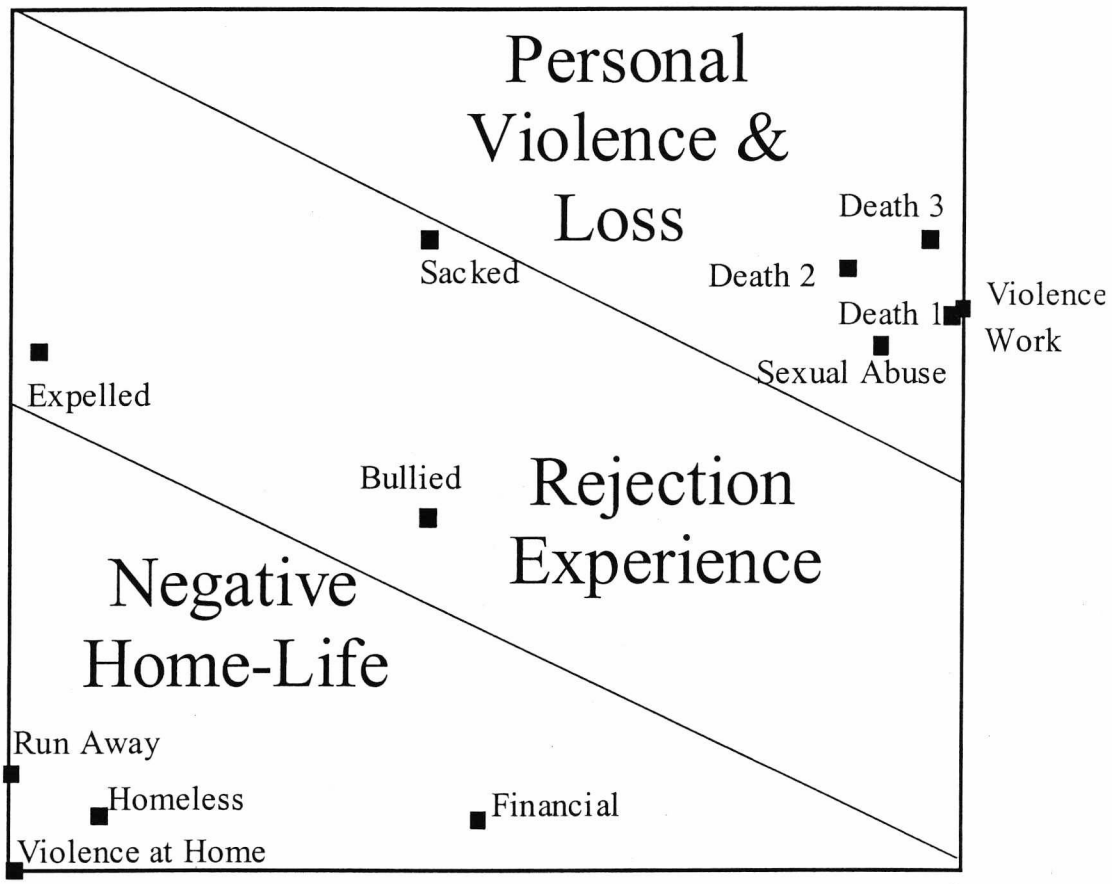


Figure 8.2 SSA-1 of Participants' Negative Life Events, Partitioned According to 'Negative Home-Life', 'Rejection' and 'Personal Violence and Loss' Dimensions

That the plot has been partitioned in this way suggests the presence of three qualitatively different types of key life events. Taking each region in turn, it is possible to hypothesise, in psychological terms, why these particular variables may co-occur.

It is suggested that the variables comprising 'negative home life experience' (characterised by having been a victim of violence at home, having run away and having been homeless) could conceivably be dependent upon one another. In other words, experiencing violence

at home could result in somebody running away, which may mean they experience financial problems which, in turn, may lead to homelessness.

The commonality between the events in the 'rejection' category could be that they all relate to events that the individual had some control or influence over. For example, although the reasons that participants were dismissed or expelled were not explored, it may have been because of actions of the individual concerned. The reason that the events in the region entitled 'personal violence and loss' co-occur is less clear. It could simply be because they are the least frequent set of variables in the analysis.

Having established a qualitative difference between the groups of variables in the analysis, the next stage is to ascertain if there is any quantitative variation. More specifically, an attempt was made to ascertain if any of the particular sub-groupings in the analysis was more or less likely to have experienced a higher number of negative life events overall.

8.5 The Cumulative Effect of Negative Life Experiences

As outlined in Section 8.1, Meltzer et al. (1999) identified a cumulative (i.e., quantitative) effect of negative life events, having established that participants who had attempted suicide had experienced a substantially higher numbers of key life events, than those who had not. However, it is important to emphasise that Meltzer et al. examined only the differences between groups who had attempted suicide and those who had not: they did not explore the differences or similarities between attempted suicide and self-injury. This is a drawback that the current study attempts to overcome.

A series of one-way between-subjects analyses of variance was conducted to evaluate the relationship between participant grouping and *overall* experience of negative life events as described above. The ANOVA F test evaluates whether the group means on the dependent variable differ significantly from one another. In the first analysis, the independent variable (participant grouping) included two levels, attempted suicide and self-injury. The dependent variable was the mean score on all three categories of negative life events (a total of twelve events) described above. Participants who had experienced an event scored 2 whilst those who had not scored 1 (range 12-24). The two groups of participants had

similar overall mean scores (15.94, SD=1.87 and 15.83, SD=1.92 respectively), thus there was no statistical difference between them (F (1, N = 108) = 0.093, p=0.761).

The second one-way ANOVA included male and female as the two levels of the independent variable. Women had a slightly higher mean score than male participants (16.00, SD=1.80 and 15.82, SD=1.95 respectively), although there was no significant difference (F (1, N = 108) = 0.216, p = 0.643).

The final one-way ANOVA in this series included adults and young offenders as the two levels of the independent variable. Young offenders had a higher mean score than adults (16.37, SD=1.90 and 15.45, SD=1.79 respectively), a difference that was statistically significant (F (1, N = 108) = 6.797, p = 0.010). The strength of this relationship is assessed by the results of the Eta squared statistic, which is used to assess the proportion of variance in the dependent variable that is related to the independent variable (Green et al., 1997). Eta squared ranges in value from 0 to 1, with a value of 0 indicating no differences in the mean scores among groups. Traditionally, η^2 values of .01, .06 and .14 represent small, medium and large effects sizes respectively (Green et al., 1997). In the current case, a moderate proportion of the variance in the dependent variable (6%, Eta squared = 0.06) is accounted for by the age factor. No follow-up tests were conducted, as there were only two levels to the dependent variable.

In addition to the ANOVA analyses on participants' overall negativity scores, individual analyses were conducted on each negative life event category, as established empirically by the SSA-1 analysis.

8.5.1 Rejection Events

In the first analysis, rejection events, the independent variable was behavioural grouping, with two levels (attempted suicide/self-injury). The dependent variable was participants' mean score on the three negative events in this category (expulsion from school, dismissal from employment and bullying at school). In this instance self-injury participants had a slightly higher mean score than attempted suicide participants (1.48, SD=0.31 and 1.53,

SD=0.30 respectively) although the result was not significant (F (1, N = 108) = 0.682, p=0.411).

In the second analysis in this series, the independent variable was gender. Men had a higher mean score than women (1.55, SD=0.31, compared with 1.41, SD=0.29), a difference that was statistically significant (F (1, N = 108) = 4.8961, p = 0.030). The strength of this relationship as measured by Eta squared was moderate, with the gender factor accounting for 4.3 per cent of the variance of the dependent variable. No follow-up tests were conducted, as there were only two levels to the independent variable.

In the final test in this series, the independent variable was age grouping with two levels (adult and young offender) and the dependent variable as above. Young offenders had a significantly higher mean score than adults (1.57, SD=0.31 and 1.45, SD=0.30 respectively), a difference that was significant, (F (1, N = 108) = 4.55, p = 0.047). The strength of this relationship, as measured by Eta squared, was moderate, with the age factor accounting for 3.6 per cent of the variance of the dependent variable.

8.5.2 Negative Home-Life Events

The next set of comparisons in this series examined participants' mean scores on negative home-life events (comprising homelessness, severe financial problems, violence at home and experience of running away from home). In the first comparison the independent variable was behavioural grouping with two levels (attempted suicide/self-injury) and the dependent variable was participants' overall scores. Participants who had attempted suicide had a slightly higher mean score (1.69, SD=0.33 and 1.62, SD=0.26 respectively), although the difference was not significant (F (1, N = 108) = 1.263, p =0.264).

In the second comparison, the independent variable was gender. Overall, the mean score for women in the sample was slightly higher than for men (1.69, SD=0.26 and 1.63, SD=0.031 respectively), although there was no significant difference between the groups (F (1, N = 108) = 0.870, p=0.353).

In the final comparison, the independent variable was age with two levels (adult and young offender). Overall, the mean score for young offenders was slightly higher than for adults (1.69, SD=0.30 and 1.62, SD=0.29 respectively), although there was no significant difference between the groups (F (1, N = 108) = 1.408, p=0.238).

8.5.3 Personal violence and loss

Finally, participants' mean scores on 'personal violence and loss' variables were examined. To reiterate, the variables included in this analysis were as follows: death of a child or partner; death of a parent or sibling; death of a close friend; and sexual abuse. There were no differences in mean scores between attempted suicide and self-injury participants (1.19, SD=0.18 and 1.19, SD=0.20 respectively), consequently, the ANOVA was not significant (F (1, N = 108) = 0.000, p=0.989).

The mean score for women was higher than for men (1.25, SD=0.22 compared with 1.16, SD=0.17), a difference that was statistically significant (F (1, N = 108) = 5.362, p = 0.022). The strength of the relationship between gender and the number of events experienced was moderate, with the gender factor accounting for 2.2 per cent of the variance of the dependent variable.

The final (age-based) comparison revealed that the overall mean score for young offenders was higher than for adults (1.23, SD=0.20 and 1.16, SD=0.18 respectively) a difference that was statistically significant (F (1, N = 108) = 4.274, p = 0.041). The strength of the relationship between age and the number of extreme events experienced was moderate, with the age factor accounting for 4.1% of the variance of the dependent variable.

8.5.4 Summary

To recap, a series of ANOVA tests was conducted to ascertain if any of the specific participant groupings in the analysis had experienced more negative life experiences, either overall or in any of the individual categories examined. The statistically significant differences between the groups are now summarised:

- Men had experienced a higher number of 'rejection events' than women;
- Young offenders had experienced a higher number of 'rejection events' than adults;
- Women had experienced a higher number of 'personal violence and loss' events than men;
- Young offenders experienced a higher number of 'personal violence and loss' events than adults.

8.6 THE QUALITATIVE STRUCTURE OF NEGATIVE LIFE EXPERIENCES

Having established a number of significant differences between the main participant groupings in the analysis, verification of the possible dual (i.e., qualitative and quantitative) effect of negative life experiences was sought. The technique used to examine this relationship was Partial Ordered Scalogram Analysis (POSA) (Shye, 1978; 1985), another in the series of multi-dimensional scaling techniques. As mentioned, POSA identifies qualitative, as well as quantitative differences between participants in the analysis. Each unique profile of scores (accounting for at least one incident of attempted suicide or self-injury) is represented as a point in geometric space. The quantitative differences between participants (i.e., differences in total score) are represented along the 'joint' axis (running north-east to south-west of the POSA plot). The qualitative differences between participants (i.e., differences in the type of events experienced) are represented along the 'lateral' axis (running north-west to south-east).

Participants who reported that they had, for example, been bullied at school, were coded '2' on this item. In contrast, those who had not experienced bullying were coded '1'. The coding for each participant on every item was then entered into a data matrix suitable for use with the analyses in this chapter. An example data matrix is shown in Figure 8.3. Each of the columns represents one of the life experiences described above and each row represents one of the participants in the analysis. The scores on all the variables can be added to give a measure of participants' experiences of key life events. Thus, a profile of scores with the highest level of experience of life events would read 222222222222 (sum=24), and one with the lowest would read 111111111111 (sum=12). In addition to the quantitative variation in negative life events, however, there is also a qualitative variation. For example, medium levels of negative life events can be achieved in qualitatively

different ways, e.g., 11221 (sum=7) or 22111 (sum=7). Although both life experience types are intermediate in terms of severity, they represent quite different experiences.

Figure 8.3

		Life Event					
		1	**2**	**3**	**4**	**5**	→
Participant No.	**1**	1	2	2	2	1	
	2	2	1	1	2	2	
	3	2	2	1	1	1	
	4	1	1	1	1	1	
	5	2	2	2	2	2	
	↓						

Figure 8.3 Example Data Matrix

In the current example, participants' scores on each of the variables arising from the three regions of the SSA-1 are summed to give a measure of negative life experience in that region. Each of these is now examined in turn.

8.7 'Rejection' Events

A data matrix was devised, which including all 110 participants in the analysis, based on their experience (or not) of each of the three variables within this category. Each participant was coded, according to two levels of experience. A score of 2 indicates that the participant had experienced each event, whilst 1 indicates that they had not. As described overleaf, the scores on these three variables can be totalled to give a measure of the degree of 'rejection' background for each participant, which can explain both the quantitative and qualitative variation in participants' experiences of rejection events. For example, a medium level of negative 'rejection' experience can be achieved in qualitatively different ways, e.g., 121 (sum=4), 211 (sum=4) or 112 (sum=4). These profiles indicate intermediate levels of negative life events but represent quite different experiences.

The overall POSA plot for rejection events is shown in Figure 8.4. Each profile of scores (accounting for one or more incident of attempted suicide/self-injury) is represented as a point in geometric space. The points represent all the participants with the same score profile. The quantitative variation in participants' experiences is represented along the 'joint' axis (north east to south west) of the plot. The qualitative region is represented along the 'lateral' axis (north west to south east). The number of incidents of attempted suicide/self-injury represented by each data profile is also shown. Thus, for example, the point in the top right hand corner represents the 15 people showing the highest level of rejection experience (with a score of 222). The point at the bottom left hand corner of the plot represents the 17 people with the lowest possible rejection score (111). The points in between represent the qualitative and quantitative differences between these extremes.

Figure 8.4

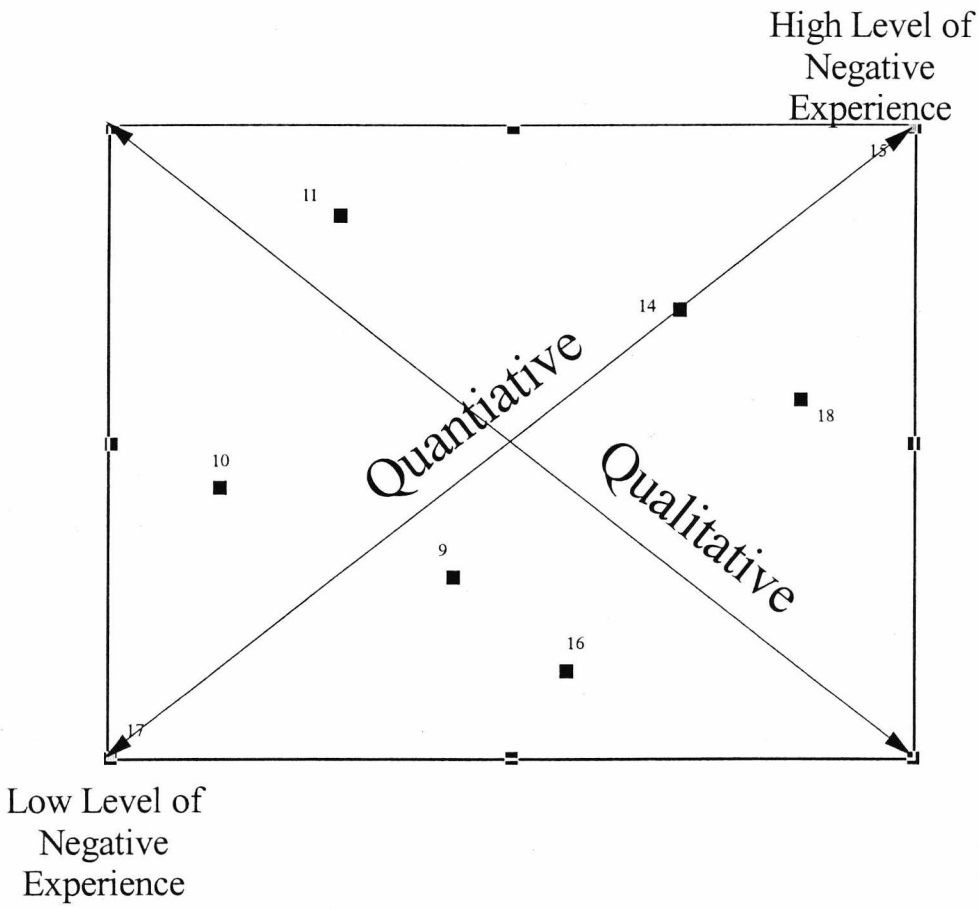


Figure 8.4 POSA plot of 'Rejection' Events (N=110, 3 items)

The output of the POSA programme also provides a series of 'item-plots', one for each of the variables in the analysis. In the item plots the same configuration of points is represented although, instead of the case number (as shown in the overall plot), the category code that each case was originally assigned on that variable is shown. Therefore, the figure 2 indicates that all the participants represented by that profile had experienced the event, whilst the figure 1 indicates that they had not. This allows the researcher to draw regional divisions including participants who had or had not experienced each event.

Figures 8.4a-c show the partitioning of the plot according to each of the three variables in the analysis. The positioning of the points in these plots are the same as those in Figure 8.4. However, in the item plots, those points marked with the figure 2 represent all those profiles (each accounting for one or more incident of attempted suicide or self-injury) who had experienced each of the events shown. Conversely, all those profiles marked with the figure 1 represent those profiles (accounting for one or more participant who had injured themselves or attempted suicide) who had not experienced the event. Once the regions have been drawn onto the diagrams, the researcher can compare the way that the different regions overlap, both with the other variables and with the actual cases as numbered on the plot (Wilson, 2000). In this way, it is possible to define empirically the nature of the background life events between different groups of participants in the sample.

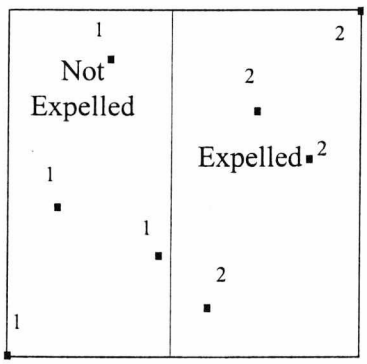


Figure 8.4a Expulsion from School

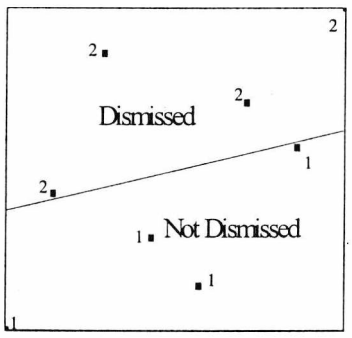


Figure 8.4b Dismissal from Employment

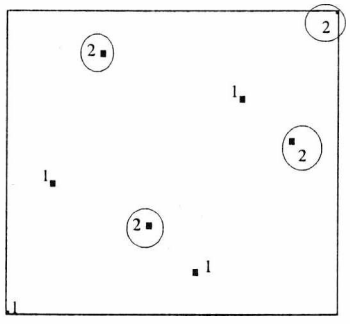


Figure 8.4c Experience of Bullying at School

Inspection of the plots in Figures 8.4a–8.4c indicate that expulsion from school and dismissal from employment are independent of one another since there are incidents in the sample corresponding to each of the four types resulting from their combination (i.e., expelled only, expelled and dismissed, dismissed only or neither expelled nor dismissed).

It is important to note that the variable bullying (Figure 8.4c) cannot be partitioned. This means that not only are dismissal and expulsion independent of one another, but that bullying is independent of both these variables. In other words, as well as the four types of rejection experience formed by the variables expulsion and dismissal, each of these regions contained participants who both had and had not been bullied, making a total of eight possible combinations, all of which are represented in the data. This model of rejection experience is shown in Figure 8.5.

Figure 8.5

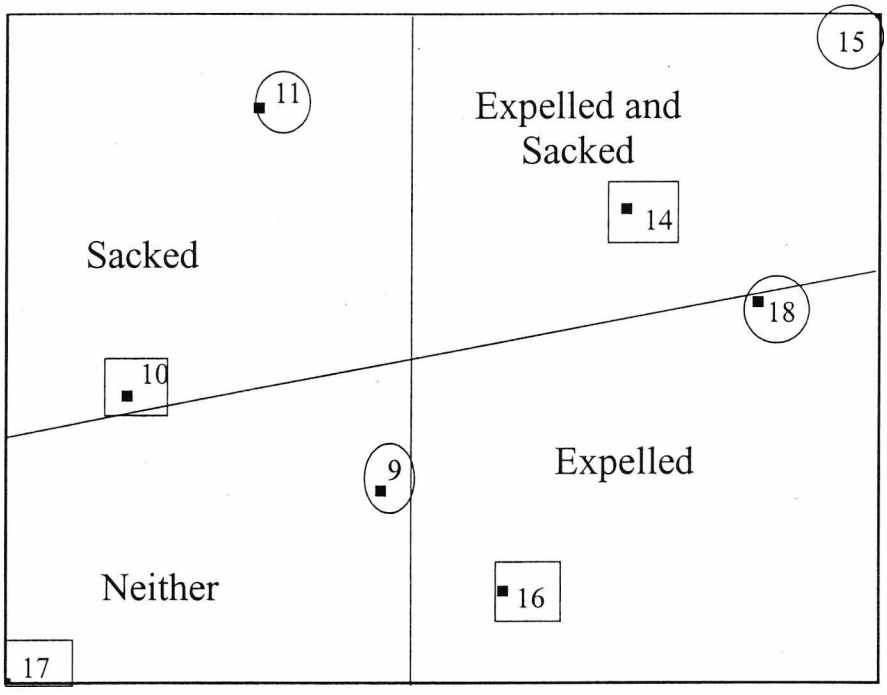


Figure 8.5 POSA plot partitioned according to 'Rejection' Events (N=110, 3 items)

As illustrated, the variables dismissed from employment and expelled from school form three clear regions (i.e., dismissed, expelled or both). Within each of these regions, some participants have and some have not had the additional experience of bullying. Those marked with a circle had been bullied and those marked with a square had not. The final region of the model, shown in the lower left-hand corner of Figure 8.5, includes those cases that had experienced none of these events or had been bullied only.

In accordance with the overall aims of the thesis, the next stage in the analysis involved an examination of the behavioural grouping, gender and age composition of the different types of rejection events arising from the POSA output. As the variable 'bullied' forms no independent region in the model of rejection experience resulting from the POSA, it has been excluded from further analysis. An examination of the types of participants forming each of the four regions shown in Figure 8.5 (with the exclusion of bullying) is now undertaken. Participants were categorised according to the number and type of rejection experiences they had encountered, resulting in four different combinations of this experience. Type 1 participants had not experienced any of the events. Type 2 had been expelled from school. Type 3 had been dismissed from employment. Finally, Type 4 had been expelled and dismissed.

8.7.1 Outcome, Gender and Age Differentiation

Figure 8.6 shows the proportion of attempted suicide and self-injuring participants who experienced each combination of 'rejection' events. For example, 18% and 14% of attempted suicide and self-injuring participants respectively had experienced none of the events in this category. A further 18% and 12% of attempted suicide and self-injuring participants respectively had been expelled from school and so on. As illustrated, the two groups were very similar in their experience of rejection events. Thus, as expected, follow-up cross-tabulation analyses revealed that there were no statistically significant associations between behavioural grouping and the experience of rejection events in this population.

Figure 8.6

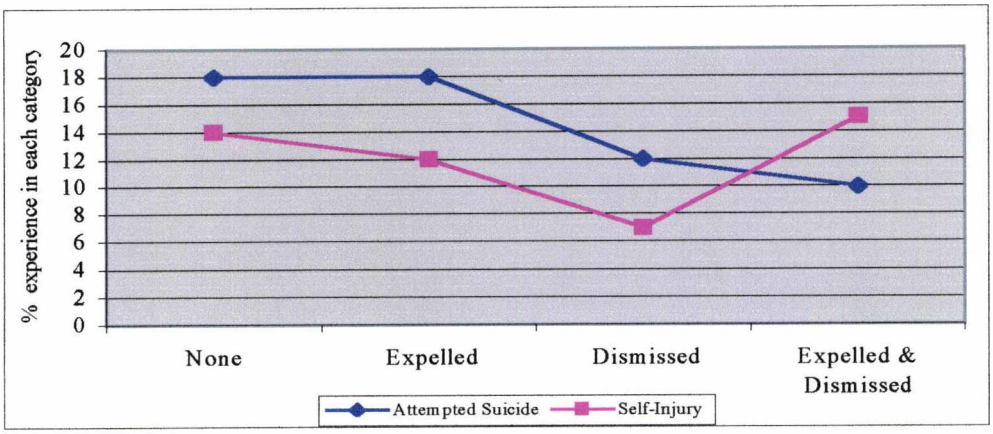


Figure 8.6 Rejection Events by Behavioural Outcome

Figure 8.7 below shows the four types of rejection events by gender. As shown, women were far more likely than men to have experienced none of the events in this category, as association that approached statistical significance (χ^2 (1, N = 110) = 3.357, p=0.067). Similar proportions of men and women had either been expelled from school only or had been expelled from school and dismissed from employment. Finally, a slightly higher proportion of men had been dismissed from employment only, although there was no statistically significant relationship between these variables.

Figure 8.7

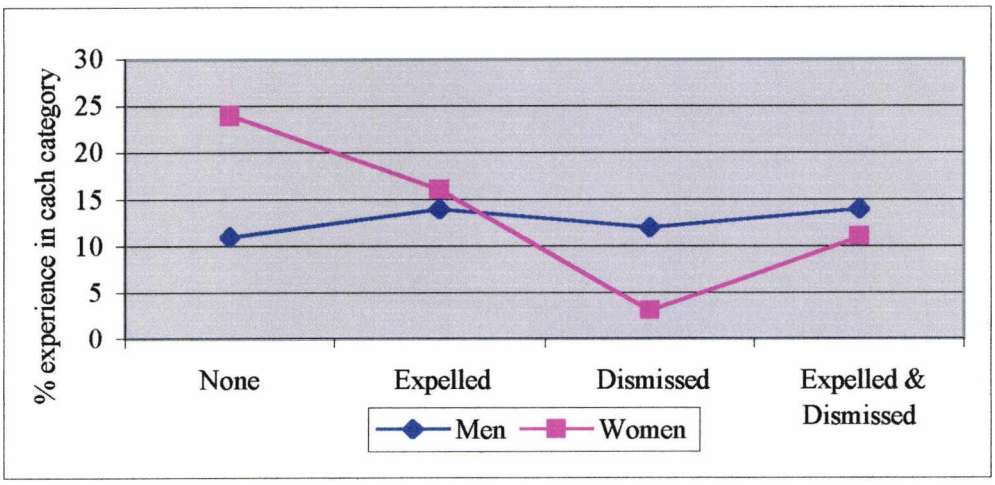


Figure 8.7 Rejection Events by Gender

Figure 8.8 shows the occurrence of rejection life events by age grouping (adult/young offender). As illustrated, a higher proportion of those who had not experienced any of the events in this category were adults. Similar proportion of adults and young offenders had been expelled from school or expelled from school and dismissed from employment. Finally, a slightly higher proportion of those who had only been dismissed from employment were young offenders. Despite these differences, none of the follow-up cross-tabulation analyses on these data were statistically significant.

Figure 8.8

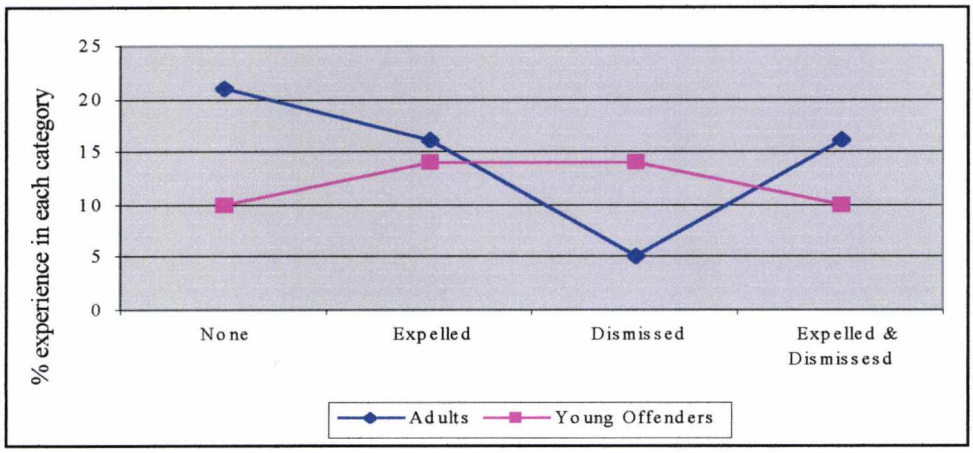


Figure 8.8 Rejection Events by Age

8.7.2 Summary

The above analysis has examined participants' experiences of the combination of 'rejection' events arising from the SSA-1 and POSA analyses. Comparisons were made on the basis of the main participant sub-groupings, i.e., behavioural outcome, gender and age. The behavioural outcome comparison revealed no significant differences between the participants, either in terms of each group's overall mean score (as discussed in Section 8.5.1) or in terms of their experience of specific combinations of rejection events (as discussed in Section 8.7.1). An age-based comparison revealed that, although young offenders had a higher overall mean score than adults (indicating a higher level of rejection experience overall), each group's experience of particular combinations of rejection events did not differ significantly. A similar pattern emerged when a gender-based comparison was undertaken: men had higher overall scores than women, but their experience of

particular combinations of rejection events did not differ significantly from the women in the sample.

8.8 NEGATIVE HOME LIFE EVENTS

The second region in the key life events SSA-1 (see Figure 8.1) was entitled 'negative home life'. The variables included in this set are as follows:

- Having run away from home as a child,
- Having experienced violence at home,
- Having been homelessness
- Having experienced serious financial problems.

As previously, those who experienced each event within this category scored 2, whilst those who did not scored 1. Participants' scores on the four variables in the analysis are added to give a measure of the degree of home life negativity. As well as the quantitative differentiation between the groups, a qualitative distinction is drawn between those who experienced the same number but different types of negative home life events.

The overall POSA output for negative home life events is shown in Figure 8.9.

Figure 8.9

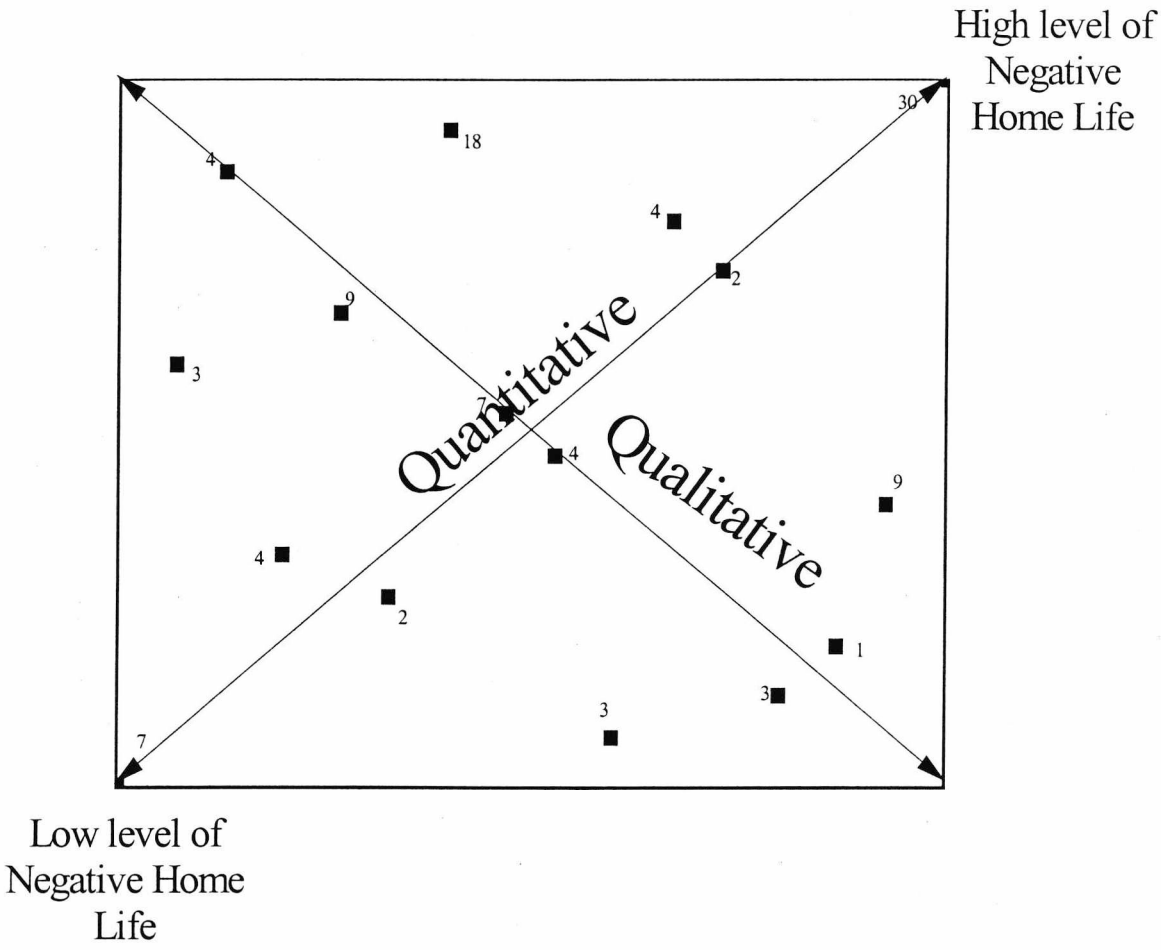


Figure 8.9 POSA Plot of 'Negative Home Life' Events (N=110, 4 items)

Each profile of scores existing in the data is shown as a point in the space. For example, the number in the uppermost right-hand corner represents the 30 participants displaying the highest possible score on each of the variables (sum=8). In these cases, participants had run away from home, had experienced violence at home, had had severe financial problems and had been homeless. The point in the lower left-hand corner represents the participants displaying the lowest possible score (sum=4), having experienced none of the events in this category. The points in between represent the differences between these extremes in both qualitative and quantitative terms. As illustrated, the plot contains sixteen score profiles, indicating sixteen different combinations of negative home life experiences amongst the sample.

Figures 8.9a-d show the schematic partitioning of the item plots according to each of the four variables in the analysis. It should be noted that two profiles in both Figures 8.9a and 8.9b are in the incorrect region, as highlighted by the squared points. In both cases, each point should be in the opposite region. Such 'mis-partitionings' do occasionally occur and represent the constraints of the two-dimensional representation.

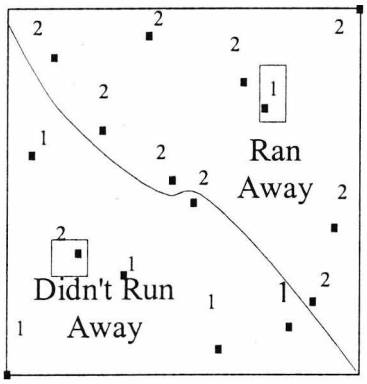


Figure 8.9a Ran Away from Home

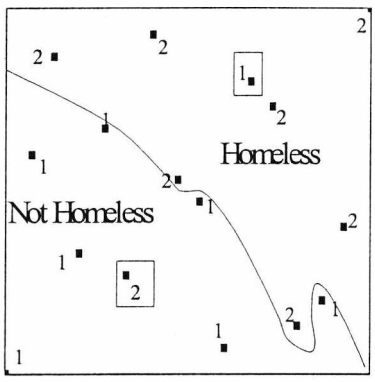


Figure 8.9b Homelessness

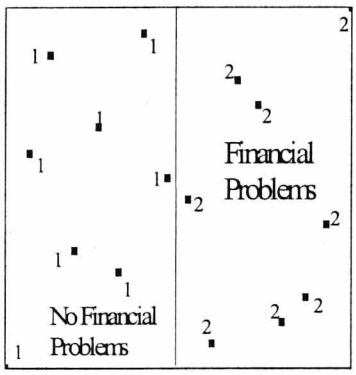


Figure 8.9c Severe Financial Problems

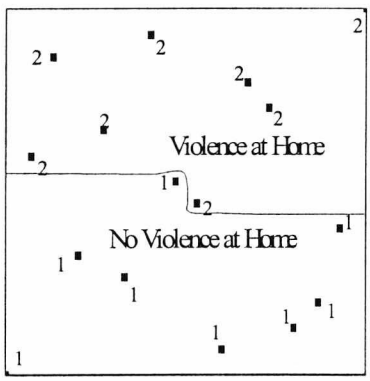


Figure 8.9d Violence at Home

The shape of the regions following partitioning indicates that the variables 'violence at home' and 'severe financial problems' are independent of one another, since there are incidents in the sample corresponding to each of the four types resulting from their combination. Over two thirds of the sample (67%, n=74) had experienced violence at home; half (51%, n=56) had experienced severe financial problems; and slightly more than a third (36%, n=40) had experienced both. However, comparison of the regions containing those participants who had run away and/or been homeless shows that, in most cases where the participant had runaway, they had also been homeless. Thus, a high proportion of those in the regions 'run-away' and 'homelessness' had experienced both events. Two-thirds (76%, n=75) had been homelessness; three-quarters (75%, n=82) had run-away from home; and over half (58%, n=64) had run-away and been homeless. The qualitative variation at the intermediate level of negative home life experience is accounted for by the variables 'financial problems' and 'violence at home'. Thus, participants may not have had financial problems, but experienced violence at home or may not have experienced violence at home, but had financial problems. An idealised representation of this partitioning is shown in Figure 8.10.

Figure 8.10

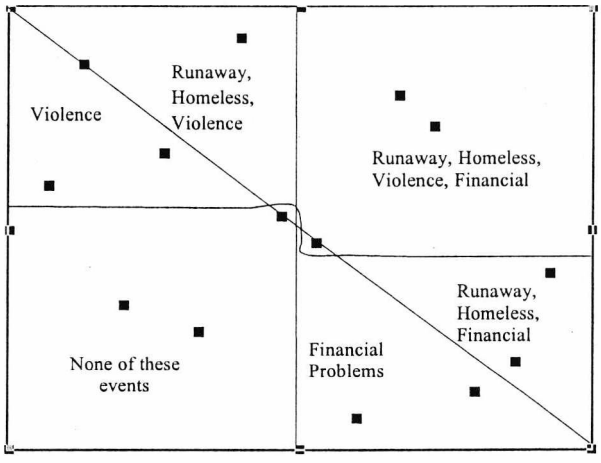


Figure 8.10 Idealised Representation of Negative Home Life Partitioning

Partitioning the plot according to these variables produces four broad types at the highest and lowest levels of negative home life experience, which are summarised in Figure 8.11.

Figure 8.11

TYPE 2a MEDIUM LEVEL OF NEGATIVE HOME EXPERIENCE *Runaway, homeless, violence at home*	**TYPE 3** HIGHEST LEVEL OF NEGATIVE HOME EXPERIENCE *Runaway, homeless, violence at home, financial problems*
TYPE 1 LOWEST LEVEL OF NEGATIVE HOME EXPERIENCE *None of the events in this category*	**TYPE 2b** MEDIUM LEVEL OF NEGATIVE HOME EXPERIENCE *Runaway, homeless, financial problems*

Figure 8.11 Four Types of Negative Home Life Events

As illustrated, Type 1 participants had experienced none of the events in this category (n=7). Type 2a participants had runaway, been homeless and experienced violence at home (n=18). Type 2b had runaway been homeless and had financial problems (n=9). Finally, Type 3 participants had experienced all the events in this category (n=30). Given the similarities between Types 2a and 2b, both at the quantitative level (i.e., each had experienced three events) and at the qualitative level (i.e., they had both runaway and been homeless), these two groups have been combined for subsequent analyses.

Although not all 110 participants are included in these broad types of negative home life events, this categorisation does capture a sizeable proportion (58%), the remainder being spread between the remaining eleven profiles, some of which contain as few as one participant. What follows are behavioural outcome, gender and age-based comparisons of the sample that fell into each of these broad types of negative home life experience.

8.8.1 Outcome, Gender and Age Differentiation

Figure 8.12 shows the three types of negative home life experiences by behavioural outcome grouping. As illustrated, very similar proportions of the attempted suicide and self-injury participants included in this analysis had experienced none of the measured negative home life events (Type 1). A higher proportion of those who had runaway from home, been homeless and experienced violence at home or financial problems (Type 2) had injured themselves rather than attempted suicide. This association was statistically significant (χ^2 (1, N = 110) = 6.909, p=0.009). Finally, a substantially higher proportion of those who had experienced all of the negative home life events (Type 3) had attempted suicide (χ^2 (1, N = 110) = 9.267, p=0.002).

Figure 8.12

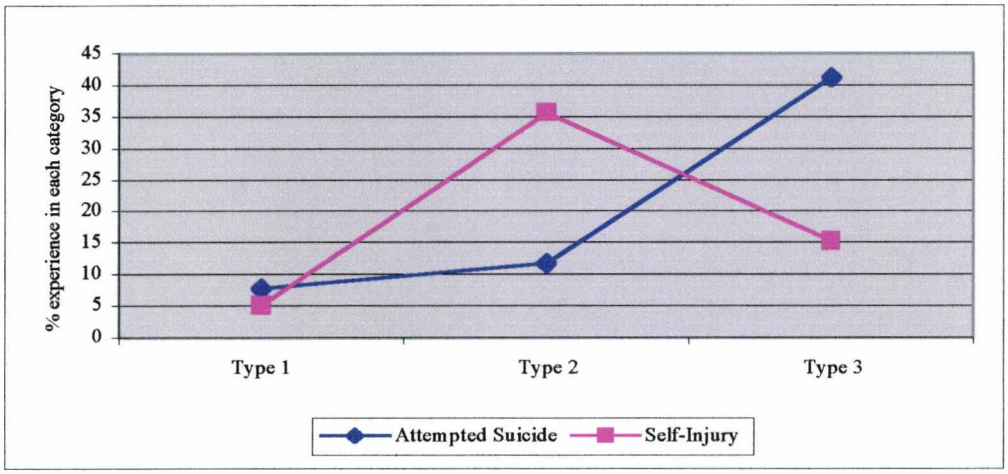


Figure 8.12 Type of Negative Home-Life Experience by Behavioural Outcome

Figure 8.13 summarises participants' experience of negative home-life by gender. As shown, women were slightly more likely than men to have experienced none of the events in this category (Type 1) or to have runaway from home, been homeless and experienced violence at home or financial problems (Type 2). Almost equal proportions of men and women had experienced all four events in this category (Type 3). As expected, given these similarities, there were no statistically significant associations between gender and the experience of negative home life events.

Figure 8.13

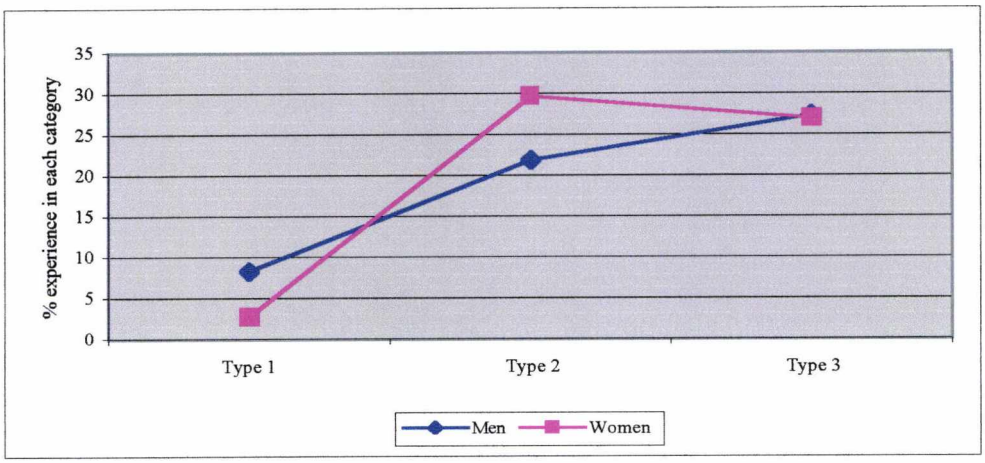


Figure 8.13 Type of Negative Home-Life Experience: Gender

Figure 8.14 shows the experience of negative home-life events by age grouping. As illustrated, adults and young offenders were very similar in their experience of Type 1 and Type 2 negative home events. Although young offenders were slightly more likely to have experienced all these events (Type 3) were was no statistical relationship between the variables.

Figure 8.14

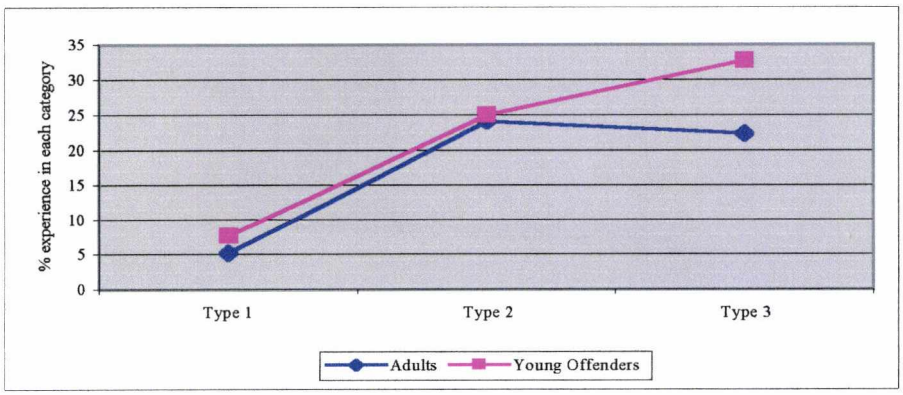


Figure 8.14 Type of Negative Home-Life Experience: Age

8.8.2 Summary

The above analysis has examined participants' experience of 'negative home life' events arising from the SSA-1 and POSA analyses. The above analysis revealed two main differences between attempted suicide and self-injuring participants in their experience of particular combinations of negative home life events, as follows:

- A significantly higher proportion of those who had experienced all the events in this category had attempted suicide.
- A significantly higher proportion of those who had runaway, been homeless and experienced violence at home or financial problems had injured themselves.

There were no significant age or gender differences between participants in their experience of negative home life events.

8.9 PERSONAL VIOLENCE AND LOSS

The final region in the negative life events SSA-1 (see Figure 8.4) was entitled 'personal violence and loss'. The variables included in this set are as follows:

- Having experienced the death of a child or partner
- Having experienced the death of a parent or sibling;
- Having experienced the death of a close friend;
- Having been sexually abused.

As previously, participants who had experienced each were coded two 2, whilst those who had not were coded 1. As in the above examples, POSA was used to represent both the qualitative and quantitative differences between the participants according to the four variables in this group. Each profile of scores (accounting for at least one incident of attempted suicide/self-injury) is represented as a point in geometric space, such that the quantitative variation is shown along the 'joint' axis and the qualitative variation shown along the 'lateral' axis. In the current example, there were fourteen different score profiles, indicating fourteen different types of personal violence and loss experience.

The overall plot produced by the analysis on these four variables is shown in Figure 8.15. The number of participants who experienced each different profile in the personal violence and loss experience is shown. For example, the number in the bottom left hand corner represents the 46 participants who achieved the lowest possible score (1111), having experienced none of the events in this category. It should be noted no participants experienced all the events in this category (shown in the top right hand corner of the plot). POSA automatically creates the highest and lowest possible scores, irrespective of whether they actually exist in the data set. In fact, the majority of participants had experienced none or only one of these events (42% and 43% respectively), 13% had experienced two and only 3% had experienced three events.

Figure 8.15

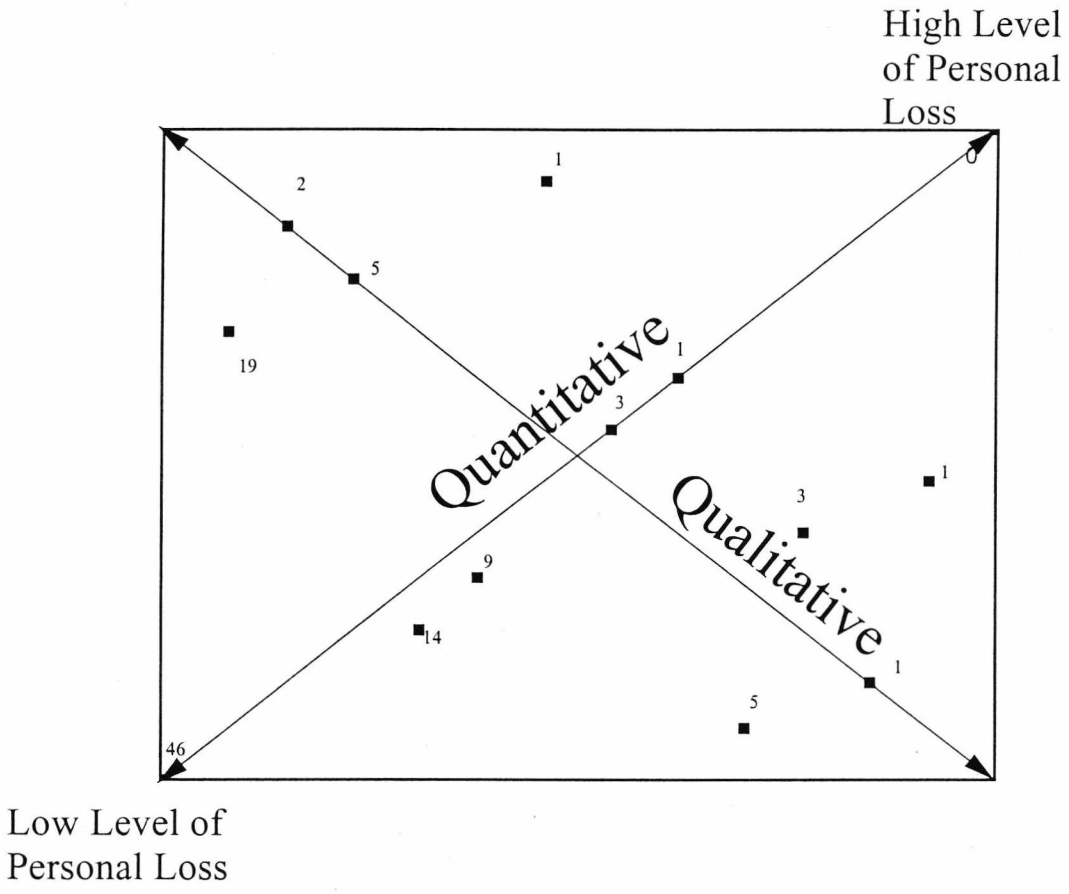


Figure 8.15 POSA Plot of 'Personal Violence and Loss' Events (N=110, 4 items)

Figure 8.15a-c shows the schematic partitioning of the item plots according to each of the four variables in the analysis. It should be noted that one profile in each of Figure 8.15c and 8.15d are in the incorrect region; in each case the profile is marked with a square. As mentioned previously, the constraints of two-dimensional analysis mean that 'mis-partitionings' do sometimes occur.

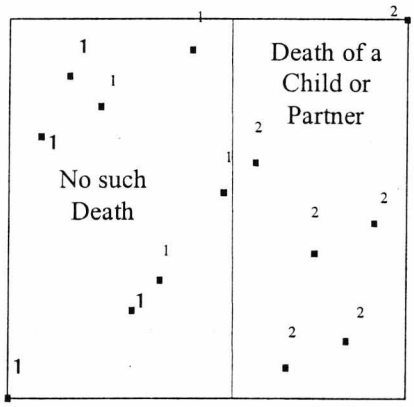


Figure 8.15a Death of a Child or Partner

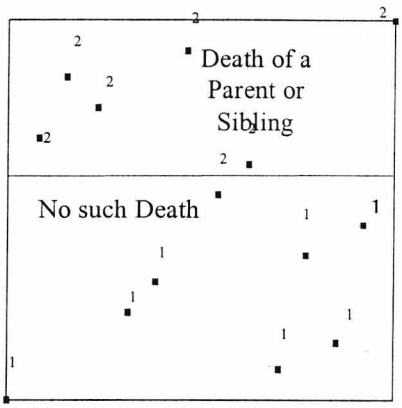


Figure 8.15b Death of a Parent or Sibling

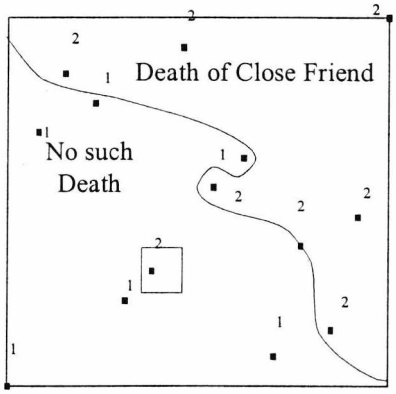


Figure 8.15c Death of a Close Friend

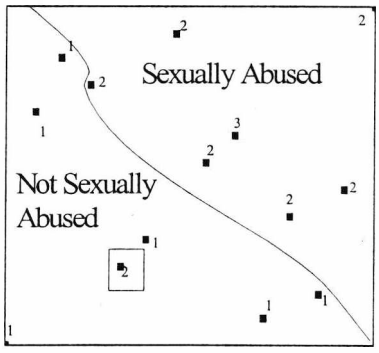


Figure 8.15d Sexual Abuse

The shape of the regions following partitioning indicates that the variables 'death of a child/partner' and 'death of a parent/sibling' are independent of one another, since there are incidents in the sample corresponding to each of the four types resulting from their combination. Death of a child/partner is partitioned vertically; death of a parent/sibling is partitioned horizontally. Conversely, death of a close friend and sexual abuse are both partitioned diagonally (from north-west to south-east). The overlap between the regions shows the different combinations of personal violence and loss experienced by those in the sample

The qualitative variation at the highest and intermediate levels of personal violence and loss (having experienced three or two of these events respectively) is accounted for by the variables 'death of a child/partner' and 'death of a parent/sibling'. Thus, participants may have experienced the death of a child/partner, but not the death of a parent/sibling and vice versa. At the highest level of negativity (profile 1), all had experienced either the death of a child/partner or the death of a parent/sibling as well as having been sexually abused and the majority had experienced the death of a close friend. The participant forming profile 2 had experienced the death of a child/partner, a close friend and sexual abuse (n=1). The participant forming profile 3 had experienced the death of a child/partner, the death of a parent/sibling and sexual abuse (n=1). Finally, the participant who formed profile 4 had experienced the death of a parent/sibling, the death of a close friend and sexual abuse (n=1).

Participants at the intermediate level of personal violence and loss (with a score of 6) constitute five qualitatively different groups. Those who formed profile 5 had experienced the death of a close friend and had been sexually abused (n=3). Profile 6 participants had experienced the death of a parent/sibling and had been sexually abused (n=5). Those who formed profile 7 had experienced the death of a parent/sibling and a close friend (n=2). Those who formed profile 8 participants had experienced the death of a child/partner and had been sexually abused (n=3) and those participants who formed profile 9 had experienced the death of a child/partner and a close friend (n=1).

Finally, those at the lower level of the personal violence and loss scale constitute four qualitative different groups. Profile 10 participants had been sexually abused (n=14).

Profile 11 participants had experienced the death of a child/partner (n=5). Those who formed profile 12 had experienced the death of a parent/sibling (n=19). Those who formed profile 13 had experienced the death of a close friend (n=9). Finally, those who constituted profile 14 had experienced none of the events in this category (n=46). In summary, partitioning the plot along the later (qualitative) axis reveals a number of different groups at each level of personal violence and loss.

By examining the overlap between the regions, it is possible to define the types of personal violence and loss that exist in the sample. An idealised model of personal violence and loss resulting from the POSA output is shown in Figure 8.16. As indicated, this model shows only the quantitative variation between the participants in their experience of personal violence and loss events. The qualitative variation among the participants has been outlined above.

Figure 8.16

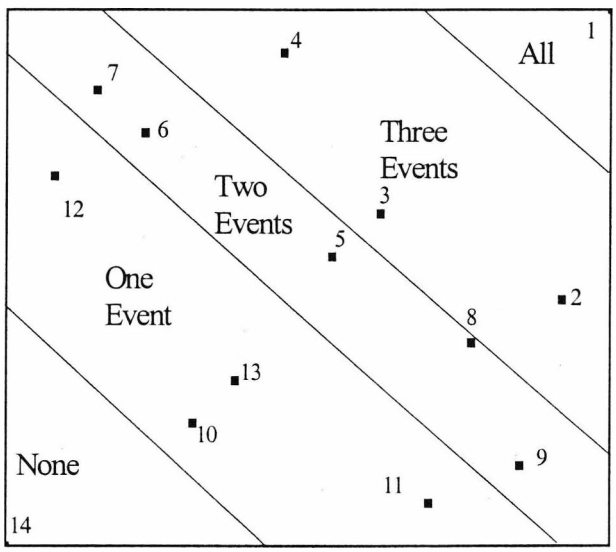


Figure 8.16 Partitioning of POSA according to Number of Personal Violence and Loss Events

Given the very small frequencies in most of the profiles arising from the POSA, it is not meaningful to illustrate, diagrammatically, the differences between the groups, in terms of

their outcome, gender and age compositions. However, for reasons of completeness, univariate statistical tests were conducted to ascertain if there were any positive associations. Although it is important to bear in mind the small population being considered, women were significantly more likely than men to have experienced the death of a child/partner and sexual abuse (χ^2 (1, N = 110) = 6.085, p=0.014, Fisher's Exact, p=0.036). Women were also significantly more likely than men to have experienced the death of a parent/sibling and to have been sexually abused (χ^2 (1, N = 110) = 5.044, p=0.025, Fisher's Exact, p=0.043). Finally, young offenders were significantly more likely than adults to have experienced the death of a close friend and to have been sexually abused (χ^2 (1, N = 110) = 4.630, p=0.047).

8.10 CHAPTER SUMMARY

This chapter has focused on the negative life events experienced by participants in the current sample. As was outlined in the introduction to this chapter, previous studies have found an association between negative background events between the prison population in general and, more specifically, with suicidal behaviours among prisoners. The current analysis, which was based on a partial replication of the earlier work of Meltzer et al. (1999), measured participants' experiences of the following events: having run away from home; homelessness; having experienced violence at home/work; having been expelled from or bullied at school; having had serious financial problems; having been dismissed or made redundant from a job; having experienced the death of a parent/sibling, partner/child, or close friend; and having experienced sexual abuse. Participants were asked directly whether or not they had experienced the first eleven of these twelve events. The variable 'sexual abuse' was included in the analysis as a relatively high proportion of the sample (28%) disclosed during interview that they had been sexually abused. It is acknowledged that a higher proportion of the sample but have been sexually abused, but simply not disclosed this information.

The overall aim of the chapter was to ascertain whether or not there were any differences (either qualitative or quantitative) between the main participant groupings in their experience of the events examined. At the most basic level, a series of cross-tabulation

analysis was conducted to establish if there were any behavioural outcome, gender or age-group differences. These analyses revealed that:

- Attempted suicide participants were more likely (than self-injury participants) to have experienced violence at home;
- Men were more likely than women to have been dismissed/made redundant from a job;
- Women were more likely than men to report having been sexually abused;
- Young offenders (when compared with adults) were significantly more likely to report sexual abuse;
- Young offenders were significantly more likely (than adults) to have run away from home;
- Young offenders were significantly more likely than adults to have experienced the death of a close friend.

The next stage in the analysis was to examine the *structure* of participants' experiences of these events. In order to meet this end, the data were submitted to SSA-1 analysis, which revealed three distinct categories of events, which were termed 'negative home life', 'rejection events' and 'personal violence and loss'. This finding represents an important departure from the earlier research conducted by Meltzer et al. (1999), in which the negative life events were grouped on the basis of assumed similarity.

These empirically defined negative life event categories were then examined in detail to determine if there were any differences between the groups in their experience of events within the different categories, as well as in their overall experience of negative life events generally. A series of between-subjects analysis of variance tests revealed no differences between the groups when analyses were conducted on the basis of behavioural outcome, although a number of age and gender differences were identified, as follows:

- Young offenders scored more highly than adults overall, indicating that they had experienced more negative life events;
- Men had a higher mean score than women in the 'rejection' events, indicating higher levels of 'rejection' experience;
- Young offenders had a higher mean score than adults on 'rejection' events;

- Women had a higher mean score than men in the 'personal violence and loss' category;
- Young offenders had a higher mean score than adults on 'personal violence and loss' events.

Having established a number of significant age and gender differences, verification of the possible dual (i.e., qualitative and quantitative) effect of negative life events was examined using POSA analysis, which represents empirical relationships in a data set as points in geometric space. Like other MDS techniques, POSA makes more apparent aspects of the data that may be obscured in the original matrix. It differs from SSA-1 in that it allows one to examine qualitative and quantitative differences in a data set simultaneously. A separate analysis was conducted on each of the three negative life event categories. The main results are now summarised:

- An analysis of the variables in the 'rejection' events category revealed that the combination of participants' experiences of these events were similar, thus follow-up univariate analyses revealed no differences between the main participant groupings in the analysis.
- An analysis of the variables in the 'negative home life' category revealed that participants who had self-injured were more likely to have run away from home, been homeless and experienced violence at home or financial problems. Further, a significantly higher proportion of those who had experienced all the events in this category had attempted suicide. No age or gender differences were identified.
- Finally, an analysis of variables in the 'personal violence and loss' category revealed that women were more likely than men to have experienced the death of a child/partner and sexual abuse, as well as the death of a parent/sibling and sexual abuse. Young offenders were significantly more likely than adults to have experienced the death of a close friend and sexual abuse.

Having examined in detail the current sample's experience of negative life events using a range of statistical techniques, attention in the following chapter turns to their generalised mood states and the emotions that preceded their suicide attempts or incidents of self-injury. In other words, events and experiences that are closer (both literally and psychologically) to the most recent incident of attempted suicide or self-injury.

CHAPTER 9

RESULTS IV: MOOD-STATES AND KEY EMOTIONS PRECEDING ATTEMPTED SUICIDE/SELF-INJURY

9.1 INTRODUCTION

Previous chapters have examined the socio-demographic, criminological, psychiatric and social-situational factors that distinguish the main participant groupings in the current sample. The focus in this chapter is on participants' mood states, both generally, within the prison context and more specifically, preceding their most recent incidents of attempted suicide or self-injury. It also examines how participants felt after the incident (i.e., better or worse) as a way of determining whether or not there is a functional element to these behaviours. In accordance with the overall aims of the thesis, an attempt is made to distinguish between participants who attempted suicide and those who injured themselves without suicidal intent. It also examines age and gender differences. The key mood and emotional data analysed in the present chapter was collected by means of self-report.

There are two main reasons for examining the emotions and mood states of participants in the current sample. Firstly, as Hawton and Van Heeringen (2000) suggest, research examining how cognitive mechanisms related to suicidality change with fluctuations in mood is lacking. Secondly, Williams (1997) suggests that, although there is convincing evidence of a relationship between emotional experience and suicidal behaviours generally, the specific emotions typical of those who complete suicide and those who injured themselves without suicidal intent are different. There is little or no published research that examines the differences between attempted suicide and self-injury in this regard.

9.2 THE ASSOCIATION BETWEEN MOOD-TYPES AND SUICIDAL BEHAVIOURS

The mood-types examined within the current study (namely anger, stress, anxiety, boredom, depression and loneliness) are variously associated with different types of suicidal behaviours. For example, Williams (1997) suggests that, whilst both completed

suicide and self-injury may be related to depression, self-injury appears to be related to anger whereas suicide may be more related to apathy or an absence of strong emotions. Williams reports that people who injure themselves (without suicidal intent) are often more angry, hostile, and irritable, compared with non-suicidal psychiatric patients and the general population

Similarly, Babiker and Arnold (1997) suggest that most people who injure themselves report having, since childhood, experienced overwhelming and unbearable feelings of sadness, anger and anxiety. They suggest that the intolerable nature of their distress may lead them to a desperate search for ways of alleviating and coping with their feelings. Similarly, Arnold (1995) reported that the most frequently reported trigger for self-injury was overwhelming feelings of emotional pain or anger. Babiker and Arnold (1997) suggest that some people injure themselves as a way of releasing anger without hurting others. Empirical evidence for this proposition is provided in Chapter 10. In contrast, people who kill themselves are characterised by feelings of apathy and/or indifference rather than anger (Williams, 1997). With this distinction in mind, the current research hypothesised that participants who had injured themselves would be more likely to report experiencing emotions related to anger, whereas those who attempted suicide would be more likely to report experiencing feelings of depression.

As well as the general associations between suicide and depression and self-injury and anger, there is evidence to suggest that different stages of the suicide 'process' may be characterised by different mood-types. Epidemiological research indicates that suicide is commonly preceded by a process that may start with fleeting thoughts of suicide, which may then evolve through more concrete plans and suicide attempts before moving finally to completed suicide. This process was described in the form of the 'suicide trajectory' in Chapter 2 of this thesis. It is argued that different stages of this process are characterised by different moods or emotions. During the early phases, anxiety and anger may be predominant, whilst later stages may be characterised by high levels of depression and hopelessness (Van Heeringen, Hawton and Williams, 2000).

This brief introduction has outlined a number of mood states associated with attempted and completed suicide and self-injury, namely anger, stress, depression, loneliness, anxiety and boredom. These will be examined in the current research. Firstly the literature in relation to each is examined.

9.2.1 Anger

As Reber (1985) suggests, anger is an extremely difficult concept to define objectively, particularly as it hedges into emotional reactions of similar kinds, such as hostility. Very generally, however, it is defined as 'a fairly strong emotional reaction which accompanies a variety of situations..... [It] is often defined ..... by a collection of physical reactions, including particular facial grimaces and body positions characteristic of action in the automatic nervous system' (Reber, 1985, p.35). Anger is included in the current thesis because of its broad association with suicide and self-injury.

As discussed in Chapter 1, Menninger (1935, 1938) outlined three elements of suicide: (i) murder of the self; (ii) murder by the self; and (iii) the element of dying. One of his most influential ideas was the breaking down of suicide and 'focal suicide' into three aspects: (i) the wish to kill; (ii) the wish to be killed; and (iii) the wish to die. Psychoanalytic writers have since then agreed that people who injure themselves or attempt suicide experience problems in outward and inwardly directed aggression and anger. Problems of affective control, particularly anger and impulsivity, are one of Williams' (1997) twelve predictors of completed suicide, especially amongst the young. Indeed, Williams suggests that the emotion that most commonly precedes suicide attempts among adolescents is anger, which may arise from negative objectively identified-loss and subsequent family disruption, such as the loss of a parent. Similarly, Stein, Witztum, Brom, DeNour and Elizur (1992) reported that negative emotions were more common among adolescents hospitalised for suicide attempts than among non-suicidal psychiatric inpatients or community controls and that multiple attempts were associated with self-rated anger (Stein et al., 1992). Hazell (2000) also suggests that anger is a key antecedent among suicidal adolescents, suggesting that its recognition and regulation is necessary, to avoid the escalation of anger into suicidal behaviour.

Self-injury (as distinction from attempted and completed suicide) is widely associated with anger, particularly anger that is ongoing and seemingly uncontrollable and which can become painful and intolerable. In such cases, self-injury can be functional in its regulation (Babiker and Arnold, 1997). Regulating mechanisms include sleep (following overdose), distraction from emotional stimuli or direct biological effects on the emotional system (by cutting or ingesting drugs) (Williams, 1997).

Anger has also been found to relate to suicidal behaviours in prisons. Verbalised anger and hostility were found to be more common in violent offenders, whilst guilt, intrapunitively expressed anger and hostility was more often noticed in those who attempted suicide (Maiuro, O'Sullivan, Michael and Vitaliano, 1989).

Earlier chapters have outlined the gender differences in relation to suicide and self-injury, in that men are more likely to die by suicide, whilst women account for far more instances of non-fatal suicidal behaviours (The Samaritans, 2002). A factor that may partially account for this difference may relate to the different ways in which men and women express anger. Traditionally, the socialisation of women has encouraged inhibition of anger (Chesler, 1972), thereby making positive coping with frustrating events and circumstances very difficult (Babiker and Arnold, 1997). As an alternative to outward expression, women may internalise anger, which may ultimately be manifested in self-injurious behaviours (Stillion and McDowell, 1996). Gender-specific ways of internalising and externalising anger may go some way to explaining why there are such clear gender differences in various types of behaviours on the 'suicidal continuum'.

9.2.2 Stress

Stress is defined as:

> '..... any force that when applied to a system causes some significant modification of its form, usually with the connotation that the modification is a deformation or a distortion. The term is used with respect to physical, psychological and social forces and pressures. [Stress can also be understood as] a psychological tension produced by the kind of forces or pressures alluded to above' (Reber, 1985, pp.736-737).

There is a well-established association between suicide and stressful life events, particularly those of an interpersonal nature (Van Heeringen et al., 2000). There is some evidence that stress is cumulative, building from early loss through family disruption to interpersonal disputes occurring close to the time of self-harm/attempted suicide (Williams, 1997). However, the occurrence of stressful life events per se is not

necessarily associated with risk of suicide. The crucial factor seems to be individuals' perceptions of the stressful life events (O'Connor and Sheehey, 2000). A key issue relates to how stressful events impact on mental mechanisms to initiate the psychological states of the suicidal process (Van Heeringen et al., 2000). Traskman-Bendz and Mann (2000) outline an important biological dimension to stress, suggesting that stressful external conditions and psychological stresses initiate the secretion of several hormones. If this stress is long lasting, the result can be a decreased number of neurones, which have been reported in suicide victims. Stress is also related to self-injury without suicidal intent. Particularly in the prison context, self-injury has been shown to be functional in the reduction of stress (Cullen, 1985; Cookson, 1977).

9.2.3 Depression

Depression is defined as: 'a mood state [that is] characterised by a sense of inadequacy, a feeling of despondency, a decrease in activity or reactivity, pessimism, sadness .....' (Reber, 1985, p.188).

The wide association between depression and suicide warrants its inclusion in the current analysis. Although suicide risk is elevated in all mental disorders, it is particularly elevated in people with depression (Appleby, 1992). It has been estimated that 15% of depressed individuals will eventually die by suicide and that two-thirds of all suicides have a depressive illness (Maris, 1991). Classic retrospective studies (such as Barraclough et al., 1974) suggest that the most significant risk factor for the vast majority of people who die by suicide is a psychiatric diagnosis. Indeed, the most frequent diagnosis found in retrospective studies of consecutive cases of suicide is major depression, which is found in between 40% and 70% of cases (Michel, 2000). Barraclough et al. (1974) examined one hundred cases of suicide and found that 93 had been diagnosed as mentally ill, with 70% having depressive illness as a principle diagnosis. A depressive illness, uncomplicated by other serious physical or mental disorder, was found in 66% of the sample.

Whilst a 20-fold increase for suicide risk has been found among those with major depression, suicidal behaviour is a feature of all types of depression (Lonnqvist, 2000). For example, it is reported that more than half of clinically depressed people have

suicidal thoughts, and their suicidal ideation is significantly related to the severity of the depression (Lonnqvist, 2000). Fawcett (1990) found that short-term risk of suicide is particularly high in depression that is associated with agitation, anxiety or panic attacks. On a psychological level, depressive cognitions and hopelessness have been shown to correlate with an increased risk of suicide (Beck et al., 1990). Although there is some evidence to support the notion that depression is a risk factor for self-injury without suicidal intent (Williams, 1997) those who die (following suicide) seem to differ in the degree of depression they experience (O'Connor and Sheehey, 2000). For example, depressed people who injure themselves without intending to die are more likely to express or experience anger, whilst those who attempt or die by suicide do not. Instead they often express apathy prior to death (MacLeod, Williams and Linehan, 1992).

9.2.4 Loneliness

Loneliness is defined in the Collins Concise Dictionary as '[being] without companions; solitary'.

Previous research has shown that societies with low levels of social integration have higher suicide rates (Durkheim, 1887/1952; Sainsbury, 1986). Later data on suicide within and between populations is broadly consistent with Durkheim's notion of 'anomie' and social disintegration is a major factor in explaining suicide (Williams, 1997). As outlined in Chapters 1 and 2, a number of the factors associated with suicidal behaviours emphasise the possible negative effects of social disintegration. These include older age, living alone, being retired or unemployed and being single, divorced or widowed. The picture that emerges is one of an individual with few resources and a clear lack of social support. Whilst inadequate social support is said to increase vulnerability to suicidality (O'Connor and Sheehey, 2000) others (i.e., Yang and Clum, 1994) suggest that this is only the case in the presence of other factors, such as stressful events. This finding has resonance with Cohen and Wills' (1985) hypothesis that social support helps maintain good general health in adverse situations, although it is relevant in normal circumstances (the so-called 'buffering' effect of social support).

O'Connor, Sheehy and O'Connor (2000) suggest that although suicide and attempted suicide are associated with social isolation, the majority of those who attempt suicide

regard themselves as affable and outgoing and are not consciously introverted or withdrawn. Similarly, they suggest that most of those who attempt suicide report having close friends in whom they can confide, yet described themselves as feeling very lonely when they were with other people. These observations led the authors to draw a distinction between *psychological* and *social* isolation. This distinction may be particularly pertinent to the prison context in that although prisoners are very often surrounded by other people and seldom left alone, they may feel psychologically distant from those around them.

Loneliness is also (although less frequently) associated with self-injury without suicidal intent. Intolerance of being alone and subsequent feelings of loneliness are defining characteristics of borderline personality disorder (Williams, 1997), of which repetitive self-injury is one of the diagnostic criteria (DSM-1V, 1994).

9.2.5 Anxiety

Anxiety is defined as '..... a vague, unpleasant emotional state with qualities of apprehension, dread, distress and uneasiness' (Reber, 1985).

Anxiety has found to play an important role in suicidal behaviours, both independently and as a co-morbid symptom. Anxiety increases the risk of suicide in psychiatric disorders, imminently and over the life span and has been found to be present in patients who exhibit suicidal ideation and behaviour (Allgulander, 2000). Beautrais, Joyce and Mulder (1998) reported an over-representation of anxiety disorders among individuals who had attempted suicide, when matched with controls from the general population. As mentioned previously, self-injury is seemingly functional in the reduction of anxiety (Babiker and Arnold, 1997).

9.2.6 Boredom

Boredom is defined in the Collins Concise Dictionary (1988) as follows: 'the state of being bored' which, in turn, is defined as: 'to tire or make weary by being dull, repetitious or uninteresting'.

That intolerance to boredom is one of the key indicators of borderline personality disorder (DSM-IV, 1994), coupled with the relationship between self-injury and borderline personality disorder, warrants its inclusion within the current research. The widely held association between imprisonment and boredom, both among those who attempted suicide/injury themselves and more generally, reinforces this inclusion.

In the prison context, Liebling (1992) found very high levels of inactivity and boredom among participants in her sample. Participants who had attempted suicide or injured themselves differed from those who had not engaged in these behaviours on a number of dimensions relating to these factors. Firstly, they were significantly less likely to be involved in physical activities and, if they were, were less likely to enjoy them. Further, they were more likely to report being bored 'often' or 'sometimes' and less likely to report being bored 'never'. They were less likely to be 'active' and more likely to be 'bored' when in their cells. Finally, those who attempted suicide were more likely to be able to find nothing to do when they were bored.

Liebling (1992) drew attention to the consistency with which suicidal and self-injuring participants were (and felt) worse off than their fellow prisoners in terms of the availability and desirability of work, education, PE and other occupations. As well as the constraints placed upon them, they did not see or take opportunities for themselves and did not make constructive use of their time. Rather they were: 'helpless and resourceless in the face of hours of unfulfilled time. It is their inability to occupy themselves constructively ..... that increases their vulnerability to both impulse acts of self-harm and suicidal thoughts' (Liebling, 1992, p.145).

9.3 Mood-Types and Suicide/Self-Injury in Prisons

As this review has demonstrated, different mood-types and emotions are variously associated with completed and attempted suicide and self-injury. Those most generally discussed within the literature are included for analysis in the current study. As indicated in the above discussion, distinct types of mood, e.g. depression or anger, and different degrees of mood disorder, e.g., major or anxiety-related depression, are variously associated with different suicidal behaviours, e.g., attempted suicide and self-injury. However, no published research has (within the same study) examined the

mood-states or emotions of those who attempt suicide, compared with those who injure themselves *without* suicidal intent.

The current research overcomes the limitations of previous studies in this regard by attempting to determine if there were any differences between those who attempt suicide and those who injure themselves for other reasons on the key mood or emotional states outlined. In order to meet this end, a six item, five-point scale was devised to measure participants' perceived levels of boredom, anger, stress, anxiety, depression and loneliness. Question 52 of the interview schedule contained the following question:

> **I am now going to give you a list of feelings or moods that you might have experienced since being in prison. As I give you each feeling, could you tell me how often you have felt like this since being in prison. I'd like to know how often you have these feelings *generally*, not just recently. Would you say you have felt [angry, depressed, lonely, etc] never, rarely, sometimes, most of the time or always?**

This question was designed to measure how participants felt *generally* since being in prison and not just immediately before, during or after the suicide attempt or incident of self-injury. Of the 124 participants in the overall data set, only 105 were included in this analysis. In the remaining 19 cases there was missing data on one or all of this subset of items. The answers of those who responded to all questions in this subset were coded according to their response on each of the self-perceived negative mood types, with 'never' being coded 1, 'rarely' coded 2, 'sometimes' coded 3, 'most of the time' coded 4 and 'always' coded 5.

Figures 9.1a-f below show participants' responses to the scale that measured their self-rated general mood states. As indicated, a substantial proportion of participants reported experiencing the measured mood-states either most of the time or always.

Figure 9.1a

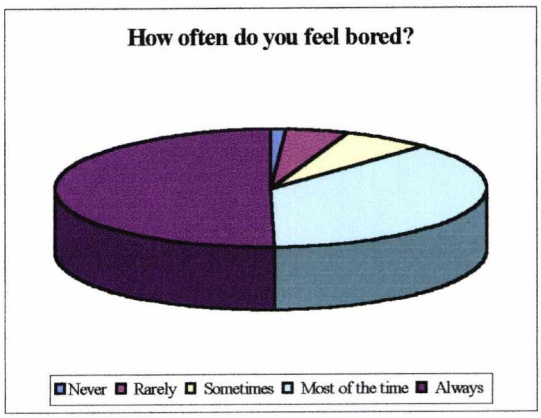


Figure 9.1a Extent to which participants felt bored (%)

Figure 9.1b

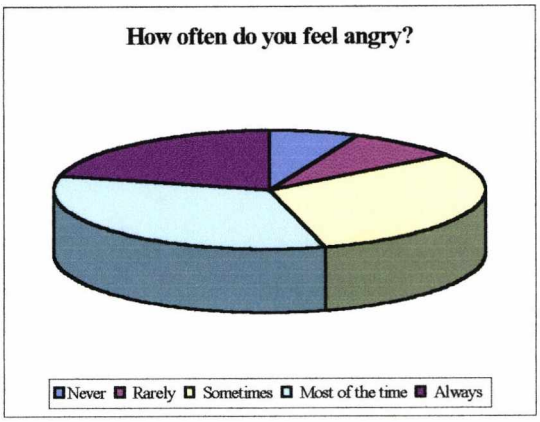


Figure 9.1b Extent to which participants felt angry (%)

Figure 9.1c

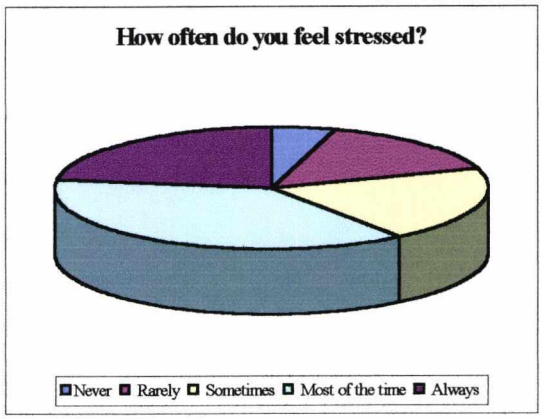


Figure 9.1c Extent to which participants felt stressed (%)

Figure 9.1d

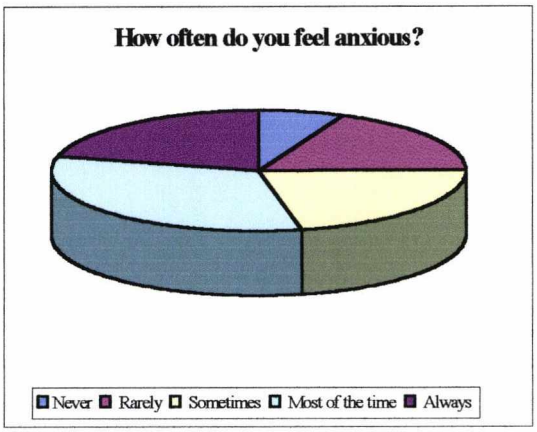


Figure 9.1d Extent to which participants felt anxious

Figure 9.1e

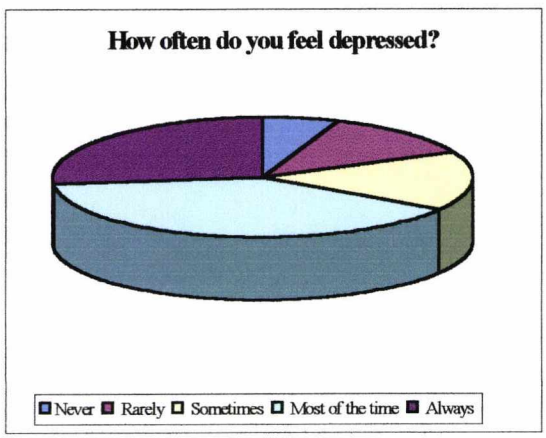


Figure 9.1e Extent to which participants felt depressed (%)

Figure 9.1f

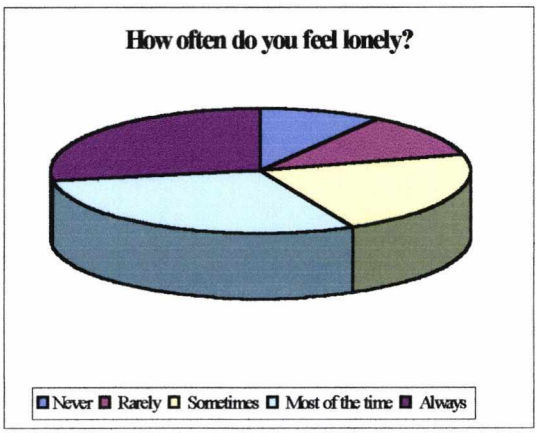


Figure 9.1f Extent to which participants felt lonely

Table 9.1 shows the mean scores and standard deviations across all participants on each of the six measures. As shown, the highest mean score relates to participants' reported boredom levels (4.31) whilst the lowest are for reported anxiety levels (3.43). That the scores across all variables are relatively high (indicating high levels of measured negative mood states) is notable.

Table 9.1

Variable	No.	Mean	Std. Deviation
How often do you feel bored?	105	4.31	0.87
How often do you feel depressed?	105	3.69	1.16
How often do you feel stressed?	105	3.58	1.14
How often do you feel lonely?	105	3.54	1.27
How often do you feel angry?	105	3.53	1.12
How often do you feel anxious?	105	3.43	1.20

Table 9.1 Mean Scores and Standard Deviations on Self-Reported Mood States

Given that the majority of participants reported that they experienced each of the negative mood states 'most of the time' or 'always' (resulting in a relatively high overall mean on each item) these categories were examined separately. In accordance with the overall aims of the thesis, an examination of the main participant groupings within each of these categories was made. Figures 9.1a-f show the percentage of participants that reported experiencing each mood state 'most of the time' or 'always' within each of the behavioural outcome, gender and age groupings. The behavioural outcome differentiation is coded as follows: 'AS' for attempted suicide and 'SI' for self-injury. The gender differentiation is coded as follows: 'M' for men and 'W' for women. Finally, the age differentiation is coded as follows: 'A' for adults and 'Y' for young offenders. The horizontal line on each chart shows the overall mean, when all the groups in the analysis were combined.

Figure 9.2a shows that participants who had injured themselves, men and young offenders were slightly more likely to report feeling bored most of the time or always, although there was no significant deviation from the overall mean score for any of the participant groupings. As shown in Figure 9.2b, women were most likely to report experiencing anger most of the time or always (Pearson χ^2 (1, N = 105) = 6.217, p = 0.013). Figure 9.2c shows that young offenders were slightly more likely to report

feeling stressed most of the time or always. As shown in Figure 9.2d, participants who had injured themselves, young offenders and women were most likely to report being anxious most of the time or always. Those most likely to report being depressed most of the time or always had attempted suicide (Pearson χ^2 (1, N = 105) = 10.333, p = 0.001), as shown in Figure 9.2e. Finally, as shown in Figure 9.2f, none of the groups was significantly more likely to report feeling lonely most of the time or always.

Figure 9.2a

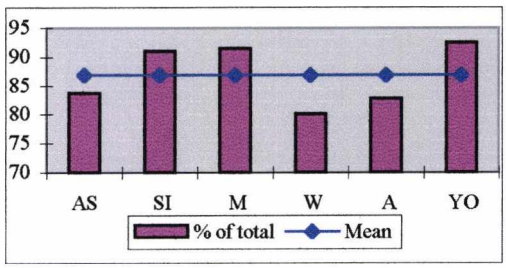


Figure 9.2a % of participants who felt bored mostly or always

Figure 9.2b

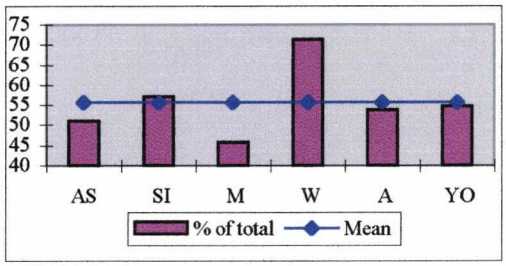


Figure 9.2b % of participants who felt angry mostly or always

Figure 9.2c

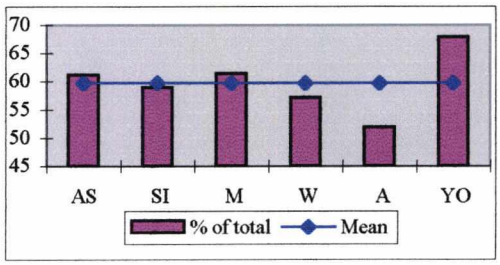


Figure 9.2c % of participants who felt stressed mostly or always

Figure 9.2d

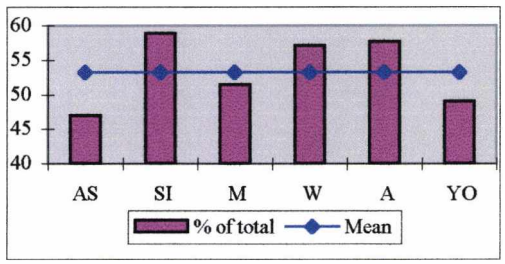


Figure 9.2d % of participants who felt anxious mostly or always

Figure 9.2e

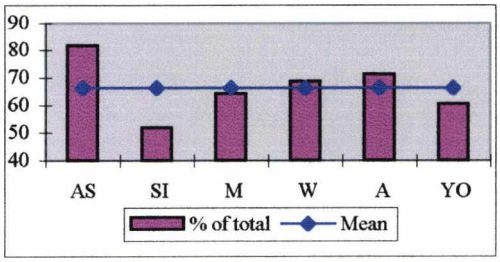


Figure 9.2e % of participants who felt depressed mostly or always

Figure 9.2f

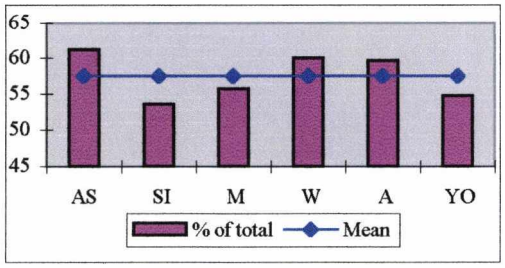


Figure 9.2f % of participants who felt lonely mostly or always

In summary, a high proportion of participants reported experiencing the measured negative mood-states most of the time or always, with actual proportions as follows: 87.6% (bored); 54.3% (angry); 60% (stressed); 53.3% (anxious); 65.7% (depressed) 57.1% (lonely). As indicated, boredom, stress and depression were the most commonly experienced emotions.

Further examination of the data was undertaken to ascertain if the same participants were most likely to report experiencing the negative mood-types most frequently or if there were subgroups of emotions that could distinguish between the participant groupings. The first step in this analysis was to examine the relationships between the expressed emotions.

9.4 Identifying the Structure of Mood-States

In order to understand fully the structure of participants' experience of the key emotions measured, as well as the interrelationships within this structure, the data were analysed using Smallest Space Analysis (SSA-1; Lingoes, 1973), one in a series of multidimensional scaling (MDS) techniques. A fuller description of SSA-1 was given in Chapter 8.

9.4.1 Results of SSA-1

The SSA-1 on self-assessment mood data was carried out using the Phi coefficient of association, which is appropriate for the ordinal scale used in the analysis. As only six items were included in the analysis, a two-dimension plot was deemed sufficient for interpretative purposes. The resultant two-dimensional SSA-1 solution had a Guttman-Lingoes coefficient of alienation of 0.32 in fifteen iterations. Although, ideally, the coefficient should be around 0.20, there is no simple highest level (Borg & Lingoes, 1987). Given that published papers present SSA-1 with similar coefficients (for example, Canter & Heritage, 1990) it was deemed acceptable. The first step in interpreting the SSA-1 results is to examine the inter-relationships between the items via the correlation matrix, which is replicated below in Table 9.2.

Table 9.2

	Boredom	Anger	Stress	Anxiety	Depression	Loneliness
Boredom						
Anger	**0.28**					
Stress	**0.41**	**0.48**				
Anxiety	**0.31**	**0.47**	**0.60**			
Depression	**0.22**	**0.29**	**0.28**	**0.22**		
Loneliness	**0.31**	**0.31**	**0.36**	**0.39**	**0.43**	

Table 9.2 Correlation Matrix of Self-Reported Mood States

As indicated, all variables are positively correlated to one another to varying degrees. The highest correlations are between self-reported levels of stress and levels of anger (0.48), and stress and anxiety (0.60). The lowest correlations are between boredom and depression (0.22) and anxiety and depression (0.22). The two-dimensional SSA-1 solution is shown in Figure 9.3.

Figure 9.3

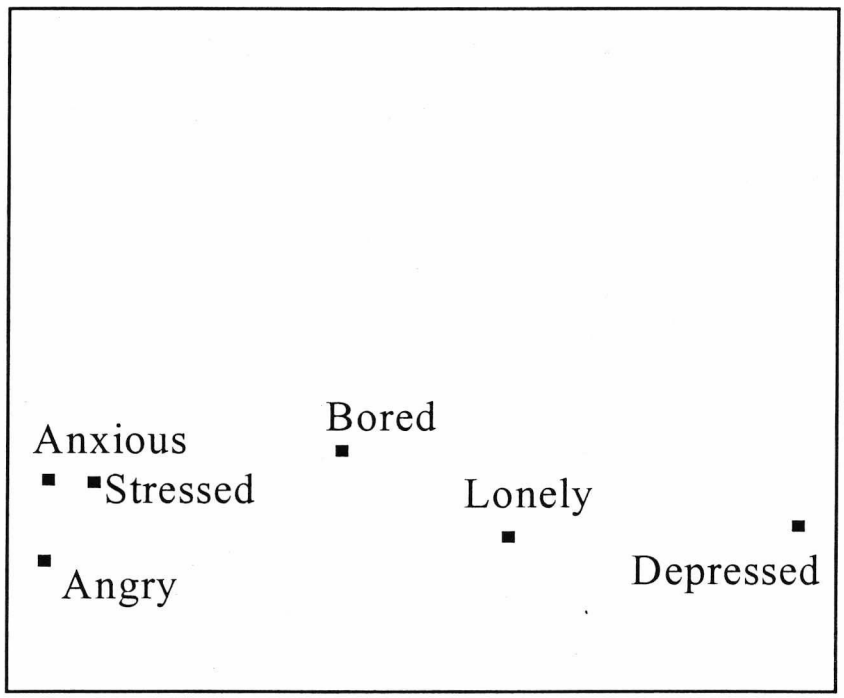


Figure 9.3 2-Dimensional SSA-1 of Mood States
(Coefficient of Alienation = 0.32, 6 items, n=105)

As indicated, each point in plot 9.3 represents one of the negative mood states as outlined above, and the empirical relationship between the experience of each mood-type is represented by the distances between the items on the plot. Figure 9.4 shows the two-dimensional plot after it has been partitioned into two parallel regions. These regions, which have been termed 'active' and 'passive', include the following two sets of three items: anger, anxiety and stress; and depression, loneliness and boredom.

The items included in these regions are variously associated with suicidal behaviours in the literature. For example, completed and attempted suicide are commonly associated with depression (Williams, 1997), ambivalence (Ogilvie, Stone and Shneidman, 1969) and the inability to form or sustain meaningful or lasting relationships (Shneidman, 1980). Conversely, self-injury is associated with anger (Williams, 1987) and anxiety (Wilkins and Coid, 1991) and is widely regarded as being functional in reducing stress (Snow, 1997).

The term 'passive' was chosen to represent the variables bored, lonely and depressed, because of their general association with apathy which, in itself, is related to suicide (Williams, 1997). Self-injury, on the other hand, is more commonly related to external verbalisations of anger and stress (Babiker and Arnold, 1997) hence, for the current purposes, the region is termed 'active'. The hypothesis that 'passive' mood states are related to attempted suicide and that 'active' mood states are related to self-injury will be tested later in the chapter.

Figure 9.4 shows the two-dimensional plot after it has been partitioned into the 'passive' and 'active' domains.

Figure 9.4

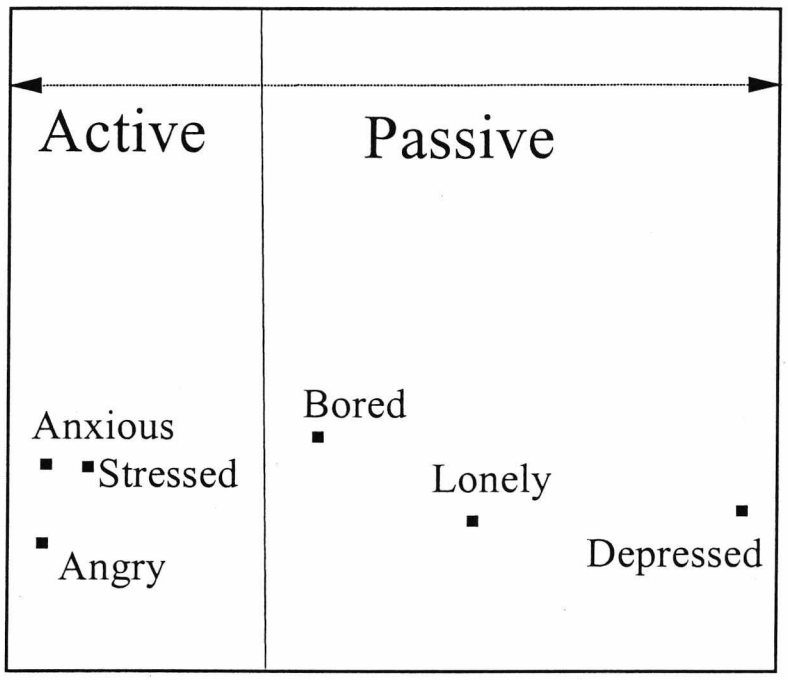


Figure 9.4 2-Dimensional SSA-1 Partitioned According to 'Active'/'Passive' Domains (Coefficient Of Alienation = 0.32, 6 Items, N=105)

That the plot can be partitioned into two distinctive regions suggests that these two sets of items represent conceptually different elements of the overall domain of negative mood states.

9.5 Between-Group Comparisons of Mood-States

The regions that arose from the SSA-1 analysis can be interpreted as representing two separate scales, each measuring different elements of the overall domain of negative mood states – i.e., 'active' and 'passive'. The next step in the analysis is to examine participants' overall mean scores on each of these scales to ascertain if any behavioural outcome, age or gender differences exist. Firstly, their reliability was assessed by calculating Cronbach's alpha values (Cronbach, 1951) which involved calculating participants' overall scores on each of two scales and submitting them to reliability analysis. Cronbach's alpha is the current standard statistic for assessing the reliability of a scale composed of multiple items. It provides a measure of internal consistency,

reflecting the extent to which items are highly correlated. Nunnally (1978) suggests that a value of 0.5 of 0.6 is a sufficient correlation for basic research. In the current study, the value of the Cronbach's alpha coefficient calculated for the 'active' scale was 0.76. The Cronbach's alpha coefficient for the 'passive' scale was 0.59 which, although lower than that for the 'active' scale, is still above the minimum recommended by Nunnally (1978) for basic research. Having established acceptable reliability coefficients for each of the two scales, participants' scores on each of the three items within the two scales were summed and a mean calculated for each mood-domain. Each participant was then classified according to whether they had attempted suicide or injured themselves and the sum of scores for all participants within each of these groupings calculated.

9.5.1 Comparison between attempted suicide/self-injury participants

To recapitulate, the 'active' mood domain included the items 'anger', 'anxiety' and 'stress' whilst the 'passive' domain included 'depression', 'loneliness' and 'boredom'. The sum of all participants' scores on each of the two sub-domains was calculated and independent samples t-tests conducted to ascertain if there were any statistically significant differences between the attempted suicide and self-injury groups.

Taking first the 'active' domain, the mean score for attempted suicide participants was 3.42, whilst the mean score for self-injuring participants was 3.60. Although the difference in mean scores was not statistically significant, the slight difference between the groups was in the predicted direction. Participants who had injured themselves had a slightly higher overall mean score on the three variables that comprised the 'active' domain.

The mean score for attempted suicide participants on the 'passive' domain was 4.02 and 3.70 for self-injuring participants. The independent samples t-test was statistically significant (t ($N = 103$) = 2.053, p=0.43) indicating that participants who had attempted suicide felt *more* depressed, lonely and bored than participants who had injured themselves for reasons other than death. These results are summarised in Table 9.3.

Table 9.3

Variable Domain	No	Mean	Std. Deviation	t	Df	Sig.
Active Mood States						
Attempted Suicide	49	3.42	1.00			
Self-Injury	56	3.60	0.90	-.927	103	0.356
Passive Mood States						
Attempted Suicide	**49**	**4.02**	**0.77**			
Self-Injury	**56**	**3.70**	**0.85**	**2.053**	**103**	**0.043**

+ Equal variances not assumed

Table 9.3 t-tests on Active/Passive Mood Domains by Behavioural Outcome

9.5.2 Gender Differentiation

Table 9.4 shows that men and women were very similar on their overall mean scores on both the 'active' and 'passive' domains. Consequently, there were no statistically significant differences between the groups. These results are summarised in Table 9.4.

Table 9.4

Variable Domain	No	Mean	Std. Deviation	t	Df	Sig.
Active Mood States						
Men	70	3.46	1.03			
Women	35	3.62	0.78	-.798	103	0.384
Passive Mood States						
Men	70	3.88	0.80			
Women	35	3.80	0.90	-.875	103	0.629

+ Equal variances not assumed

Table 9.4 t-tests on Active/Passive Mood Domains by Gender

9.5.3 Age Differentiation

The final comparison in this series was between the adults' and young offenders' mean scores on the 'active' and 'passive' domains. As illustrated by the results in Table 9.5, both groups' mean scores were very similar on each of the domains. Consequently, there were no statistically significant differences between the groups.

Table 9.5

Variable Domain	No	Mean	Std. Deviation	t	Df	Sig.
Active Mood States						
Adult	52	3.45	1.07			
Young Offender	53	3.58	0.82	-.699	103	0.486
Passive Mood States						
Adult	52	3.83	0.89			
Young Offender	53	3.87	0.77	-.254	103	0.800

Table 9.5 t-tests on Active/Passive Mood Domains by Gender

9.5.4 Summary

The above discussion has focussed on participants' generalised mood states, i.e., how they *usually* feel whilst in prison. Following interpretation of the two-dimensional SSA-1 plot, the six negative mood state variables were classified into two broad mood domains. The 'active' domain included the items anxiety, anger and stress, whilst the 'passive' domain included boredom, loneliness and depression.

Comparisons between the various sub-groups in the analysis (on the basis of behavioural outcome grouping, gender and age) were made between what were termed 'active' and 'passive' mood domains. Attempted suicide participants were shown to have significantly higher scores on the 'passive' mood states measure when compared with participants who had injured themselves, indicating higher levels of depression, boredom and loneliness among the former. As mentioned, these emotions are widely associated with completed and attempted suicide. This important finding will be more fully addressed in Chapter 12.

9.6 Participants' Emotions Preceding Attempted Suicide/Self-Injury

The focus for the remainder of this chapter is on participants' self-reported emotions immediately preceding the incident of self-injury or attempt at suicide. In contrast to the measurement of generalised mood states, participants were asked to describe how they felt immediately prior to the incident of self-injury or suicide attempt in their own

words and without a pre-defined list of options. The data arising from the items concerning participants' feelings beforehand were examined using content analysis and each incident coded for the presence or absence of each emotion-descriptor. Of the total sample of 124 participants, 22 were excluded because of missing data, leaving a total of 102. From their responses, only five different emotions were elicited. These were as follows: 'depressed', 'angry/frustrated, 'anxious/stressed', 'bored' and 'in emotional pain'. The emotions 'anger'/'frustration' and 'anxious'/'stressed' were combined as participants tended to use the terms interchangeably. Further, as demonstrated in Section 9.4, these emotions were highly correlated among participants in the current sample.

Each of the various preceding mood states was examined independently to ascertain if there were any prevalent behavioural outcome, gender or age types. A number of notable outcomes were found. Firstly, the vast majority of participants who had attempted suicide (88.6%) reported feeling depressed prior to the incident. This compares to slightly more than half (54.5%) of self-injury participants. This difference was statistically significant (Pearson χ^2 (1, N = 99) =13.451, p = 0.001).

Secondly, a significantly higher proportion of participants who experienced anger prior to the incident had injured themselves rather than attempted suicide (Pearson χ^2 (1, N = 99) =23.188, p = 0.001). Women were statistically significantly more likely than men to have experienced anger prior to the event (Pearson χ^2 (1, N = 99) = 5.256, p = 0.02). Finally, young offenders were statistically significantly more likely to have experienced boredom (Pearson χ^2 (1, N = 99) = 4.429, p = 0.035) and stress/anxiety (Pearson χ^2 (1, *N* = 99) = 3.800, p = 0.051). There were no other significant differences between the groups. These findings are summarised in Table 9.6.

Table 9.6

Participant Grouping	Preceding Emotion	Pearson χ^2
Attempted Suicide	Depressed	Pearson χ^2 (1, N = 99) = 13.451, p = 0.001
Self-Injury	Anger	Pearson χ^2 (1, N = 99) = 23.188, p = 0.001
Women	Anger	Pearson χ^2 (1, N = 99) = 5.256, p = 0.002
Young Offenders	Bored	Pearson χ^2 (1, N = 99) = 4.429, p = 0.035
Young Offenders	Stressed/Anxious	Pearson χ^2 (1, N = 99) = 3.800, p = 0.051

Table 9.6 Emotions Preceding Attempted Suicide/Self-Injury

Having examined each mood-state independently, the next stage in the analysis was to examine their *combinations* or, in other words, to examine if specific mood-states were likely to occur with others. In order to ascertain if there was any underlying structure to participants' reported mood-states in this regard, the data were submitted to MSA (Multidimensional Scalogram Analysis), the purpose of which is to make visual the occurrence of variables in the analysis and their relationships. MSA represents each of the incidents as a point in geometric space. Each incident of attempted suicide and self-injury is coded with a number on each of the five variables according to the category of the variable that describes the incident. In this way a data matrix is constructed so that each incident is represented by a profile of scores across a row. This profile describes the characteristics of the incident on each of the five variables. The more similar the profile of category codes for two incidents across the five variables, the closer together are the points in the space. If two or more incidents share exactly the same category codes, that is the same coding on every emotion-descriptor, they are represented by the same point.

The MSA solution is generated with the aim that the final configuration of points can be divided into clear regions in the space according to the categories for all the variables in the analysis. Thus, if the solution is a good fit, one should be able to take the plot and draw a dividing line between incidents that were, for example, preceded by feelings of depression. Taking the same configuration of points, it should be possible to create another set of regions dividing the plot into the categories of the next variable, and so on. MSA finds the best configuration of points to allow the categories of all the variables in the analysis to be represented by these regional divisions. The measure of how close the solution is to a perfect fit, that is clear regions for all the variables in the same geometric space, is called the coefficient of contiguity. A perfect fit would result in a coefficient of 1, although a coefficient of contiguity of 0.9 is deemed acceptable (Wilson, 2000).

As mentioned above, 102 participants were included in the descriptive analysis of participants' experience of mood-states. As MSA can process only 99 cases at a time, three further cases were excluded. As they comprised the largest group in the sample, three adult men were excluded, randomly. The behaviour, gender and age proportions of participants in the final analysis were as follows: attempted suicide/self-injury = 44/55 (44%/56%); male/female = 68/31 (69%/31%); adult/young offender = 51/48

(51.5%/48.5%). The ninety-nine profiles in the analysis were reduced to fourteen unique profiles each representing and mood-descriptor that differs, *qualitatively*, from the others. The resultant MSA solution, which had a coefficient of alienation of 0.99, is shown in Figure 9.5. The numbers shown in parentheses next to the data points indicate the number of participants that shared each score profile.

Figure 9.5

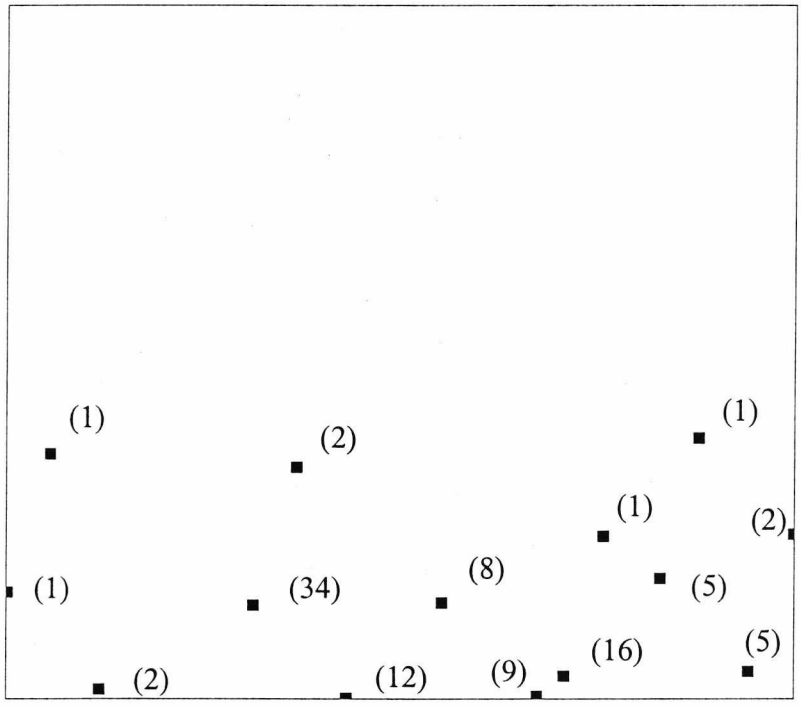


Figure 9.5 Overall MSA Plot Showing Emotions Precipitating Attempted Suicide/Self-Injury (Coefficient Of Contiguity =0.99)

The MSA output also provides item diagrams for each variable in the analysis (which are shown in Figures 9.5a–9.5e below). The item diagrams show the same configuration of points as the overall plot, but in place of the case number is the category code that each case was originally assigned on that variable (e.g., 2 for presence and 1 for absence of depression). This allows the researcher to draw the regional divisions. Once the regions have been drawn onto the diagrams, the researcher can compare the way that the category regions overlap, both with the other variables and with the actual cases as numbered on the plot (Wilson, 2000). The MSA plot, partitioned according to each of the five preceding emotions, is shown in Figures 9.5a-e.

Each plot is partitioned into two regions, with the regions containing those who had experienced each emotion shown.

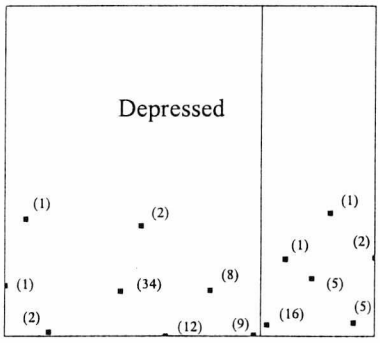


Figure 9.5a Item Plot 'Depressed'

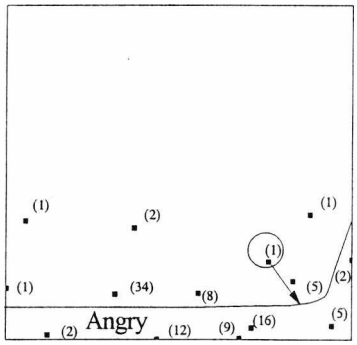


Figure 9.5b Item Plot 'Angry'

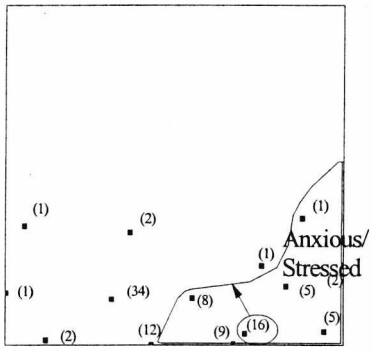


Figure 9.5c Item Plot 'Anxious'

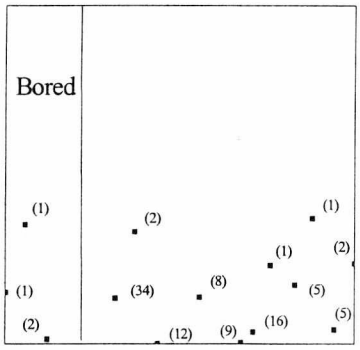


Figure 9.5d Item Plot 'Bored'

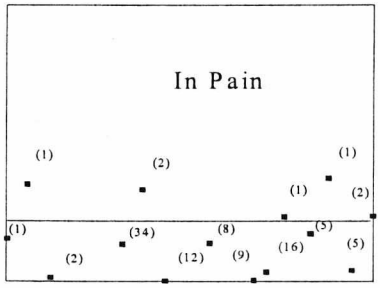


Figure 9.5e Item Plot 'In Pain'

By examining the way in which the regions in the item plots overlap it is possible to summarise the relationships between the variables. In the present case it allows an examination of which emotions tended to be experienced in conjunction with others and to what extent such co-occurrence occurs. Figures 9.6a to 9.6d show the partitioning of the original plot, together with the overlapping regions, and also show the number of incidents in the sample that fall into each region.

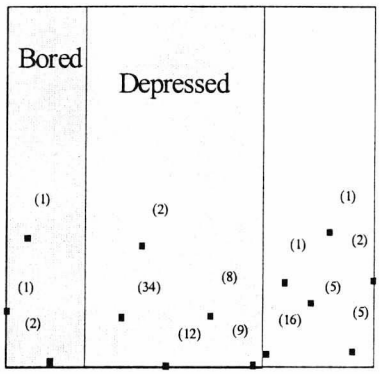


Figure 9.6a Boredom/Depression

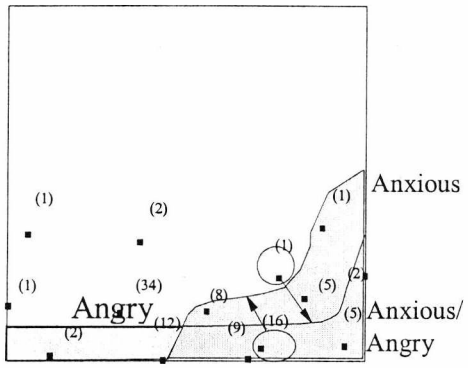


Figure 9.6b Anxiety/Stress & Anger

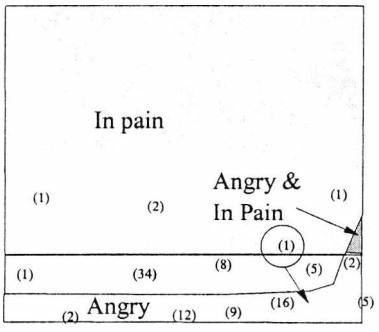


Figure 9.6c Anger/In Pain

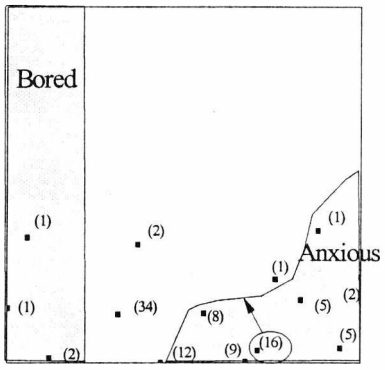


Figure 9.6d Boredom/Anxiety

As indicated by the overlapping regions of plots 9.6a ('depressed') and 9.6d ('bored') the items are related to one another, since all participants who expressed boredom also said that they were depressed. On the other hand, 'anger' (see plot 9.6b) and 'in pain' (see plot 9.6c) are independent, in two ways. Firstly, they are independent of each other, since there are examples of both 'anger' and 'in pain' alone. Secondly, they are independent of 'boredom' and 'depression', since there are people who were angry and 'in pain' at every level of the bored/depressed cumulative scale.

Like the relationship between depression and boredom, anger and anxiety are related, as in most cases where people were anxious they were also angry. The variable anxiety/stress appears to form a third dimension to the model, in the sense that it never co-occurs with boredom. This finding adds empirical support to the theoretical distinction that was made between these emotions earlier in the chapter.

In summary, the schematic partitioning of the plot according to the five variables in the analysis indicates the presence of two orthogonal scales that are independent of one another. Firstly, the depressed/bored scale, which is partitioned vertically, shows that all participants who reported feeling bored also reported feeling depressed. As there are some participants who reported none of these emotions and there are some who reported only being depressed, this represents a cumulative scale (i.e., from none, to one to two of these emotions). The other scale, which is partitioned horizontally, includes the variables in pain and anger. There are incidents in the data of participants reporting only anger, or only pain, but very few of both. In fact there was only one participant who reported experiencing both pain and anger. On the whole, participants reported experiencing either one of these emotions separately, or neither of them. Thus, these variables represent a scale, although it is non-cumulative. In order to represent these findings in a simple visual form three-dimensional diagrammatic interpretations of the models, showing both the boredom/depressed and anger/in-pain orthogonal scales are shown in Figure 9.7a and 9.7b. As outlined above, anxiety tends to co-occur with anger. There are no incidents in the data were anxiety co-occurs with boredom only. There is only one data-point (accounting for nine incidents) where anxiety co-occurs with depression. These findings suggest that the two scales identified represent psychologically different emotions preceding the incident of attempted suicide/self-injury. For completeness, a three-dimensional interpretation of the stress/anxiety model is also shown (in Figure 9.7c).

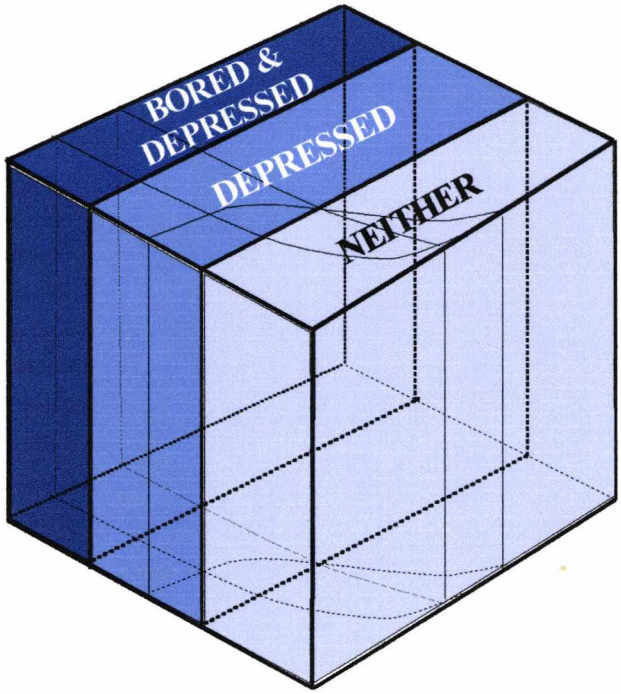


Figure 9.7a 3-Dimensional Model of 'Bored/Depressed' Scale

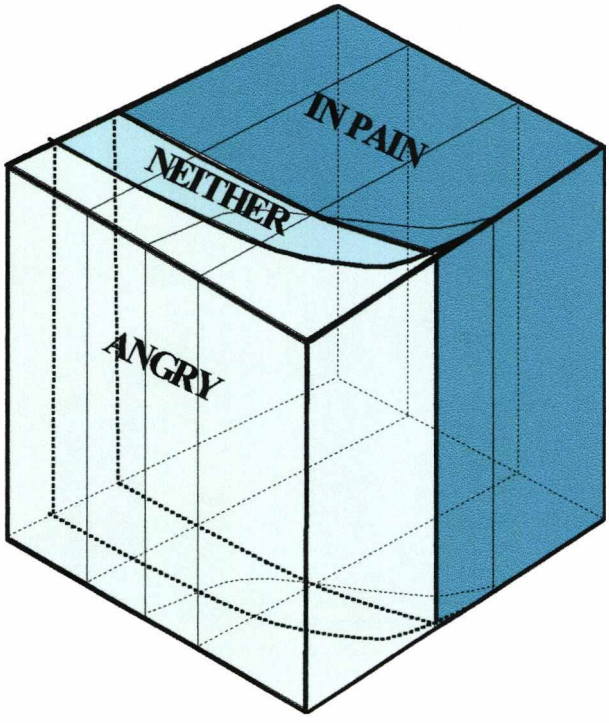


Figure 9.7b 3-Dimensional Model of 'Angry/In Pain' Scale

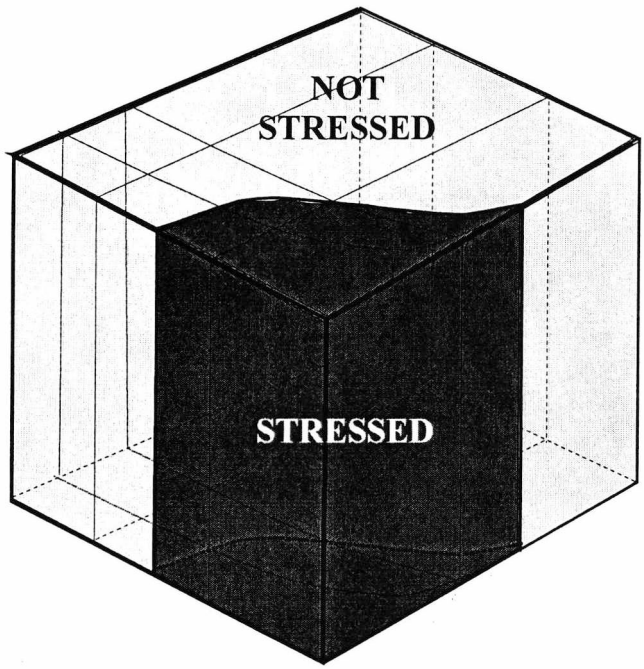


Figure 9.7c 3-Dimensional Model of 'Stressed' Scale

Combining the overlapping regions results in the model shown in Figure 9.8, which also shows the number of incidents in the sample that fall into each region in the model. The majority of incidents display either one or two of the primary preceding emotions. Each combination of these resources is represented, albeit by a small number of cases.

Figure 9.8

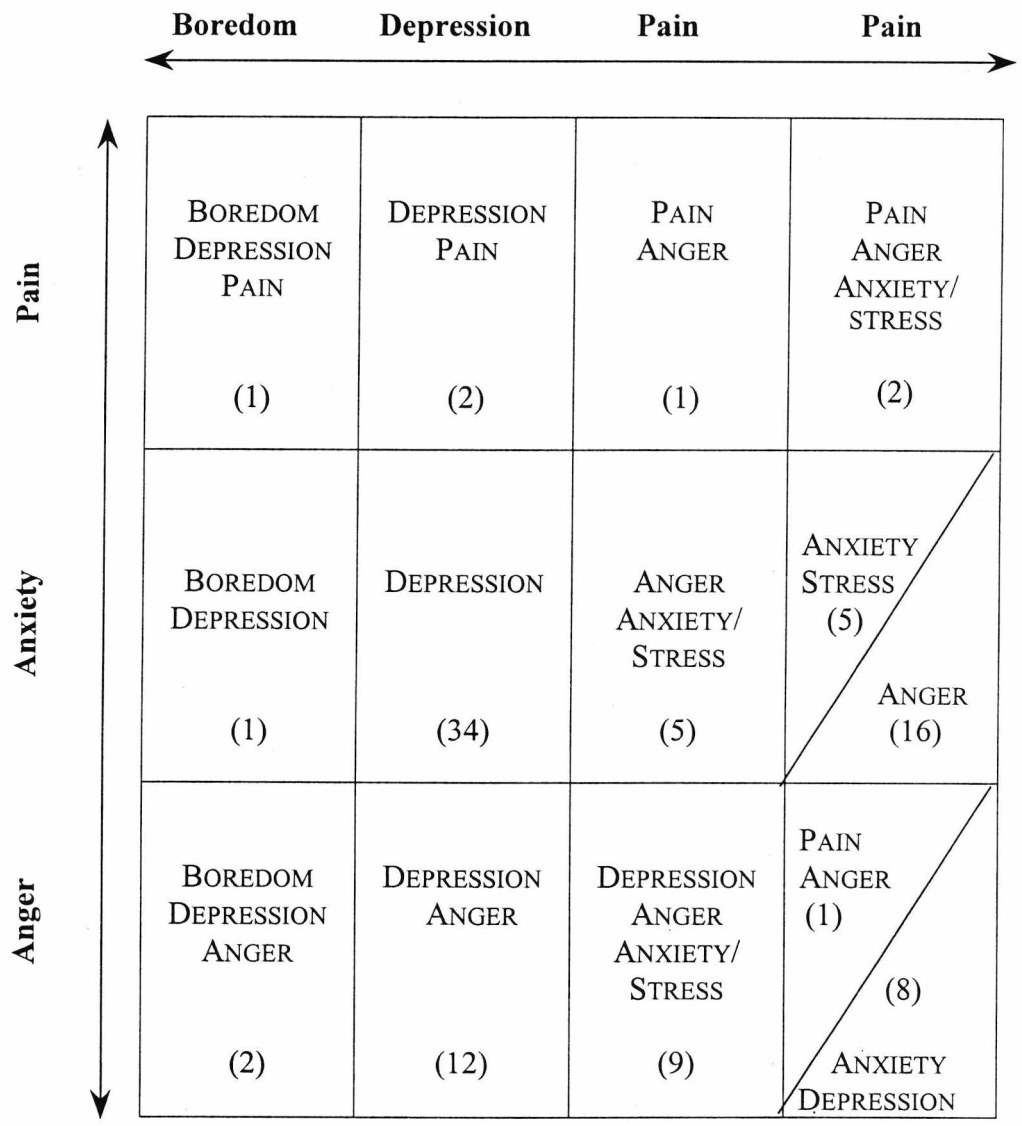


Figure 9.8 Model of Emotions Preceding Attempted Suicide/Self-Injury

9.7 Examination of Mood-Emotion Model by Behavioural Outcome, Gender and Age Groupings

A number of comparisons were undertaken to see if there were any clear over-representations of specific groupings (i.e., behavioural outcome, age or gender) within each of the cells of the above model. Given that the majority of preceding emotion-types were represented by small numbers in most cases, this comparison was only possible in a minority of cases. Wherever possible, binomial or z-approximation tests were conducted to assess if the behavioural outcome, gender and age proportions within each cell were more or less than would be expected given the composition of the overall sample. The binomial test evaluates whether the proportions of individuals who fall into the categories of a two-category variable are equal to hypothesised values. The test procedure uses a binomial distribution if the sample size is 25 and a z-test if the sample size is 26 or more (Green et al., 1997).

As indicated above, twelve participants reported experiencing feelings of depression and anger prior to the incident. Of these three (25%) had attempted suicide (an under-representation bearing in mind they make up 44% of the overall sample). In this instance the binomial test calculates whether the actual number of attempted suicide participants who reported feeling depression and anger prior to the incident (i.e., three, or 25% of the total) differed significantly from the hypothesised number (i.e., 44%, since they comprise 44% of the total population). In the case of attempted suicide participants, the observed proportion of 0.25 did not differ from the specified probability parameter of 0.44 (one-tailed p=0.150). Seven (58%) of those who experienced depression and anger prior to the incident were male (again, an under-representation, compared with their 69% distribution in the overall sample). For men, the observed proportion of 0.58 did not differ significantly from the specified probability parameter of 0.69 (one-tailed p=0.303). Finally, six (50%) of those who reported feelings of depression and anger were adults, a proportion that is comparable to their 52% share in the overall sample. In this case, the observed proportion of 0.50 did not differ significantly from the specified probability of 0.51 (one-tailed p=0.585). A larger sample size may have yielded significance.

Thirty-four participants reported experiencing only depression prior to the incident. Of these, twenty-four (71%) had attempted suicide; twenty-six (76%) were male and

eighteen (53%) were adults. In the case of attempted suicide participants, the observed proportion of 0.71 was significantly different from the specified probability parameter of 0.44 (one-tailed p=0.002). This result indicates that attempted suicide participants were statistically more likely than would be expected (given their proportions in the overall population) to report experiencing feelings of depression prior to the incident. For men and adults the observed proportions of 0.76 and 0.53 respectively did not differ significantly from the specified probability parameters (one tailed p=0.225 and p=0.387 respectively).

Sixteen participants reported experiencing only anger prior to the incident. Of these, three (19%) had attempted suicide, six (33%) were male and thirteen (81%) were young offenders. In the case of attempted suicide participants, the observed proportion of 0.19 was significantly different from the specified probability parameter of 0.44 (one-tailed p=0.034). This result suggests that those who attempted suicide were statistically less likely than would be expected (given their proportion in the overall population) to report feelings of anger prior to the incident. Similarly, the observed male proportion of 0.38 was significantly different from the specified probability parameter of 0.69 (one-tailed p=0.009) indicating that women were more likely to report experiencing anger. Finally, the observed proportion of 0.81 for young offenders was significantly different from the specified probability parameter of 0.51 (one tailed p=0.013), indicating that young offenders were more likely than adults to report feelings of anger only prior to the event.

9.8 Participants' Feelings Post-Incident

As outlined in previous chapters, a number of theories exist as to the functional aspects of self-injury. For example, it can be useful in regulating distress (Babiker & Arnold, 1997), reducing anxiety (Cullen, 1985; Coid et al., 1992), attracting sympathy or comfort (Cullen, 1985) or for instrumental purposes, such as securing a change in location (Cullen, 1985). Others suggest that self-injury occurs in the context of generalised prison-specific frustration and helplessness and that it can provide temporary relief from frustration, anxiety or depression by enabling prisoners the ability to exert control over their environment (Cookson, 1977). In order to test the assumption that self-injury may have some functional element, participants were asked to describe how they felt immediately after the incident. It was hypothesised that those for whom self-injury served some function or purpose, particularly in terms of a reduction of

tension, anger or other negative feelings, would report feeling better afterwards. Every participant was asked if, immediately after the incident, they felt better, no better or worse. The percentage of responses in each category was as follows: 41%, 45% and 14%. Given the small number of participants who felt worse (n=14) and because the purpose of the analysis was to examine if participants felt *better*, the data were re-coded to include only two responses categories, as follows: better or no better. Each participant was coded according to his or her response and the totals in each category compared with ascertain if there was any over-representation of either attempted suicide or self-injury participants. The binomial test was used to evaluate whether the proportions that fell into each category were equal to hypothesised values. In this case, the two categories were as follows: they felt no better (coded 1); or they felt better (coded 2). The hypothesised proportion in each category is 0.50 (i.e., half of each category felt either no better or worse).

A two-tailed binomial (z-approximation) test was conducted to assess whether population proportions for participants who felt better following the incident was greater than 0.50 (the proportion that would be expected if there was no difference between the groups). The majority of participants who felt better (81%) had injured themselves, rather than attempted suicide (two-tailed p = <0.001). Conversely, the majority of those who felt no better or worse after the incident (83%) had attempted suicide (two-tailed p = <0.001). These findings (summarised in Table 9.7) give credence to the view that self-injury is functional in providing relief.

Table 9.7

Did you feel better after the incident? Yes				
Group	N	Observed Prop.	Test Prop.	Significance (2-tailed)
Self-injury	44	0.81	0.50	0.000
Attempted Suicide	10	0.19		
	54	1.00		
Did you feel better after the incident? No				
Group	N	Observed Prop.	Test Prop.	Significance (2-tailed)
Attempted suicide	40	0.83	0.50	0.000
Self-injury	8	0.17		
	48	1.00		

Table 9.7 Participants' Feelings Post-Incident: Attempted Suicide/Self-Injury

A two-tailed binomial test was conducted to assess if men or women were more or less likely to report feeling better after the incident. Given that women comprised less than 50% of the sample, which meant that the gender groups were not equal in proportion, the data were weighted (by simulated replication) for analysis. The majority of participants who felt no better (when cases were weighted) were male (two-tailed p = 0.008). Similarly, the majority of participants who did feel better (after weighting) were female (two-tailed p= 0.024). These findings are summarised in Table 9.8.

Table 9.8

Did you feel better after the incident? Yes				
Group	N	Observed Prop.	Test Prop.	Significance (2-tailed)
Male	29	0.37	0.50	0.024
Female (weighted)	50	0.63		
	79	1.00		
Did you feel better after the incident? No				
Group	N	Observed Prop.	Test Prop.	Significance (2-tailed)
Male	39	0.68	0.50	0.008
Female (weighted)	18	0.32		
	57	1.00		

Table 9.8 Participants' feelings post-incident: Men/Women

A final comparison was conducted on the basis of age grouping. A two-tailed z-approximation test revealed that of those who did not feel better, there were almost equal proportions of adults and young offenders (46% and 54% respectively), hence there was no statistically significant population proportion (two-tailed p=0.665). Similarly, 54% of those who felt better were adults and 46% were young offenders (two-tailed p =0.683).

9.9 CHAPTER SUMMARY

This chapter has focused on the emotions and mood-states of participants in the current sample, both generally (within the prison context) and, more specifically, immediately preceding their recent 'suicidal' incident. The principal reason for this focus was to establish whether or not there were any differences between those who attempted

suicide and those who injured themselves (without suicidal intent) in this regard. The results of the presented research demonstrated that, indeed, such a difference does exist. The results of SSA-1 analysis were used to develop two separate scales, each of which measured different elements of the overall domain of generalised mood states, as follows:

- The 'active' mood domain included the items 'anger', 'anxiety' and 'stress';
- The 'passive' domain included 'depression', 'loneliness' and 'boredom'.
- Follow-up t-tests demonstrated that participants who had attempted suicide had higher mean scores on the 'passive' domain, indicating that they felt *more* depressed, lonely and bored when compared with participants who had self-injured.

The second stage of the analysis focused on participants' self-reported emotions immediately preceding incidents of attempted suicide/self-injury. The data arising from an open-ended question in the interview schedule were content-analysed and the following five broad emotion types: 'boredom', 'depression', 'anger', 'in-pain' and 'anxious/'stressed'. MSA analysis revealed that four of these emotion-types formed orthogonal scales, which may be used to measure different types of emotional-precipitators. Follow-up binomial tests revealed that:

- Self-injury is significantly more likely (than attempted suicide) to be preceded by feelings of anger;
- Young offenders were significantly more likely (than adults) to experience anger prior to the event;
- Women were significantly more likely (than men) to experience anger.

The final stage of the analysis examined the possible functional aspect of suicidal and self-injurious behaviours, by assessing whether or not specific participant groupings were more or less likely to report feeling better after attempting suicide or injuring themselves. The findings from a series of binomial tests give support to the observation that self-injury (as distinct from attempted suicide) can provide relief from negative feelings (Cookson, 1977). The results revealed that:

- Those who injure themselves are more likely to feel better after the incident;

- Women were significantly more likely than men to report feeling better after having injured themselves.

The relationship between participants' self-reported mood-states and their emotions prior to incidents of attempted suicide and self-injury will be further discussed in Chapter 12, in relation to the concepts examined in earlier chapters, namely background, socio-demographic and criminological factors, negative life events and social support. The focus in the following chapter is in the second broad research aim of the thesis, that is, to examine what motivates or underlies suicidal behaviours in prisons.

CHAPTER 10

RESULTS V: MOTIVATIONS FOR ATTEMPTED SUICIDE/INJURING THEMSELVES

10.1 INTRODUCTION

The research outlined in earlier chapters revealed the nature of the current participants' backgrounds. Attention now turns to the psychological events which immediately preceded or surrounded their attempt at suicide or incident of self-injury and which they described as being 'motivators' for the event itself. To begin with, a content analysis is undertaken of participants' self-reported motivations for attempting suicide or injuring themselves and the differences between the two groups are revealed. Whether these factors distinguish between the different age and gender groups is also examined.

10.1.1 Methodology: In-depth Interviews

The main reasons for choosing interviews as the main data elicitation technique among participants who had engaged in the broad spectrum of suicidal behaviours were outlined in Chapter 5. At this point, it is important to reiterate why this approach was adopted and to highlight some of the differences of opinion between various schools of thought on the validity of such data.

Silverman (1993) highlights the dilemmas facing researchers using interviews as to the validity of their data. On one hand, positivists have as their goal access to 'facts' about the word. Their primary concern is to generate data that are valid and reliable. The way in which this is achieved is by random selection of the sample and the administration of standardised questions with predetermined response categories. Thus, the aim for positivists is to generate data that hold independently of both the research setting and the researcher or interviewer (Silverman, 1993). This type of approach has been criticised in recent years in terms of both its feasibility and desirability (Baker, 1982; Miller and Glassner, 1997). Baker (1982) questions the attempt to treat interview questions and resultant data as passive filters towards the 'truth'. Instead, she argues that both interviewer and interviewee actively *construct* a version of the world

appropriate to what is taken to be self-evident about the person being interviewed and in the context of the research questions.

An alternative to the positivist striving for 'pure' data which comes as close as possible to providing a 'mirror reflection' of the reality that exists in the social world, is the interactionist view that no knowledge about a reality that is 'out there' can be obtained from an interview. This is because interviews are essentially interactions between two people who create and construct narratives of their social worlds. Such narratives are context-specific, invented to fit the demands of the interactive context of the interview itself, and representative or nothing less or more (Miller and Glassner, 1997, p.99).

Miller and Glassner (1997), occupying a mid-point between these two extremes, argue that it is possible to obtain information about individuals' social worlds through interviews. Whilst data arising from interviews may not be able to provide the 'mirror reflection' of reality that positivists strive for, it can provide access to the meanings that people ascribe to their experiences and their social worlds. Whilst the interview itself is an interaction, this does not discount the possibility that knowledge of the social world *beyond* the interaction can be obtained.

This is the approach that was adopted within the current study. The researcher was sensitive to the context of the interview-situation, and the possible dynamics between research and researched (that were alluded to in Chapter 5), however, in order to investigate any underlying constructs between participants' responses, all were asked the same set of questions in the same way. It is argued that any 'error' arising from any individual participant's socially constructed slant should be averaged out over the sample (i.e., 124). Consequently, an understanding of any underlying dimensions is achieved which is broader than the specifics of each individual case.

Although, for the most part, the interview schedule consisted of closed questions, the section designed to elicit participants' reasons for attempting suicide or injuring themselves was open-ended. There were a number of reasons for this. Firstly, open-ended questions are said to enable respondents to use their 'unique ways of defining the world' whilst allowing them to 'raise important issues not contained in the schedule' (Denzin, 1970, p.125). Fundamentally, however, open-ended questions are regarded as

being most appropriate when collecting data on participants' feelings or emotions, as they are often too complex to report in a single phrase (Selltiz, Jahoda, Deutsch and Cook, 1964, p. 246).

With these points in mind, participants were asked to explain their motivations, including their emotions and/or specific triggering events, for the incidents of self-injury or attempted suicide. They were asked to describe the incident in their own words and without prompting from the interviewer, in response to the following question:

> **As we discussed at the beginning of this interview, I am aware that you hurt yourself recently. I'm now going to ask you to describe, in your own words, exactly what happened and why you think it happened?**

Participants' responses were manually recorded (written down) during interview and entered into a database as soon as possible afterwards. The data elicited incorporated a large amount of qualitative information covering a broad range of reasons and motivations for incidents of attempted suicide and self-injury. The following section briefly overviews other research that has explored this issue.

10.2 Prisoners' Explanations for Attempted Suicide/Self-Injury: In their own words

As outlined in Chapters 3 and 4, few studies have considered the motivational aspects of attempted suicide/self-injury, or the factors that precipitate these behaviours. An exception is Liebling (1992). When questioned about specific events or 'triggers' that might have provoked the suicide attempts among those in her sample almost a third (30%) reported that there had been problems with other prisoners prior to the event, involving either threats, bullying or an argument. Other reasons chosen from a list of alternatives provided by the researcher included a lengthy prison sentence (22%), recent punishment or segregation (24%), the end of a relationship (12%), a parole refusal (4%) and a recent transfer or move from one location in the prison to another (8%). Liebling reported that suicide attempts or thoughts of suicide were usually brought on by identifiable problems. These included an outside problem, usually to do with relationships or families (10%), a prison-related problem such as being lonely or afraid (30%). Others gave dual problems, usually related to prison-specific issues and

personal problems (over 50%). Some mentioned not being able to turn to anyone for help or feeling and nobody cared. Others gave various and unspecified reasons, such as feeling helpless, or missing someone outside.

The current study shares some similarities with Liebling's (1992) findings. One notable difference is that the current study found less of an emphasis on 'situational' factors per se, and more of an emphasis on specific occurrences or events, such as drug withdrawal. A second difference relates to the clear differences between suicide and self-injury. As has been discussed in Chapter 9, a sizeable proportion of the sample clearly emphasised the functional aspects of self-injury and its distinction from attempted suicide.

For illustrative purposes, a selection of participants' expressed reasons for attempting suicide or injuring themselves are given, with brief details of the participant (in terms of their gender and age) and the incident. The full set of responses, and details of all incidents can be found in Appendix E.

10.2.1 Participants' Expressed Reasons for Attempting Suicide

1. RM55, a male young offender, had cut his wrist with a plastic knife, which had snapped. He was in the process of fashioning a noose (with which he was going to hang himself) when an officer found him. He said he wanted to die, describing a number of precipitating factors, including feelings of depression and hopelessness. He was worried about his ill girlfriend and about a forthcoming court appearance.

> *It was my first night in prison. I'd lost everything – my home, my job, my family* [who had disowned him]..... *my girlfriend is dying of cancer. The reality of my situation kicked in at bang-up. I felt deeply distressed, depressed and hopeless.*

During evening association prior to the incident RM55 asked an officer if he could make a telephone call to his girlfriend. The officer refused, but said that he would call her to let her know that RM55 was in prison. The officer did not tell the prisoner that he made contact with the girlfriend until the following day (after the suicide attempt).

2. ND46, an adult woman, had set fire to herself. She said she wanted to die because of feelings of guilt and shame (over her offence), concern for her children and because she was bullied.

> *I told staff I was being bullied and they moved me* [to the segregation unit]. *This was a good opportunity for me to kill myself, because I knew I'd be left on my own for longer. I felt ashamed* [at being in prison], *regretted what I'd done and was worried about my family and children* [who were in Jamaica]. *Being bullied was the final straw.*

3. PK49, a male young offender, had tied a bandage around his neck in an attempt at self-strangulation. Although, in response to auditory hallucinations he initially attempted suicide, he said he later changed his mind and called for help.

> [The night before the incident] *I'd spoken to the nurse about the voices, told her that the medication wasn't helping and asked for it to be changed. She was no help..... Because I told her I wouldn't be around the next day she moved me to a strip cell* [where the incident took place]. *I heard his voice* [the person who'd sexually abused him] ..... *he told me to kill myself ..... so I tied the bandage around my neck and kept it there for two or three minutes before calling for help. I got scared. I was afraid of actually dying and losing out on everything in the future.*

After the incident PK49's medication was changed, after which he felt much better. PK49 felt that the whole situation could have been avoided if his medication was changed sooner, i.e., when he first reported that there had been no improvement in his symptoms. He felt that he received no help to deal with his past. Outside of prison he used drugs to "dull the voices".

These examples, together with those in Appendix E, illustrate the wide range of reasons given for the particpants' suicide attempts. In addition, explanations by participants from different age and gender groupings are provided. The following section presents similar responses from participants who had injured themselves without suicidal intent.

10.2.2 Participants' Expressed Reasons for Injuring Themselves

1. TR5, a male young offender, inflicted superficial cuts to his arms to relieve feelings of anger and frustration, although he was did not specify why he felt like this.

I was feeling uptight, agitated and stressed. I always feel more relaxed after I've cut myself. Also, feeling pain makes me feel better. Talking to people about how I feel doesn't help. Exercise sometimes gets rid of the pent-up aggression. If I feel like this on the out [outside of prison] *I take drugs.....*

2. FC124, an adult woman, inflicted superficial injuries to her forearms with a razor blade. She explained that it was due to a number of factors mainly related to anger arising from previous physical and sexual abuse (on the part of her mother), concern for the welfare of her children and feelings of guilt about being away from them. FC124 had just learned that her mother had taken custody of her children whilst she was in prison. She was very worried about their welfare.

She [her mother] *tortured me .... I'm really worried about them* [her children]. *I felt guilty at what I've put them through* [the fact that they were living with their grandmother] *and wanted to punish myself.... and I was having nightmares about the time I was raped.*

When asked how she felt after she'd cut herself, FC124 said:

The pressure builds up in my heart and in my mind..... I feel a relief of pressure when I've hurt myself. I feel better because I've punished myself and not others.

3. MR40, another adult woman, scrubbed and scratched her arms with a toothbrush. She did this to relieve feelings of anger, towards herself and others, related to past abuse:

I feel powerless and it [self-injury] *is a way of getting some control ... of helping me cope. It's become a habit, a way of controlling my anger, but it's a repetitive viscous circle. I feel anger, want to exert control over something, so I cut myself. Then I feel angry with myself and I remember the reasons for it* [sexual abuse].

4. CC108, an adult woman, had cut her arms with a razor to make herself feel cleaner and as a way of reducing "psychological pain". She said that she is more likely to use self-injury as a method of reducing negative feelings in prison, as an alternative to drugs.

I was having flashbacks [of previous sexual abuse]. *I felt dirty and wanted to get all the badness and dirt out. Also, feeling physical pain blocks out the emotional pain I'm feeling. Outside I take drugs to get rid of the pain, but in prison it gets too much. I feel worse* [in prison] *because I can't get drugs, which block out the pain.*

10.2.3 Summary

The above discussion has provided a sample of participants' expressed reasons for attempting suicide or injuring themselves. The data provided were 'raw' in the sense that they were unstructured or unclassified. The following section outlines the first step in classifying these data using Content Analysis (Krippendorff, 1980) before describing the subsequent data analysis techniques that allowed an examination of the structure of participants' explanations and which enabled detailed comparisons to be made between the sub-groups within the analysis.

10.3 CONTENT ANALYSIS

The first step in dealing with a large amount of qualitative data is to establish a classification scheme (Wilson, 1995). One way of classifying this type of data is content analysis, a technique that allows the researcher to utilise data 'without imposing too much structure on the subject' (Krippendorff, 1980, p.18).

Content analysis involves categorising data consisting of, for example, words, phrases or sentences according to particular 'themes or strands of information' (Millward, 1994, p.228). Krippendorf (1980) suggests there are two main components to this process, the *interpretative* and the *mechanical*. The mechanical involves physically organising and subdividing the data into categories. The interpretative component involves a thorough examination of the categories and an analysis of those that are meaningful to the research questions, using sound theoretical ideas as a basis (Wilson, 1995). The content of each theme is then summarised using a simple description which generates a coding framework that can be used to classify the raw data (Millward, 1995). Each 'unit of text' is then classified according to the constructs defined within the coding framework using a tabulated grid, with the code on one axis and the participant identifier on the other. In the current case, a 'unit of text' is a participant's expressed reason for or emotion preceding an attempt at suicide or incident of self-injury. The content analysis revealed forty-two separate explanation categories, each of which was given by one or more of the participants in the sample. These are summarised in Table 10.1. The first column in the table shows the number of times the relevant explanation or reason was given. The final column is discussed in Section 10.4.

Table 10.1

Frequency	Explanation-Category	Cohen's Kappa
44	To relieve anger, anxiety, stress or tension	0.982
35	Internalised feelings of anger towards others	0.852
33	Depression (unspecified)	0.979
31	Feeling alone, being lonely, having no-one to talk to	1.000
20	A method of dealing with negative feelings in the absence of alternative methods (e.g., drugs, alcohol)	0.970
20	To achieve/prevent transfer, or because a move had taken place	0.971
19	Grief/bereavement	1.000
18	A way of attracting help	0.967
17	General concern over family/children	0.849
17	Guilt/shame	1.000
16	Alternative to outward expression of emotions	1.000
15	Following an incident of bullying	1.000
14	Relationship problems	1.000
13	Being in prison (general)	0.956
13	Drug withdrawal	1.000
13	In response to auditory/visual hallucinations	1.000
13	Feelings of hopelessness	1.000
13	Homesickness	0.757
12	Sentence related: following award/expectation of long sentence	1.000
11	Boredom at being in cell/locked in cell	1.000
10	To experience the feeling of physical pain	1.000
10	Related to previous abuse (sexual or physical)	0.948
8	Concern about someone due to illness	1.000
7	Innocent of charges	1.000
7	Medication (had been changed or wanted alternative/more)	1.000
7	Because of the calming effect of seeing blood	1.000
6	To get back at or punish somebody	1.000
5	Feelings of anger towards self (e.g., for being in prison)	1.000
5	Following an argument with another (inside prison)	1.000
5	Scared	1.000
4	Let down (e.g., promised something but didn't deliver)	1.000
4	A means of self-punishment	1.000
3	Following some kind of refusal (e.g., bail)	1.000
3	Concern over being released from prison	1.000
2	A desire to feel cleaner	1.000
2	To counteract emotional pain	1.000
2	Influenced/provoked by somebody else	1.000
2	No recollection of incident	-
2	To regain a sense of power	1.000
2	Unspecified	-
1	Other	-
1	Related to a recent visit (e.g., went badly)	1.000

Table 10.1 Summary of Explanations for Attempted Suicide/Self-Injury

Closer examination of the categories in Table 10.1 indicates that there may be some overlap between them, for example, 'internalised feelings of anger towards others' and 'alternative to outward expression of emotions'. However, it is important to remember that these categorisations were based on participants' own explanations of the events or the emotions that precipitated their actions. It was considered important that the participants provided their own explanations, rather than simply asking them to choose from a predefined list, because of the reported problems in using predefined explanations or constructs. Adams-Webber (1970), for example, found that participants' own constructs were more salient than those that were predefined by researchers. Similarly, Hall et al. (1976) suggested that predefined constructs might include attributes that would not normally be used with particular stimuli, or that the researcher might unwittingly omit important aspects.

The types of events, experiences or emotions precipitating participants' attempts at suicide and incidents of self-injury were very complex and contained a great deal of information. Examples of the types of phrases or explanations that were categorised according to each of the forty-two explanation-types are now provided.

The 'being in prison' category included statements such as: '*It was my first night in prison, I'd lost everything – my home, my job, my family*' or '*I felt upset and depressed at being in prison again*'. Some prisoners described their actions as being directly related to drug withdrawal, as in the following statements: '*I was going cold turkey ... I was fitting and hadn't slept for days. I just couldn't see things getting any better*' or '*I was withdrawing. I felt depressed, angry, confused, tired. I wanted to sleep at any cost*'. Others said that they injured themselves or attempted suicide as a result of not having access to drugs, although they did not say that it was because of drug withdrawal. For example, '*I didn't have drugs to help me forget things, which means I'm forced to think about things when I'm not ready to face up to them*' or, '*If I feel like this on the out* [outside of prison] *I take drugs, but I can't get any in here*'. These statements were included in the 'method of dealing with negative feelings in the absence of alternative methods' category.

Guilt and shame were expressed in various ways, such as: '*I feel guilty at being in prison, and being away from my children*' or '*I feel really guilty about my offence. I'm*

worried that I'm going to go to hell' or ' *I feel ashamed and guilty about being in prison - about what I've done*'. In several cases, participants attributed their actions to grief or bereavement, for example: '*My son died recently. I'm still very upset about it. I just want to be with him*'. Another prisoner remarked, '*I miss him* [her son] *and I want to be with him*'. The 'innocent of charges' category included the explanation: '*I'm just fed-up with being accused of something I didn't do... I didn't do it*'. The 'sentence-related category' included explanations such as: '*I'm in court soon and looking at a really long sentence*'.

A number of participants directly attributed incidents of self-injury to previous sexual abuse, as illustrated in the following statements: '*I was having nightmares about the time I was raped*' or, '*The abuse makes me feel dirty and I think it's better to get the dirt out ..... I feel cleaner afterwards*'. The latter of these statements was included in both the 'related to previous abuse' and 'a desire to feel cleaner' categories.

As intimated above, many participants gave more than one explanation. The following explanations from one prisoner were included in both the 'to regain a sense of power' and 'to relieve anger, anxiety, stress or tension' categories: '*I feel powerless and it* [self-injury] *is a way of getting some control. It's become a habit ... a way of controlling my anger*'. In this case, the prisoner felt anger towards somebody else. Others felt angry towards themselves, as illustrated in the following statement: '*I was angry with myself* [for being in prison]. *I was punishing myself for him* [her son] *being taken away. I'd rather hurt myself than anybody else*'. This prisoner's comments were included in the 'to relieve anger, anxiety, stress or tension' and the 'feelings of anger towards self' categories.

This overview has given a flavour of the types of comments that were included to form the above-mentioned explanation categories. More detailed case studies can be found in Appendix E.

10.4 Inter-Rater Reliability Results

In order to ensure the reliability of the above classification scheme and subsequent analysis, the data were re-classified by an independent rater. As Wilson (1995) outlines,

a reliable classification scheme would mean that two independent raters would classify the data in a similar way. Unless an attempt is made to ascertain the reliability of coding, the data may be wholly subjective and, therefore, open to interpretation. It is possible to calculate the reliability of two raters' classifications simply by assessing the number of times the raters agree as a percentage of all possible observations (Wilson, 1995). Percentage agreement gives a rough estimate of the reliability of the classification scheme, although a better estimate is obtained by calculating an index of agreement (Hammond, 1995). The conventional test to use is Cohen's kappa (k) which ranges between 0 and 1 and represents the proportion of agreement corrected for chance (Cohen, 1960). A value of 1 indicates perfect agreement and a value of 0 indicates that the agreement is no better than chance.

In the current example, the author conducted the first content analysis, generating 42 explanation-categories. A written definition of these categories was produced and each unit of descriptive text classified according to which category or categories best accounted for the description. Most explanations typically contained a large amount of information, some of which related to more than one explanation category. For example, one participant explained: '*I felt down and depressed. I was withdrawing from drugs for the first time. I couldn't sleep. I was worried about next week's court appearance..... I was expecting to get three years*'. These explanations were split into 'units' of text and these units classified according to the general explanation categories. This particular explanation would be categorised as 'depression (unspecified)' 'drug withdrawal' and 'sentence-related'.

The second content-analyst was a psychologist independent of the project. They were given the forty-two definitions of explanation categories and performed the second content analysis. The inter-rater reliability and Cohen's Kappa scores were then calculated for each explanation category. Due to their lack of specificity, three explanation categories have been excluded from analysis. These are as follows: 'no recollection of incident', 'other' and 'unspecified'. The results of the test (on each of the remaining thirty-nine variables) ranged from 1 to 0.757 and are shown in the final column of Table 10.1. As illustrated, the result was high for almost all variables, the exception being 'misses someone outside' which yielded a comparatively low score of was sufficiently reliable.

10.5 MOTIVATIONAL DIFFERENCES BETWEEN PARTICIPANT GROUPS

This section explores whether or not clear differences could be found in the explanation-types given by the different participant groupings in the sample, examining first the differences between those who attempted suicide and those who injured themselves.

10.5.1 Differences in Motivation between Attempted Suicide/Self-injury

The theoretical distinction between attempted suicide and self-injury has been outlined in earlier chapters. In order to test this distinction empirically participants' explanations for the incidents of attempted suicide and self-injury were analysed. All participants were coded according to the presence (1) or absence (0) of each explanation category. These categorisations, together with participants' classification, as either attempted suicide or self-injury, were analysed using two-way contingency table analysis, which showed that a number of variables statistically differentiated between the groups. These results are shown in Table 10.2, which also shows (in the second column) the number of attempted suicide and self-injuring participants who gave each explanation.

Table 10.2

Explanations Associated with Attempted Suicide	**n AS/SI**	**χ^2 Result**
Grief/bereavement	13/6	χ^2 (1, N=124) = 4.223, p=0.040
Feelings of Hopelessness	11/2	χ^2 (1, N=124) = 8.353, p=0.004
Homesickness	10/3	χ^2 (1, N=124) = 5.302, p=0.021
Relationship Problems	10/4	χ^2 (1, N=124) = 3.853, p=0.050
Lengthy sentence (actual or expected)	11/1	χ^2 (1, N=124) = 10.755,p=0.001
Explanations Associated with Self-Injury	**n AS/SI**	**χ^2 Result**
Anger towards others	8/27	χ^2 (1, N=124) =11.204, p=0.001
To experience physical pain	0/10	χ^2 (1, N=124) = 9.559, p=0.002
To relieve stress, tension or anger	4/40	χ^2 (1, N=124) = 38.900,p=0.001
Wish to see blood	0/7	χ^2 (1, N=124) = 6.520, p=0.011
Alternative to drugs/alcohol, etc.	5/15	χ^2 (1, N=124) = 4.541, p=0.033
Alternative to outward expression of emotion	2/14	χ^2 (1, N=124) = 8.668, p=0.003

Table 10.2 Empirical Differentiation between Participants' Explanations for Attempted Suicide/Self-Injury

In terms of the behavioural outcome distinction, eleven of the thirty-nine categories significantly differentiated between attempted suicide and self-injuring participants. Attempted suicide participants were more likely than self-injury participants to have explained the incident as being motivated by grief, feelings of hopelessness, homesickness, relationship problems, or concerns over the award of or expectation of a lengthy prison sentence. By comparison, self-injury participants were more likely to explain the incident as being purposeful in relieving negative feelings rather than being related to concrete events. They were also more likely to describe the incident as being precipitated by feelings of anger towards others, a desire to relieve feelings of stress, tension or anger, a desire to experience physical pain and the wish to see blood, which was said by some to have a calming effect. Further, they were more likely to report that self-injury was used in the prison context as an alternative to other methods of coping with negative feelings (e.g., drugs/alcohol) and as an alternative to outward expressions of emotion. There were no other statistically significant associations between the groups on these variables.

10.5.2 Differences in Explanation between Men and Women

As in the above example, participants were categorised according to the explanation categories they had given and these, together with their gender classification, were analysed using two-way contingency table analysis. The analysis revealed that eight variables differentiated between men and women. In should be noted that in two of these cases the chi-squared statistics did not quite reach significance.

The results suggested that men were motivated by *concrete events* such as relationship problems or homesickness. By contrast, women tended to report that *feelings* or *emotions* precipitated the incident. These included feelings of anger towards others, a desire to feel physical pain and a desire to negate feelings of guilt or shame. To a lesser extent than men, women reported that they were motivated by *concrete* experiences or events, such as previous abuse or concern over children or other family members. These results are summarised in Table 10.3, with the number of men and women who gave this as an explanation shown in the second column of the table.

Table 10.3

Explanations Associated with Men	**n M/F**	**χ^2 Result**
Homesickness	12/1	χ^2 (1, N=124) = 3.803, p=0.051
Relationship Problems	13/1	χ^2 (1, N=124) = 4.326, p=0.062
Explanations Associated with Women	**n M/F**	**χ^2 Result**
Anger towards others	18/17	χ^2 (1, N=124) = 6.629, p = 0.010
Because of feelings of guilt/shame	8/9	χ^2 (1, N=124) = 4.220, p = 0.040
To experience physical pain	3/7	χ^2 (1, N=124) = 7.497, p = 0.006
Alternative to outward expression of emotion	2/14	χ^2 (1, N=124) = 26.767, p=<0.001
Concern over children/family	7/10	χ^2 (1, N=124) = 6.846, p = 0.009
Related to previous abuse	2/8	χ^2 (1, N=124) = 11.891, p = 0.001

Table 10.3 Empirical Differentiation between Male/Female Participants' Explanations for Attempted Suicide/Self-Injury

10.5.3 Differences in Motivations between Adults and Young Offenders

The final comparison in this series examined participants' explanation categories by age classification. When compared with the behavioural outcome and gender analysis discussed above, very few explanations differentiated adults from young offenders. Young offenders were significantly more likely than adults to describe their behaviour as an alternative to other methods of managing negative feelings and were more likely to report that it had been precipitated by auditory or visual hallucinations. Adults on the other hand were more likely to report that they had injured themselves or attempted suicide because of symptoms of substance withdrawal; an association that approached statistical significance. These results are summarised in Table 10.4, with the number of adults and young offenders who gave this as an explanation shown in the second column of the table.

Table 10.4

Explanations Associated with Adults	**n A/YO**	**χ^2 Result**
Substance withdrawal	10/3	χ^2 (1, N=124) = 3.725, p = 0.054
Explanations Associated with Young Offenders	**n A/YO**	**χ^2 Result**
Alternative to drugs/alcohol, etc.	6/14	χ^2 (1, N=124) = 4.460, p = 0.035
In response to audio/visual hallucinations	3/10	χ^2 (1, N=124) = 4.735, p = 0.030

Table 10.4 Empirical Differentiation between Adults/Young Offenders' Explanations for Attempted Suicide/Self-Injury

Having identified the main motivators that are differentially associated with the behavioural outcome, gender and age groupings in the analysis, the overall *structure* of these motivators is now examined in an attempt to ascertain if there are any underlying themes or dimensions.

10.6 The Structure of Motivations for Attempted Suicide/Self-Injury

In order to fully examine the pattern of associations between the motivational factors outlined above, participants' explanations of the factors (i.e., events and/or emotions) preceding incidents of attempted suicide and self-injury were analysed using SSA-1. A full discussion of the purposes of SSA-1 was provided in Chapter 8 of this thesis. To reiterate, its function is to test simultaneously the relationship between all variables in a dataset. The output represents these empirical relationships as points in a geometric space, which makes aspects of the data that may be obscured in the original matrix more apparent (Donald and Cooper, 2001). This is achieved by producing an association matrix, in this case using Jaccard's coefficient of association, which takes account of only positive co-occurrence. This was deemed appropriate for the current analysis based on dichotomous data.

The SSA-1 plot is interpreted by examining if there are any meaningful regions containing specific variables that might explain the structure underlying, in this case, participants' reasons for attempting suicide or injuring themselves. This interpretation of regional contiguity patterns is known as exploratory SSA-1 (Shye et al., 1994) and,

as outlined by Canter and Herigate (1990) requires a clear statement of what the variables in each region have in common with one another (see Section 10.6.1).

The resultant three-dimensional SSA-1 solution had an acceptable Guttman-Lingoes coefficient of alienation of 0.20 in 19 iterations. Figure 10.1 shows vectors 2 x 3 of the resultant output, which has been partitioned according to five distinct regions, each representing a different type or category of motivation.

Figure 10.1

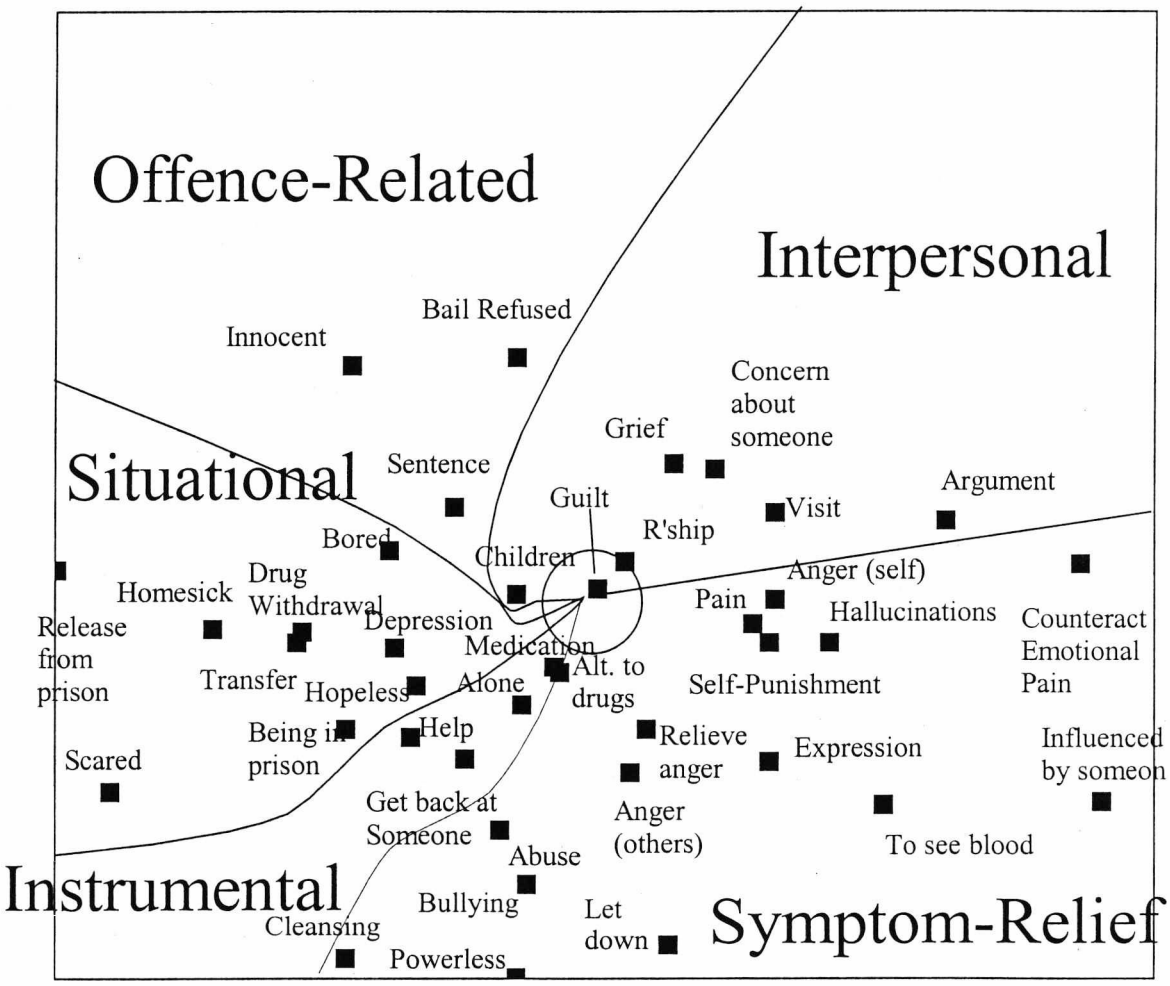


Figure 10.1 Vectors 2 x 3 of a 3-D SSA-1, with regions corresponding to Five Motivation Domains (N=123, 39 items, Coefficient of Alienation=0.20)

The plot has been partitioned according to five regions, each containing items that relate to a separate theme or element of motivation. The first region (termed 'offence-related') includes expressed motivations that relate to participants' offences (accused or actual) or prison sentences (awarded or expected). The second region (termed 'interpersonal relationships') includes those motivations that were associated with participants' relationships with others. The third region includes motivations that have collectively been termed 'symptom relief' and includes all those explanations that emphasise the functions of self-injury or attempted suicide. The fourth region (which has been termed 'instrumental') includes participants' expressed motivations that appear to have had the direct objective of affecting some change in their circumstances. Finally, the fifth region (termed 'situational') relates to prison-specific issues that are not necessarily related to prisoners' offences.

The similarity within, and the differences between, each of these explanation or motivation categories is now discussed in more detail, by providing examples of the items included in each region.

10.6.1 Commonality within each region of the Explanation/Motivation SSA-1

1. The region termed '**offence-related**' includes the variables 'innocent', 'recent refusal' (e.g., bail application) and 'concern over/court appearance'. These variables relate to participants' feelings about being in prison generally, or following an event related to being in prison (e.g., refusal of bail).

2. The '**interpersonal**' region includes factors specifically relevant to participants' relationships with others including 'concern over family/children', 'grief/bereavement', 'relationship problems' or a 'bad visit'.

3. The third region, that has been termed '**symptom relief**', includes variables that appear to be related to participants' wishes to communicate a desire, wish or need (such as 'alternative to outward expression of emotions'). This is comparable to Geller's (1992) description of arson as a form of emotional expression in pathological adults where the behaviour is neither a primary symptom of psychiatric disorder, nor

attributable to pyromania, but instead is used as a form of communication. These all refer to the functions of self-injury/attempted suicide.

4. The region termed '**instrumental**' includes variables that appear to involve a goal or objective of some kind, such as 'being alone/wanted someone to talk to', 'wanted help', 'related to medication'. This is equivalent to Fesbach's (1964) discussion of the nature of crime, in which he distinguishes between acts that are expressive or instrumental in motivation and nature. Expressive acts are those which arise from an individual's need to express anger or other emotions, as opposed to activities that have an objective of achieving an end goal (which are termed instrumental).

5. Finally, the region termed '**situational**' contains variables that relate directly to participants' imprisonment (but are not specifically offence-related). The variables in this region include 'depression (unspecified)', 'concern over children', and 'homesickness'.

'Guilt' does not easily fit into any of the five motivational types outlined above. That it occupies the central position of the plot may mean that each region shares a component with guilt. In other words, whatever motivational type/s a person is operating within, it/they typically also include an element of guilt. In summary, five motivational categories were identified from the SSA-1 analysis. They form wedge-like regions around a central point, which contains the variable 'guilt'. Partitioning the plot in this way suggests the different regions are related in a qualitative fashion. Having examined the distinct types of motivational categories and the variables included within them, their *positioning* in the plot is now briefly discussed.

10.6.2 Positioning of Motivational-Categories

That 'offence-related' motivations are plotted in the region directly opposite 'symptom-relief' motivations indicates, indicating these two motivational regions are least similar to each other, that is, they are least likely to be reported by the same individuals. The former includes the variables 'innocent' and 'concern over sentence/forthcoming court appearance'. These relate to offence-specific events that have occurred or are forthcoming. By contrast, the 'symptom relief' region contains explanations that are

more 'internal' to the individual. They relate less specifically to being in prison and seem to be more concerned with participants' feelings or emotions in general. Explanations in this category include the need to 'counteract emotional pain' and 'relieve, anger, frustration, anxiety'. Although, of course, it is possible that participants felt angry or frustrated *because* they were in prison, this was not communicated. Rather, they experienced the feelings or emotions and engaged in the behaviour as a way of relieving them. That 'interpersonal' explanations are plotted in a region most distant from 'instrumental' motivations indicates that they are psychologically dissimilar. All 'interpersonal' explanations share a common component in that they are about the participants' relationships with others, for example 'relationship problems', 'concern about someone else' and 'a visit that went badly'. 'Instrumental' explanations, on the other hand, all relate to the clear objective of achieving an end goal, such as 'wanted help', 'to get back at someone or prove a point'. This parallels Fesbach's (1964) distinction between 'expressive' and 'instrumental' acts.

10.7 Differences in the Motivational Dimensions between Participants

The next stage in the analysis explores differences between the participant groups (i.e., attempted suicide/self-injury, gender and age) in order to ascertain if they have a tendency to adopt a particular motivational typology. The explanation categories each participant gave were examined and each participant was assigned a 'predominant motivational style' based on the type of explanation/s that they gave.

For example, if a participant said "*I felt depressed. I was having flashbacks to the time he raped me. I felt dirty and wanted to get the dirt and badness out..... Outside I take drugs..... but I can't do that in here*" their predominant motivation would be *symptom relief.* Their explanation contained a total of four 'units' of text, one of which was classified as 'situational' (i.e., "I felt depressed"). The other three units were categorised according to the 'symptom relief' category. Thus, this participant's predominant explanation category would be 'symptom-relief', because two thirds of their explanations accorded to this category. Table 10.5 below indicates the distribution of the 478 different explanations used by the 123 participants included in the analysis, each of whom gave a mean of 3.9 explanations.

Table 10.5

Type of Explanation	Explanation	No. times explanation given	% of total
Offence-related	Innocent	7	1.5%
	Sentence/court appearance	12	2.5%
	Bail Refused	3	0.6%
Interpersonal	Argument	5	1%
	Concern over someone else	8	1.7%
	Grief/bereavement	19	4%
	Relationship problems	14	2.9%
	Visit (went badly, etc)	1	0.2%
Symptom-relief	Alternative to drugs	20	4.2%
	Anger – towards self	5	1%
	Anger – towards others	35	7.3%
	To feel cleaner	2	0.4%
	Counteract emotional pain	2	0.4%
	Alternative to outward expression of emotion	16	3.3%
	Hallucinations	13	2.7%
	Influenced by someone else	2	0.4%
	Let down by somebody	4	0.8%
	Physical pain blocks emotional pain	10	2%
	Feels powerless/gives power	2	0.4%
	Related to past abuse	10	2%
	Relieve anger, frustration, anxiety, etc	44	9.2%
	Seeing blood has a calming effect	7	1%
	Self-punishment	4	0.8%
Instrumental	Being alone/wanted someone to talk to	31	6.5%
	To get back at someone/prove a point	6	1.3%
	Wanted help	18	3.8%
	Related to medication/changes in medication	7	1%
	Transfer (originally in situational)	20	4.2%
Situational	Being in prison	13	2.7%
	Bored in cell	11	2.3%
	Bullying (originally in symptom-relief)	15	3.1%
	Children	17	3.6%
	Depression	33	6.9%
	Drug withdrawal	13	2.7%
	Lost everything/nothing to live for	13	2.7%
	Homesick	13	2.7%
	Scared	5	1%
	Forthcoming release from prison	3	0.6%
Guilt	Guilt	17	3.6%
Total		478	100%

Table 10.5 Explanation-types and their Frequencies

Given the multi-factorial, complex nature of suicidal and self-injurious behaviours (Pritchard, 1995) it was deemed unlikely that participants would fall neatly into any of the five explanation-types. Rather, as has been illustrated in the above example, it was expected that participants would give more than one explanation for the incident and/or that the explanations they gave would fit into more than one category. Consequently, each participant was initially rated according to the *number* of explanations they gave, after which the explanation categories were classified according to their *type*. Finally, a majority explanation-type was calculated for each participant. The results of this categorisation process, which are now summarised, are shown in Table 10.6

- The majority motivational category was 'symptom relief' in a third of cases;
- The majority motivational category was 'situational' for 28% of participants;
- The majority motivational category was 'instrumental' for 8% of participants;
- The majority motivational category was 'interpersonal' for 4% of participants;
- None of the participants had an offence-related majority motivational category.
- There was no majority motivational category in 27% of cases.

As indicated above, participants' explanations were most commonly classified according to the 'symptom relief' category. Thus, a third of all participants reported that their suicidal/self-injurious behaviour was motivated (either predominately or totally) by a desire to relieve negative symptoms or feelings. The second most common explanation category was 'situational'. Thus a sizeable proportion reported that they were motivated (either predominately or totally) by their present situation.

Table 10.6

Category	No. of participants exclusively within each category	%
Symptom-relief	41	33.3
Situational (related to being in prison)	34	27.6
No majority	33	26.8
Instrumental/to affect change	10	8.1
Interpersonal/relationships	5	4.0
Sentence/offence-related	0	0
Guilt (centre point)	0	0
Total	123	100

Table 10.6 Majority Explanation Categories

10.7.1 Profile of Participants within each Motivational-Type

Based on their 'predominant' explanation-category, participants were examined to reveal their original behavioural outcome, gender and age categorisation. These results are shown in Table 10.7.

Table 10.7

Majority Category	AS n/%	SI n/%	M n/%	F n/%	A n/%	YO n/%
Interpersonal/relationships	**5 100%**	0	**4 80%**	1	2	**3 60%**
Symptom-relief	7 17%	**34 83%**	21 51%	**20 49%**	19 46%	**22 54%**
Instrumental	4 40%	**6 60%**	**8 80%**	2 20%	**6 60%**	4 40%
Situational	**25 74%**	9 25%	**25 74%**	9 25%	**20 59%**	14 41%
No majority	**17**	16	**26**	7	**17**	16
Total	**58 47%**	**65 53%**	**84 68%**	**39 32%**	**64 52%**	**59 48%**

Table 10.7 Participants' Majority Explanation Category by Behavioural Outcome, Gender and Age

The shaded areas in Table 10.7 show the predominant behavioural outcome, gender and age classification of each majority explanation-category. For example, all of those who had been assigned an 'interpersonal/relationships' majority category had attempted suicide. Conversely, almost half of those who had been assigned a 'symptom-relief' majority category were women; this is a clear over-representation, bearing that women comprise less than a third of the overall sample. Because of the small n-sizes in the above categories, it was not possible to conduct any statistical tests. Nevertheless, the proportional differences between the groups suggest that:

1. Those motivated by 'interpersonal relationships' were most likely to have attempted suicide;
2. The majority of those motivated by 'interpersonal relationships' were male young offenders;

3. Those motivated by 'symptom-relief' are most likely to have injured themselves;
4. The majority of those motivated by 'symptom relief' were young offenders. There was also an over-representation of women in this category.
5. Self-injuring, adult men dominated instrumentally motivated incidents.
6. Incidents motivated by 'situational' factors were most common amongst those who had attempted suicide.
7. The majority of those motivated by 'situational' factors were adult men.

10.8 CHAPTER SUMMARY

This chapter has focused on participants' expressed reasons for attempting suicide or injuring themselves. It began by outlining the results of a content analysis, which was conducted on the data resulting from an open-ended question on the interview schedule. This analysis revealed forty-two separate explanation categories, each of which was given by one or more participants in the sample as *the* reason (or one of the reasons) that they had attempted suicide or injured themselves. The range and combination of peoples' accounts of the factors (events, experiences or emotions) that preceded their actions highlight the multifactorial nature of suicidal and self-injurious behaviours. In very few cases were there single reported causes for incidents. Rather, the majority of people described a number of precipitating or motivational factors, related to concrete events, feelings/emotions or both.

In order to test empirically the theoretical distinction that was drawn in earlier chapters between individuals' motivations for self-injurious and suicidal behaviours and to establish if there were any age or gender effects, the data were analysed using two-way contingency table analysis. Each participant was coded according to the type of explanation/s their gave and according to their behavioural outcome, gender and age classifications. A number of the explanation-categories significantly differentiated between groups. Prisoners who attempted suicide were more likely than those who injured themselves without suicidal intent to report being motivated by the following:

- Feelings of hopelessness, homesickness or grief;
- Concern over the expectation of a lengthy prison sentence or a court appearance;
- Relationship problems.

Prisoners who self-injured were more likely (than those who attempted suicide) to report being motivated by the following factors:

- A desire to manage negative emotions such as anger, stress or tension;
- Because they did not have access to their usual method of managing negative feelings (such as drugs and/or alcohol).

A number of age and gender differences were also found.

- Men were more likely than women to be motivated by *concrete* events;
- Women were more likely to be motivated by negative emotions or feelings;
- Adults were more likely to be motivated by substance withdrawal;
- Young offenders were more likely than adults to report being motivated by auditory or visual hallucinations;
- Young offenders were more likely than adults to be motivated by the absence of other means of problem-management, such as drugs/alcohol.

Having established, empirically, the existence of a number of differences in the motivational-types between the sub-groups in the analysis, the *structure* of participants' motivations were analysed using Smallest Space Analysis, which revealed the presence of five broad motivational-categories. These categories (which were termed 'offence-related', 'situational', 'interpersonal', instrumental' and 'symptom-relief') each contain groups of variables (i.e., motivations) that share some commonality with each other, but that differ from those in other regions. For example, the variable 'grief/bereavement' which was included in the 'interpersonal' category clearly differs *psychologically* from the variable 'concern over sentence/court appearance' which was included in the 'offence-related' region. Having established the existence of different motivational categories, the next stage was to explore if the main participant groupings had a tendency to adopt a particular motivational type. This analysis revealed that:

1. Participants who attempt suicide, men and young offenders are most likely to be motivated by variables in the 'interpersonal relationships' category;
2. 'Symptom-relief' is the main motivation for self-injury, for young offenders and for women;

3. 'Instrumental' motivations serve self-injuring, adult men;
4. 'Situational' factors motivate attempted suicide in adult men.

In summary, the combined results of this chapter indicate that the reasons prisoners attempt suicide differ from the reasons that prisoners injure themselves. Differences between men/women and adults/young offenders in the factors (i.e., events, emotions or experiences) that motivate their suicidal or self-injurious behaviours were also identified. Finally, the research shows that prisoners' motivations for engaging in these behaviours operate according to five broad motivational-categories, which are to a certain extent dependent on the specific type of behaviour examined, as well as the gender and age groupings of individual participants.

The focus in the following chapter is on participants' perceptions of the impact of imprisonment on their suicidal and self-injurious behaviours; more specifically, it examines prisoners' *attributions* in this regard. An examination of participants' views on the prevention of suicide and self-injury in prisons in also outlined.

CHAPTER 11

RESULTS VI: PARTICIPANTS' VIEWS REGARDING THE EFFECTS OF IMPRISONMENT

11.1 INTRODUCTION

Chapter 3 considered the possible short and long term effects of imprisonment, from psychological and sociological perspectives. This short chapter examines participants' attributions of these effects, by asking them if they thought that the problems that contributed to their recent suicide attempt or incident of self-injury were either *caused* or exacerbated by being in prison.

Few studies into suicidal behaviours in prisons have sought to ascertain participants' views as to the contribution of imprisonment in this regard. Instead, there seems to be a general acceptance that aspects of imprisonment contribute to the onset of suicidal crises (Liebling, 1992). The current study attempted to address this shortcoming by examining whether or not prisoners themselves thought this to be the case and, if so, *why* they thought this to be the case. Also examined in this chapter are participants' views as to what may have helped prevent their most recent suicide attempt or incident of self-injury, as well as their views regarding the prevention of future incidents.

11.2 DOES IMPRISONMENT CAUSE ATTEMPTED SUICIDE/SELF-INJURY?

Participants were asked if they thought that the problems that led to their recent suicide attempt or incident of self-injury were either caused or exacerbated ('made worse') by imprisonment. The vast majority for whom information was available (86.4%) reported that they felt this *was* the case. As with previous analyses, comparisons were made on the basis of behavioural outcome, gender and age. The different sub-groups' responses as to the causative effects of imprisonment as show in Figures 11.1, 11.2 and 11.3. Figure 11.1 shows the results of a comparison between participants who had attempted suicide and those who had injured themselves. As illustrated, very similar proportions of attempted suicide and self-injuring participants felt that prison had caused (or contributed to) their recent suicide attempt or incident of self-injury. Similarly, almost equal proportions were unsure or felt that imprisonment itself had not had this effect.

Figure 11.1

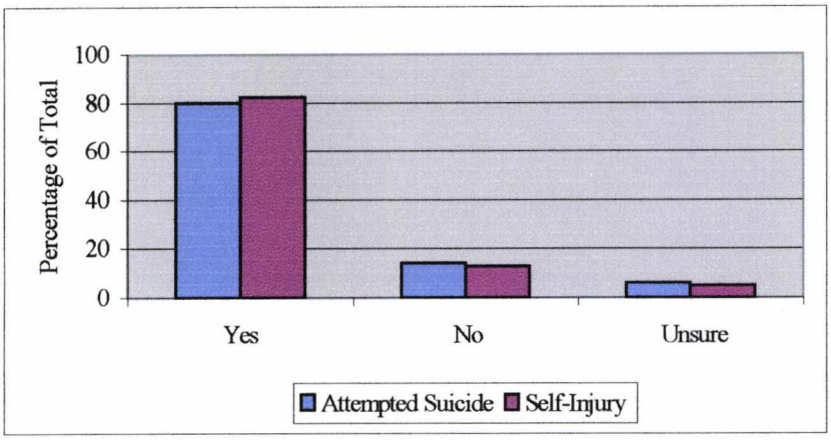


Figure 11.1 The causative effect of prison: Behavioural Outcome

A gender-based comparison revealed that women were slightly less likely than men to think that the problems that led to their recent suicide attempts/incidents of self-injury were caused or exacerbated by imprisonment. Further, women were more likely than men to report that this was not the case. In other words, women were less likely than men think that problems were caused by being in prison. These findings are shown in Figure 11.2. A follow-up cross-tabulation analysis revealed that this association approached statistical significance (Pearson χ^2 (2, N =110) =5.879, p = 0.053). These results are interesting given the arguments that imprisonment is an altogether more difficult experience for women (Devlin, 1998).

Figure 11.2

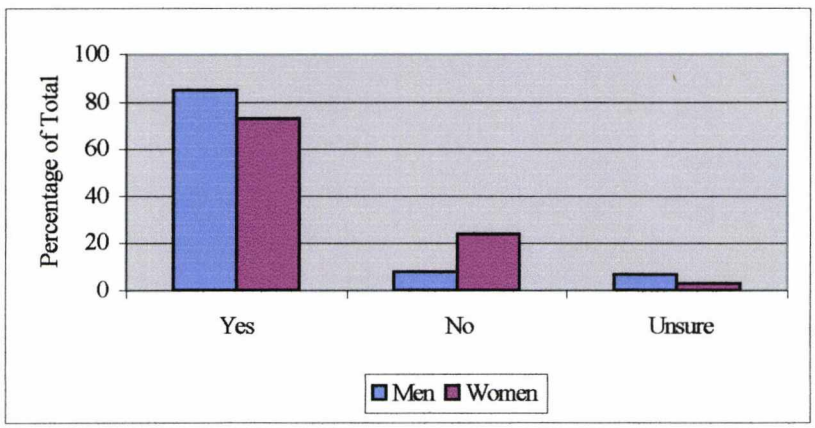


Figure 11.2 The causative effect of prison: Gender

Figure 11.3 shows the results of the age-based comparison on participants' views as to the impact of imprisonment on their suicidal or self-injurious behaviours. As illustrated, both groups gave similar responses.

Figure 11.3

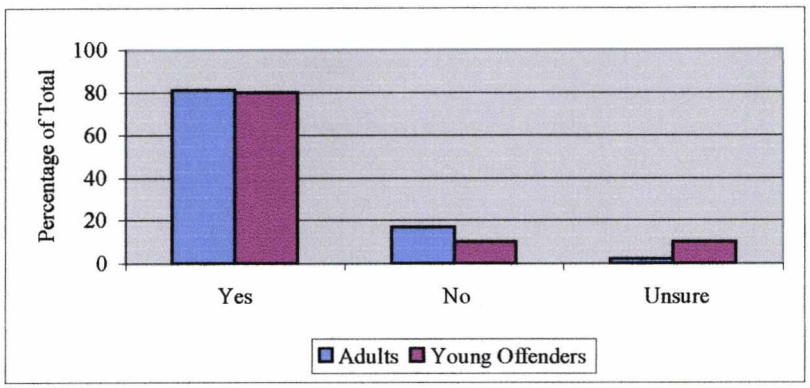


Figure 11.3 The causative effect of prison: Age

11.2.1 Participants' Views of the Factors Exacerbating their Problems

Having established that the vast majority of participants (i.e., 86%) felt imprisonment had either caused or exacerbated the problems that led to their recent suicidal/self-injurious behaviours, the next stage of the analysis was to determine more specifically *why* they thought this was the case. In order to address this issue, participants (who had responded positively to the previous question) were asked to describe, in their own words, how or why they thought being in prison had caused their problems. The data resulting from these questions were then content analysed; a detailed description of this technique was given in Chapter 10.

The content analysis indicated that participants gave explanations from one or more of nine different types, which were categorised as follows:

- Loneliness;
- Lack of control over situation;
- Lack of help/support;
- Boredom/too much time;
- Fear;
- Innocence;
- Hopelessness;
- Drug-related;
- Guilt.

Examples of the types or phrases or explanations that were categorised according to each of the explanation-types are now given. The 'loneliness' category included comments such as: '*I miss my family and friends ..... I've got no-one to talk to*'. The 'lack of control' category included comments like: '*There's nothing I can do to change my situation*'. Comments in the 'lack of help' category included: *I'm just not getting the help I need*'. The 'boredom' category included comments such as: '*I spend too much time in my cell thinking about my problems*'. The 'fear' category included the comment: '*I'm worried about what they* [other prisoners] *are going to do to me*'. The 'innocence' category included comments such as: '*Everyone thinks I'm a murderer, but I'm not*'. Comments in the 'hopelessness' category included: '*I'm a failure, I'm going nowhere*'. The 'drug-related' category included comments such as: '*there's no other way I can manage my problems ..... outside I take drugs*'. Finally, the 'guilt' category included comments such as: '*I'm just so ashamed of what I've done*'

11.2.2 Inter-rater Reliability Results

As a measure of the reliability of the above classification scheme, the data were re-classified by an independent rater, who was a psychologist independent of the project. The author conducted the first content analysis, which generated nine explanation categories (as well as a general 'other' category). A description of these categories was produced an each unit of text (i.e., explanation) was assigned to its relevant explanation category. The second rater was given the above-mentioned descriptions of the explanation categories and asked to assign participants' responses to the most suitable. The reliability of these classifications was assessed simply by summing the number of times an explanation was classified by each rater in the same way, as a percentage of all the explanations in the analysis. In the current case, a total of 96 different explanations were derived from the content analysis. The researcher assigned each of these explanations to one of the categories outlined above and the second rater then independently classified them. The 'percentage agreement' (Wilson, 1995) was 96%. In other words, in 96% of cases, explanations were categorised by both raters in the same way.

11.2.3 The Current Sample's Attributions for Attempted Suicide/Self-Injury

As outlined in Chapter 1, attributions relate to individuals' interpretations of behaviour, of both themselves and others. The principles of attribution theory have recently been applied to clinical populations, to ascertain if different types of people demonstrate different types of attributions. More specifically, Peterson et al. (1982) identified differences in attributional style between depressed and suicidal people and controls, which were measured along three dimensions: internal/external, global/specific and stable/unstable. The results showed that depressed and suicidal people blamed themselves for imaginary negative events; they thought the causes would always be present; and that they would interfere with all aspects of their lives. In short depressed and suicidal individuals were found to be characterised by an internal, stable and global attributional style.

The 'internal'/'external' attributional dimension pioneered by Heider (1958) and described by Peterson et al. (1982) was applied to the current data. Each of the explanation categories derived from the content analysis described above was examined to establish if it could best be described as 'internal' or 'external'. The results of this classification are shown in Table 11.1.

Table 11.1

No.	Explanation Category	Attribution-type (Internal/External)
1	Loneliness	Internal
2	Lack of control over situation	Internal
3	Lack of help/support	External
4	Boredom/too much time	Internal
5	Fear	External
6	Innocence	External
7	Hopelessness	Internal
8	Drug-related	Internal
9	Guilt	Internal

Table 11.1 Categorisation of Participants' Explanations according to Internal/External Attributions

As shown in the above table, the researcher classified six of the nine explanation categories as being 'internal' in origin. The 'guilt' category included comments such

as: '*I feel guilty about what I've put my parents through*' and the 'boredom' category included explanations like: '*there's just nothing I can do to take my mind off things*. In each of these cases, the participant appears to be attributing the causes of or reasons for their problems to *themselves* rather than other people. This contrasts clearly with explanation categories that were classified as being external. For example, the 'innocence' category included comments like: '*I was ill at the time* [the offences were committed]..... *They should have put me in hospital not prison*'. Similarly, the 'fear' category included the following explanation: '*Everything's made worse by the bullies and the taunts*'. In the categories classified as 'external', participants appear to be ascribing their problems to something or somebody else – to their *situation* or *environment*, rather that themselves.

As a measure of the reliability of this classification scheme, a second independent rater coded each explanation category as either 'internal' or 'external'. They were asked to judge whether incidents of attempted suicide or self-injury appear to have been attributed (by the individual concerned) to *internal* personal causes or to the *external* action of the environment or situation. The overall reliability was assessed simply by comparing the classifications made by the first and the second raters. In all but one case (i.e., eight out of nine) both the researcher and the independent rater categorised the explanation categories in the same way. The exception to this was the classification of the category 'lack of control over situation'; the researcher had classified this as being 'internal' and the rater had classified it as 'external. Overall, however, the percentage agreement (at 89%) demonstrates that the classification scheme was relatively reliable.

Having explored participants' views as to the *causative* effects of imprisonment and having examined the way in which participants attribute their behaviour (i.e., internally or externally), attention now turns to their views regarding the prevention of future incidents of attempted suicide and self-injury.

11.3 Prevention of Future Incidents

Until recently, the Prison Service's strategy for managing suicide and self-injury has shied away from prevention, focusing instead on awareness of the factors associated with suicide, attempted suicide and self-injury. This approach has been criticised in the sense that it under-emphasises the need to provide a supportive and caring environment

for *all* prisoners (HM Prison Service, 2001). One of the problems in focussing resources only on those who have been identified as suicidal is that so few of those who complete suicide are actually identified, as was discussed in Chapter 3.

As discussed in Chapters 5 and 10, given the obvious impossibility of questioning 'successful' suicides about what might have been useful in preventing their actions, a fruitful avenue of enquiry is to ask those who have attempted suicide, but been unsuccessful. Thus, attempted suicide participants in the current sample were asked if they thought anything could have prevented their attempt. Of the forty-eight participants who had attempted suicide for whom these data were available, equal proportions reported that either nothing could have been done to prevent them (48%) or that some form on intervention may have been helpful in preventing the incident (48%). The remaining participants (4%) were unsure whether or not any intervention would have been helpful or effective. Nevertheless, that almost half of those questioned felt their actions could have been prevented is an important finding and one that has implications for future policy and practice. Gender and age-based comparisons showed no statistically significant differences between the groups in this regard.

For completeness, participants who had injured themselves were also asked if anything could have prevented the incident. Almost half (49%) reported that nothing could have been done to help them. Forty-two percent thought that something could have been done to help and the remainder (9%) was unsure. There were no differences between men and women with regards to their perceptions about the likely prevention of incidents. A similar comparison on the basis of age grouping revealed that more young offenders reported that nothing could have been done to prevent the injury (the actual figures were 71% and 33% respectively). Conversely, a higher proportion of adults felt that something could have been done to help (55% and 24% respectively). Finally, 12% of adults and 5% of young offenders were unsure. These variables were found to be statistically related (χ^2 (2, N = 53) = 6.978, p = 0.031).

11.4 Participants' Interpretations of What Would Help

Participants were also asked what interventions they thought would have been beneficial to them and what they thought might reduce the likelihood of future events. Over half of those for whom information was available (58%) expressed specific

opinions as to what they thought would be beneficial. These included practical solutions, such as being occupied (in work, education or training) as well as medical intervention (psychological/psychiatric support or changes in medication). Given that such a high proportion felt their problems were at least exacerbated by being in prison, it is interesting that only one participant felt that being discharged from prison would prevent future incidents. Participants' explanations of the interventions they thought they would find helpful, and which they thought may prevent future incidents, are shown in Table 11.2.

Table 11.2

Explanation	No.	%
Medical intervention (inc. medication/psychological support)	34	38%
Nothing/don't know	27	30%
Being occupied (inc. work, education, training, programmes)	13	15%
Environmental/situational changes (e.g., different wing/cell)	8	9%
Better familial contact	6	7%
Being released from prison	1	1%

Table 11.2 Participants' Views as to the Prevention of Future Incidents

11.5 Usual Methods of Managing Negative Feelings or Emotions

As outlined in earlier chapters, it has been widely reported that self-injury (particularly in the prison context) is effective in managing negative emotions and feelings, especially in the absence of alternative strategies (Cullen, 1985). In order to test this assumption, those who had injured themselves (rather than attempted suicide) were asked if self-injury was their usual method of managing distressing feelings. As shown in Table 11.3, men were more likely to report that they never or only rarely used self-injury as a means of managing such feelings, whereas women were more likely to report that they did. A statistical association was found between these variables (Pearson χ^2 (2, N = 54) =12.410, p = 0.002).

Table 11.3

Group	N	Never	Rarely	Mostly
Men	30	9	9	12
Expected Count		5	7.2	17.8
%		100%	69.2%	37.5%
Women	24	0	4	20
Expected Count		5.8	5.8	14.2
%		0%	30.8%	62.5%
Totals	54	9	13	32

Table 11.3 The Functional Aspect of Self-Injury by Gender

Follow-up pairwise comparisons were conducted to evaluate the difference in these proportions. As shown in Table 11.4, there was a statistically significant difference in the probability of men and women using self-injury as a usual method for managing distressing feelings. The probability was about 1.67 times (0.20/0.12) more likely when the participant was female rather than male.

Table 11.4

Comparison	Pearson χ^2	Significance
Yes vs. no	10.982	0.001
Yes vs. sometimes	3.740	0.053
Sometimes vs. no	3.385	0.066

Table 11.4 Cross-Tabulation of the Functional Aspect of Self-Injury by Gender

There were no differences between adults and young offenders in the extent to which they used self-injury as a means of managing distressing feelings.

11.6 CHAPTER SUMMARY

This short chapter has examined the extent to which participants in the current sample felt that imprisonment had either caused or exacerbated the problems that led to their recent attempts at suicide or incidents of self-injury. As discussed, the vast majority of those questioned (86%) felt this to be the case. Although there were no differences between the groups when comparisons were conducted on the basis of behavioural outcome or age, men were far more likely than women to report that prison had caused their problems.

Having established that the majority felt imprisonment had *caused* or exacerbated their problems, the subsequent analysis aimed to establish in what way participants thought this to be the case. Content analysis revealed nine different explanation categories, as follows:

- Loneliness;
- Lack of control over situation;
- Lack of help/support;
- Boredom/too much time;
- Fear;
- Innocence;
- Hopelessness;
- Drug-related;

Having established (following inter-rater reliability checks) a sufficiently reliable classification scheme, the next stage of the analysis involved the application of the 'internal'/'external' attributional dimension (Heider, 1958) to the resultant data. The researcher and an independent rater classified each explanation category as being either internal or external in origin. The researcher ascribed the majority of explanations (six out of nine) to the former (internal) attributions category, a finding that has resonance with Peterson et al's (1982) suggestion that depression and suicidal behaviours are most commonly associated with internal attributions. The independent rater ascribed the explanation categories to the same (internal or external) attributions in all but one case.

The penultimate section of this chapter examined participants' views as to the prevention of attempted suicide and self-injury in prison. The results showed that almost half of those who had attempted suicide and forty per cent of those who had injured themselves felt that, on reflection, something could have been done to help prevent their actions. When questioned as to what interventions or actions that they thought would be helpful in the prevention of future incidents, almost two-thirds gave specific examples. These included regime changes (such as being more involved in work, education or training) as well as more specialist interventions (such as psychological programmes or medical interventions). Interestingly (given that the majority felt prison had either caused or exacerbated their recent problems) only one participant reported that being released from prison would help.

As a further measure of the widely reported functional aspect of self-injury (as distinct from attempted suicide) the final part of the chapter examined the extent to which it was used by participants as a method of managing their distressing feelings. The results showed that women were almost twice as likely as men to use self-injury for this purpose. There was no difference between adults and young offenders in this regard.

Having presented the results of the current research, the following chapter draws together and discusses the main findings in relation to previous research into suicidal behaviours, in the community the prison contexts. The methodological and theoretical implications of the research are then summarised. Finally, a number of conclusions are drawn and recommendations for future policy and practice are made.

CHAPTER 12

DISCUSSION, IMPLICATIONS AND CONCLUSIONS

12.1 INTRODUCTION

The introduction to this thesis highlighted the recent theoretical shift in the understanding of suicide, attempted suicide and self-injury, from an almost total reliance on *individual* factors towards an acknowledgement of the social and situational context of these behaviours. This shift has raised many challenging theoretical questions, which have implications for the development of theoretical models of suicide and self-injury, but which also have practical consequences for the management of prisoners who are suicidal or who injure themselves without suicidal intent.

The literature reviewed in Chapters 1 to 4 gave rise to three central research aims, which formed the framework for the research.

1. To develop an understanding of the *aetiology* of suicidal behaviours in prisons. Specifically, the research explored the relationships between prisoners' suicidal behaviours and various life events and background factors. The contribution of previously identified 'risk' factors was also examined.
2. To explore prisoners' conceptualisations of the factors that precipitated their suicide attempts and incidents of self-injury. The principal aim was to identify what *motivated* them to engage in these behaviours and to understand the *functions* their behaviours served. The differences and similarities between suicide and self-injury were explored.
3. To understand the differences and similarities relating to Questions 1 and 2 between different types of prisoners (i.e., adult/young offender and male/female prisoners) and different types of suicidal behaviours (i.e., self-injury and attempted suicide).

These aims were addressed by examining attempted suicide and self-injury at ten prisons in England and Wales. A total of 143 in-depth, one-to-one interviews with prisoners were conducted, on which 124 were included in the final analysis. The sample consisted of the following groups of prisoners: 36 adult men, of whom 20 had

attempted suicide and 16 self-injured; 49 young offender men, of whom 24 had attempted suicide and 25 self-injured; 28 adult women, of whom nine had attempted suicide and 19 self-injured; and 11 young offender women, of whom five had attempted suicide and six had self injured.

The present chapter starts by reviewing the research findings and focuses on the differences and similarities between the various sub-groups in the analysis, i.e., attempted suicide and self-injury ('the suicidal behavioural outcome'), men and women ('gender') and adults and young offenders ('age'). For the purposes of clarification, the term 'behavioural outcome' is not intended to imply that an experimental paradigm has been adopted. Rather, the term was adopted as a way of signifying that the studied behaviours appear to be the culmination of a combination of events and experiences the participants in the sample had experienced in their lives leading up to the event.

The study began by outlining the background characteristics of the sample, identifying that there were very few differences between participants who had attempted suicide and those who injured themselves in terms of their socio-demographic, criminal or penal, psychiatric or social-situational factors. Very clear differences emerge, however, when analysis is undertaken of their generalised mood states, their emotions precipitating incidents of attempted suicide or self-injury and, most fundamentally, their motivations for engaging in these behaviours. Broadly speaking, it appears that events closer in time and, arguably closer *psychologically*, to the suicidal 'event' play a greater role in differentiating between attempted suicide and self-injury. Prior to undertaking a fuller discussion of this issue, the main findings of the research, as presented in each of the chapters, are now summarised.

12.2 Socio-Demographic, Criminal and Penal Characteristics

The first results chapter (Chapter 6) intended to address the first and third aims of the thesis, i.e., to explore previously-identified risk factors and to identify any differences between the various sub-groups in the analysis. The initial focus was on the socio-demographic and criminological characteristics of the sample. The findings demonstrated that there were very few differences between participants when comparisons were conducted on the basis of *behavioural outcome*. Where differences

did occur they were usually when comparisons had been conducted on the basis of *gender* or *age*.

For example, in terms of their social and domestic situations prior to imprisonment, women were significantly more likely than men to be divorced and to have lived alone prior; whilst men were significantly more likely than women to be single. There were no differences between the various sub-groups in either their ethnic grouping or their educational backgrounds. In terms of offence-related characteristics, young offenders were less likely than adults to be sentenced at the time of the interview and were more likely to be imprisoned for charges of burglary. As may be expected, young offenders were also more likely than adults to be in prison for the first time. Women were more likely to be sentenced to life imprisonment and had been in prison for longer at the time of the incident. Again, there were no differences between participants who had attempted suicide and those who had injured themselves in terms of criminological characteristics.

One explanation for the lack of statistically significant differences between the various sub-groups in the analysis on these factors is that univariate analyses are simply not sufficiently sophisticated. To test this possibility, and as a partial replication of the study conducted by Meltzer et al. (1999) the data were analysed using Logistic Regression, an analysis that enables one to predict a discrete outcome (such as group membership) from a group of variables. In the current case, the outcome (group membership) was 'attempted suicide' or 'not attempted suicide' (i.e., self-injury). In accordance with Meltzer et al. (1999) Logistic Regression analyses were conducted on *demographic* variables (i.e., age, ethnicity, family-type and educational qualifications) and *criminological* variables (i.e., offence-type, location of incident, length of time in prison and whether or not the participant was in prison for the first time). Separate analyses were conducted on sentenced men, remand men and women, as well as analyses on the entire sample. The majority of these analyses were non-significant, indicating that the predictors (either as a set or individually) were not capable of predicting group membership. The exception to this was the criminological analysis conducted on male remand prisoners. Whilst, in the case, the logistic regression model (containing all the predictor variables) was statistically significant, this was not accounted for by any individual variable/s.

The current findings differ from those of Meltzer et al. (1999) whose analyses highlighted a number of differences between participants who attempted suicide and those who had not. For example, on socio-demographic variables, two factors were significantly associated with attempted suicide, namely age and ethnicity. White prisoners and those aged 21-29 years were significantly more likely to have attempted suicide. With regards to criminological variables, offence-type and location were significantly associated with attempted suicide. Those imprisoned for violent or acquisitive offences and those located in the prison's hospital or segregation wing were significantly more likely to have attempted suicide.

There are two plausible reasons that the current findings differ so clearly from those of Meltzer et al. (1999). Firstly, the current study was based on a sample of 124, whilst the latter had a sample of over 3000. As Tabachnick and Fidell (1996) assert, a large sample size is far more likely to produce significant results: 'if a sample size is large, almost any difference between models is likely to be reliable' (statistically significant) even if it has no practical importance (Tabachnick and Fidell, 1996, p.597). A second possibility relates to the precise behaviours examined. Meltzer et al. included as their subject group prisoners who had attempted suicide within the twelve months prior to interview, whilst the current study compared participants who had attempted suicide with those who had injured themselves without suicidal intent. It is possible that these behaviours are more similar than different, at least when compared with a non-injuring population.

In summary, the current research found very few socio-demographic or criminological differences between prisoners who had attempted suicide and those who had injured themselves without suicidal intent. This finding has resonance with the literature reviewed in Chapter 2, which illustrated that individuals who engage in behaviours on the broad spectrum of suicidal behaviours (including completed and attempted suicide and self-injury) are similar in a number of ways. Consequently, similarities between those who attempted suicide and those who injure themselves for other reasons (i.e., the current sample) would be expected, as was the case.

12.3 PSYCHIATRIC/PSYCHOLOGICAL AND PHYSICAL HEALTH

The latter part of Chapter 6 examined the psychiatric, psychological and physical-health of participants in the sample. As in the above case, the data were analysed using univariate and multivariate techniques. The initial analysis showed that a very high proportion of the sample reported some form of psychiatric or psychological problem (77%) and over a third (38%) had spent some time as a psychiatric in-patient. As would be expected, therefore, high proportions of participants (63%) were receiving medication for psychiatric problems at the time of interview. Similarly, very high proportions of the sample had used illicit substances at some time in their lives. Less than a fifth (17%) had not used drugs and over half (51%) reported regular multiple drug use, including opiates.

The univariate analyses conducted on these data showed very few differences between the various sub-groups in the analysis. As in the above analyses on socio-demographic and criminological variables, where differences did occur, they tended to be age or gender (rather than behavioural outcome) related. For example, women were significantly more likely than men to be receiving medication for psychiatric problems; women were significantly more likely than men to be receiving medication for drug withdrawal at the time of interview and were significantly more likely to have physical health problems. The logistic regression analyses conducted on these variables were also non-significant, indicating that the predictors (either as a set or individually) were not capable of predicting group membership. Although, in the case of male remand prisoners, the overall model approached statistical significance, this was not accounted for by any individual variable. Again, these findings differ from those of Meltzer et al. (1999), who reported that psychosis was significantly associated with attempted suicide. The probable explanations for this difference outlined above also apply in this case. Meltzer et al's comparatively large sample size may partially explain their significant results or, on the other hand, it could be that prisoners who attempt suicide are more similar to (than different from) those who injure themselves.

12.4 SOCIAL AND SITUATIONAL FACTORS

Liebling (1992) reported that the most fundamental difference between prisoners who attempt suicide and those who do not was in the groups' differential experiences of

prison life, their levels of activity/inactivity and their 'coping' abilities. Liebling's results suggest that prisoners who attempt suicide are less likely to be involved in work, education of physical activities and are more likely to report problems with others inside prison. Further, they are more socially isolated and have less contact with external sources of support. Chapter 7 of the current thesis examined participants' day-to-day experiences of prison life, including their availability and utilisation of social support networks, their locations, their compliance with the prison routine and their engagement in activities such as work and education. A descriptive analysis of these variables revealed some significant associations, most of which the result of either age or gender comparisons. The only difference between participants who had attempted suicide and those who had injured themselves related to the number of times they had been segregated from others, which was higher in the case of self-injuring participants. Gender and age comparisons revealed that men were substantially more likely than women to be housed in healthcare centres when the incident occurred.

There were no differences between the groups in their experience of being placed in 'strip cells', their regime level or the number of times they had been placed on report for disciplinary infractions. In terms of their day-to-day activities, women were far more likely than men to be employed, whilst young offenders were more likely than adults to be actively involved in education. Finally, young offenders were more likely than adults were to describe positive relationships with staff. There were no differences between the groups in their preference for single or shared cells or their perceived levels of fear of either other prisoners or staff.

Previous studies (e.g., Liebling, 1992; Meltzer et al., 1999; Power and Spencer, 1987; Inch et al., 1995) have found clear differences between prisoners who attempt suicide and those who had not in terms of their differential differences of bullying, fear and victimisation. However, it is important to reiterate that the majority of previous research has identified differences between attempted suicide and non-injuring/non-attempted suicide participants. The lack of differences between participants in the current research (on their experiences of prison life) gives further support to the suggestion made above that prisoners who attempt suicide and those who injure themselves for other reasons are perhaps more similar than they are different. This is not to suggest, however, that the characteristics of those who engage in the broad spectrum of suicidal behaviours are not different from those who do not.

12.5 Social Support

The issue of social support was also examined in Chapter 7. In accordance with the above results, few differences were found between prisoners who had attempted suicide and those who had injured themselves. In terms of participants' availability and utilisation of social support, the vast majority reported that there were people in whom they could confide, although very few did. There were no substantial differences between the sub-groups in their tendency to discuss their problems, with whom and to what effect.

That so few self-injuring participants had discussed their problems is not wholly surprising, given the hypothesis that self-injury, as distinct from attempted suicide, may be interpreted as a form of expression (Toch, 1992) used in situations where individuals find it difficult to express their feelings or emotions verbally (Pembroke, 1998). Indeed, Arnold and Magill (1997) describe the individual who harms themselves as 'a suffering human being that needs to unburden himself ... perhaps the wound is like a "mouth" which can "speak" for him' (1997, p.23). However, that so few attempted suicide participants had discussed their problems is contrary to some previous findings. For example, Shneidman (1985) reported that 80% of those who subsequently die have previously voiced their concerns or intentions with others. The current evidence does not support this suggestion. Those who attempted suicide were very unlikely to have communicated either with friends, family or prison staff.

12.6 Model of Negative Life Events

In keeping with the early focus on the background characteristics of the current sample, Chapter 8 examined the number, type and structure of negative life events experienced by participants. The analysis contained in this chapter was undertaken as a partial replication the study by Meltzer et al. (1999) and because of the widely-held association between suicidal behaviours per se and negative background experiences (for example, Schotte and Clum, 1982; Coid et al., 1992). Meltzer et al. (1999) measured prisoners' experiences of three broad types of negative life events, which were categorised as follows: personal, relationship, and educational/economic. The authors reported that the proportions of prisoners who had experienced such events during their lifetime were nearly always greater among those who had attempted suicide, compared with those

who had not. The biggest differences were found on personal factors, particularly having experienced violence or sexual abuse, where prisoners who had attempted suicide were around twice as likely as those who had not to have experienced these events.

The current research, which was based on twelve of the negative life events included in Meltzer et al's (1999) study, examined the differences between the sub-groups in the analysis, in terms of their relative experience of them. However, instead of simply grouping these variables according to assumed similarities, the data were analysed using Smallest Space Analysis (SSA-1), which enabled the development of an empirical model, which enabled detailed examination of the underlying psychological structure of prisoners' negative life experiences. The model, which makes clear the pattern of co-occurrence of these events, revealed three *discrete* negative life-event types, which were termed 'negative home life, rejection experience and personal violence and loss. Each of these experience-types contained clusters of variables that shared some psychological commonality.

'Rejection experience' included the following variables: the experience of being bullied at school; expulsion from school; and having been dismissed or made redundant from employment. **'Negative home life'** included the following: homelessness; the experience of running away from home; violence at home; and severe financial problems. Finally, the **'personal violence and loss'** category included: the death of a child or partner; the death of a parent or sibling; the death of a close friend; and sexual abuse. The model provides a theoretically and empirically based typology from which a richer and more valid understanding of prisoners' life experiences may be drawn.

Although the participants' overall experience of these negative life events was high, there were some clear differences between the various sub-groups in the analysis, both at the overall level and in terms of the three different types of negative experience. At the overall (quantitative) level, young offenders were significantly more likely than adults to have higher levels of overall negativity experience. At the individual category level, men were significantly more likely than women to have experienced *more* events in the 'rejection' category. Conversely, women were significantly more likely than men to have experienced more events in the 'personal violence and loss' category.

Similarly, young offenders were more likely than adults were to exhibit higher levels of 'personal violence and loss' experience.

More detailed analysis of the qualitative and quantitative characteristics of the model was undertaken using Partial Ordered Scalogram Analysis (POSA). For example, it was found that within the 'rejection events' category, while bullying, being sacked and being expelled share common psychological characteristics, they actually operate independently of each other. That is, a prisoner having experienced one need not (although may have) experienced another of these events. POSA also revealed that, within the 'negative home life'-category, prisoners' experiences varied qualitatively *and* quantitatively. Some experienced low levels of negative home life experience, others medium levels, and others experienced the highest level (i.e., they had experienced all events in this category). Interestingly it was found that while those with low levels of negative life events were neither more likely to attempt suicide or self-injure, those who experienced medium levels were more likely to self-injure, whereas those experiencing high levels were more likely to attempt suicide. This suggests a process where medium levels of negative home life events may be, to some extent tolerable (perhaps with the amelioration effect of self-injury), whilst the combination of all experiences may conspire to create a process whereby people may look for an escape from life itself. Finally, the POSA analysis revealed that the experience of 'personal violence and loss' operates on a cumulative scale. For example, women and young offenders were more likely to have experienced higher levels of such events. Notably, women and young offenders were far more likely than their comparison groups to have been sexually abused.

Together these models contribute a far richer picture of prisoners' negative home life events and their relation to suicidal behaviours than was previously available.

12.7 Model of Generalised Mood States and Emotions Precipitating Incidents

Moving away from the focus on background characteristics, Chapter 9 examined participants' generalised mood states, as well as the emotions that precipitated their incidents of attempted suicide and self-injury. There is apparently no other research which explores moods and emotions preceding these differential behaviours in the same study. The current research thus represents the first instance of this.

The mood-states currently examined, namely stress, anger, anxiety, boredom, depression and loneliness, are variously associated with different behaviours on the suicide 'continuum'. For example, attempted suicide is often characterised by depression (e.g., Barraclough et al., 1974; Michel, 2000; Lonnqvist, 2000; and Beck et al., 1990), whilst self-injury (without suicidal intent) is more commonly associated with anxiety (e.g., Babiker and Arnold, 1997) and/or anger (e.g., Williams, 1997).

These theoretical and empirical differences were tested on the current sample in two ways. Firstly, participants were asked to describe their generalised (i.e., normal or regular) mood-states whilst in prison. Secondly, they were asked to describe how they felt immediately before they injured themselves or attempted suicide. The main focus in this analysis was on the differences between the groups on the behavioural-outcome comparison. This analysis also acted as a further test of the theories proposed by Schneidman (1985) and Walsh and Rosen (1988) on the differences between suicide and self-injury (which are more fully discussed in Section 12.15).

Smallest Space Analysis led to the development of an empirical model of participants' generalised mood states prior to attempted suicide and self-injury. The model indicates that mood states operate in one of two modes: *active* or *passive*. The active mode includes the items 'anger', 'stress' and 'anxiety', whilst the passive mode includes the items 'boredom', 'loneliness' and 'depression'. That the SSA plot could be partitioned according to these distinct regions suggests that these two sets of items represent conceptually different elements of the overall domain of negative mood states. Relating these two modes to previous literature, it was hypothesised that 'passive' mood states would be related to attempted suicide and that 'active' mood states would be related to self-injury. The results of follow-up statistical tests supported these hypotheses. A statistically significant relationship between attempted suicide and the 'passive' mood domain was identified. Whilst there was no statistically significant association between 'active' mood-types and self-injury, the relationship was in the expected direction. That is, those who injured themselves more commonly described their mood-state according to the 'active' domain, which included the items anger, stress and anxiety. The distinct types of mood-states identified by the current analysis can be interpreted as representing two separate scales measuring different elements of the overall domain of negative mood states.

Previously, it was identified that participants' 'levels' of negative home life experience appears to have a differential impact on whether they ultimately injure themselves or attempt suicide. To reiterate, those who had experienced medium levels of such experience tended to self-injure, whereas those who had experienced the highest levels had a tendency to attempt suicide. It may be that the level of the negative life events provides the 'trigger' that relates to whether people continue along a path towards attempting suicide or self-injuring. These dual paths are further characterised by those who self-injure tending to experience 'active' mood states and those who attempt suicide tending to experience 'passive' mood states.

These findings lend support to the literature reviewed in Chapter 9 that related different behaviours on the suicide 'continuum' with different mood-states and emotions. However, there is no equivalent prison-based literature with which to compare the current findings. Thus the current research represents an important empirical development in understanding prisoners' generalised mood states and feelings which may have important consequences for the differential management of prisoners who are suicidal or who injure themselves for other reasons. This issue will be more fully discussed in Section 12.18.

To further explore the relationship between emotions and suicidal behaviours, participants' were asked to describe how they felt *immediately* prior to attempting suicide or injuring themselves. In this case, participants were not given categories of emotion that were predefined by the researcher, but were asked to describe *in their own words* how they felt. This focus represents an important departure from earlier prison-based research, which has failed to address the important issue of understanding prisoners' *actual* rather than their *attributed* psychological states. Whilst some studies have considered prisoners' motivations for engaging in these behaviours (see, for example, Inch et al., 1995) they have not sufficiently examined the emotional or psychological impact of the events or experiences that precede these behaviours (an exception is the work of Coid et al., 1992). Further, the majority of published work in the area is based on very small sample sizes and tends to be based solely on descriptive analyses which does not allow an examination of the underlying conceptual structure of these experiences.

Content analysis of prisoners' self-reported psychological states identified five different emotion-types, as follows: 'depression', 'anger/frustration', 'boredom', 'emotional pain' and 'anxiety/stress'. In support of the earlier analysis, a significantly higher proportion of those who felt depressed immediately beforehand had attempted suicide. Conversely, most of those who felt angry beforehand had injured themselves without suicidal intent, as did more women (when compared with men) and young offenders (when compared with adults).

Multidimensional Scalogram Analysis (MSA), which makes visual the co-occurrence of variables in the analysis and their relationships, was used to examine if particular emotions were most likely to co-occur. The analysis revealed that emotions existed on three separate dimensions, as follows: boredom/depression to neither boredom/depression; pain to anger; and stress to no stress. The analysis indicated the presence of two orthogonal and independent dimensions: a 'depressed/bored' and an 'emotional pain/anger' scale. The variable 'stress/anxiety' formed a third dimension, in that it never co-occurred with 'boredom' and rarely occurred with 'depression' or 'in emotional pain'. 'Depression' and 'boredom' were found to be related to one another, since all participants who reported feeling bored were also depressed. Similarly, 'anger' and 'anxiety/stress' were shown to be related, since the majority of participants who were angry were also anxious/stressed. Conversely, the variables 'in emotional pain' and 'anger' were independent, both of one another (since there were many examples of each of these emotions alone) and with regards to 'boredom' and 'depression', since there were participants who were angry and in pain at every level of the bored/depressed scale.

The development of an empirical model which represents the ways in which prisoners' (self-reported) emotions co-occur is an important departure from earlier research and one which has practical implications for the day-to-day management of prisoners who injure themselves or who are suicidal.

12.8 The Functions of Suicidal and Self-Injurious Behaviours

Evidence of a clear functional distinction between attempted suicide and self-injury was demonstrated by measuring the differences between these groups in their feelings post-incident. Participants who injured themselves without suicidal intent were significantly

more likely to report feeling better after the incident. Conversely, those who attempted suicide did not feel better afterwards. In terms of the gender differentiation, women were significantly more likely than men to report feeling better after injuring themselves, though they tended to self-injure. Conversely, men (who more commonly attempted suicide) did not feel better. There were no differences between adults and young offenders in this regard.

The fundamental (functional) distinction between attempted suicide and self-injury fundamental distinction is supported by previous research (e.g., Coid et al., 1992) which has reported that self-injury among prisoners (as distinct from attempted suicide) is functional in reducing negative feelings such as tension, anger and anxiety.

12.9 Model of Prisoners' Reasons for Attempting Suicide/Injuring Themselves

The research in the current thesis has so far provided evidence of a 'trigger-point' for suicidal behaviours in prisons and has developed models of the moods and emotions preceding them. In Chapter 10, a more detailed (empirical) model of the functions of these behaviours was developed by examining prisoners' expressed reasons for attempting suicide or otherwise injuring themselves. Again, this represents an important departure from earlier research. The vast majority of published studies into completed suicide have failed to address this issue (see for example, Topp, 1970; Backett, 1987; Bogue and Power, 1995; Crighton and Towl, 1997; Towl and Crighton, 1998). Although the research by Dooley (1990) is an exception, it is severely limited by its complete reliance on documentary sources of evidence. Approaches such as the 'psychological autopsy', that would include an examination of the views of prisoners, staff and others who knew the deceased have not been applied to the prison context. Moreover, in the areas of attempted suicide and self-injury, the question of motivation has not been fully addressed. Those studies that have examined this issue were criticised on methodological grounds (see, for example, Wool and Dooley, 1987; Dexter and Towl, 1995; Stevenson and Skett, 1995). The former of these studies was based solely on documentary sources and not interviews with those who had attempted suicide, whilst the latter were based on very small sample sizes and on sub-populations (e.g., men *or* women, adults *or* young offenders). Those that have considered the issue of motivation in any depth and with a representative sample (i.e., Liebling; 1992; Coid et al., 1992) are limited by the fact that they are somewhat outdated. It is likely that the

characteristics of the prison population have changed since these studies were conducted. Further, they were not conducted on the basis of examining differences and similarities between different types of suicidal behaviour among various types of prisoner.

The current model of prisoners' motivations was based on participants' own explanations for the incidents, rather than them being provided with predefined constructs by the researcher. This type of approach, as well as being rich and detailed in nature, enables a full examination of suicidal behaviours from participants' own perspectives. The model was based on participants' varied and complex accounts of the events or emotions that precipitated their attempts at suicide or incidents of self-injury. These data were content analysed and classified according to broad explanation types, which were then submitted to Smallest Space Analysis. The resultant model revealed five dimensions to prisoners' motivations for engaging in these behaviours, namely: 'situational'; 'offence-related'; 'interpersonal'; 'instrumental'; and 'symptom-relief'. The main associations between these motivational categories and the main participant groupings are now summarised:

- Those who attempt suicide, men and young offenders are more likely (than their counterparts) to be motivated by events in the 'interpersonal relationships' category;
- Those who injure themselves, women and young offenders are most likely to be motivated by events in the 'symptom-relief' category;
- 'Instrumental' motivations are most common among self-injuring, adult men;
- 'Situational' factors are most common among those who attempted suicide and among adult men;

Participants who attempted suicide were far more likely than those who injured themselves to report being motivated by the following factors:

- Homesickness;
- Grief;
- Hopelessness;
- Relationship problems;
- The award or expectation of a lengthy prison sentence.

Participants who injured themselves without suicidal intent were more likely to be motivated by the following factors:

- Anger, stress or tension;
- The absence of alternative ways of dealing with negative feelings (e.g., drugs and/or alcohol).

A gender-based comparison revealed that:

- Men were more commonly motivated by *concrete* events, such as the end of a relationship;
- Women more commonly reported being motivated by negative emotions or feelings such as anger, frustration or tension.

An age-based comparison revealed that:

- Adults were more likely (than young offenders) to be motivated by drug withdrawal;
- Young offenders were more likely (than adults) to report being influenced by the absence of alternative methods of managing negative feelings, or by hallucinations (auditory or visual).

These results highlight the complex and multifactorial nature of suicidal and self-injurious behaviours. In very few cases were there single reported causes. Rather, the majority of participants described a number of precipitating or motivational factors, related to concrete events, feelings/emotions or both.

The current findings share some similarities with previous studies. For example, Wool and Dooley (1987) reported that the most common reason for attempted suicide among prisoners was a domestic crisis, usually involving threats to a personal relationship. Similarly, Power and Spencer (1987) and Dexter and Towl (1995) suggested that attempted suicide and self-injury are often motivated by some form of emotional upset, such as the breakdown of a relationship. Further, in regard to self-injury (as distinct from attempted suicide), Coid et al., (1992) found that it was preceded by negative feelings, such as anger, depersonalisation, stress and frustration. As mentioned above, such feelings were often expressed by self-injurers in the current sample as precursors to their behaviour. The current research differs from some previous studies (e.g., Inch et al., 1995; Liebling, 1992; Stevenson and Skett, 1995) in that 'bullying' was not found to be a common precursor. Whilst it is of course possible that participants injured

themselves in order to orchestrate a move in location because they were being bullied, all of those who expressed a 'instrumental' or 'functional' driver to their behaviour were asked to explain their reasoning in more detail. Of those who did, nobody reported being motivated by bullying. Further, as outlined in Chapter 7, very few participants reported feeling threatened by, or fearful of, other prisoners.

These findings have parallels with the theory of locus of control (i.e., the perceived source of control over one's behaviour) which is measured along a dimension running from high internal to high external (Rotter, 1966). People with an internal locus of control tend to be those who take responsibility for their actions and who view themselves as having control over their own 'destiny'. People who have an external locus of control tend to see control as 'residing' in other people and attribute their success or failure to outside forces. As outlined above, some participants (mainly men who attempted suicide) appear to have been motivated by *external* factors, such as a forthcoming court appearance or the end of a relationship. Others (mainly women who injured themselves) were more likely to be motivated by *internal* factors, such as negative feelings related to previous sexual abuse or feelings of anger towards others that were internalised. It would appear that those with an external locus of control, motivated by situational or offence related reasons, perhaps feel such a low level of control that they believe they are unable to affect any change in their situation. In this context, the only way out of the situation may be to escape from life itself. Conversely, those with an internal locus of control, motivated by interpersonal or symptom relief reasons, feel greater ability to manage their situations and do so by injuring themselves, and feeling better as a result. Although no direct measures of locus of control were taken in the current research to test this proposition, there is a strong theoretical case for considering it as a future piece of research.

Heider's (1958) work on attribution theory is also relevant here. Heider proposed an inverse relationship between personal and situational causality, in that the more an individual is seen as causing the action, the less the environment (or 'external') factors will be perceived as important and vice versa. Although there is some doubt that internal attributions can be distinguished from external attributions (Hewstone and Fincham, 1998) the findings from the current study, although not examining this issue in detail suggest some differences in this regard.

As outlined above, participants who injured themselves were significantly more likely than those who attempted suicide to report that they were motivated by a need to reduce anger, tension or stress, to feel pain, to see blood, or as an alternative to expressing anger towards others. These findings show clear support for the *anxiety reduction model* (as outlined in Chapters 1 and 2) which holds that people injure themselves in order to feel relief from feelings similar to and including those outlined above (Bennun, 1984). Self-injury, understood by some as an unorthodox method of tension relief, may be effective in achieving homeostatic resolution or equilibrium (Ross and McKay, 1979). A powerful description of this process is summarised in the following quotation:

> 'The short answer to the question "Why do patients deliberately harm themselves?" is that it provides temporary relief from a host of painful symptoms, such as anxiety, depersonalization, and desperation. The long answer is that it also touches upon the very profound human experiences of salvation, healing and orderliness. Self-mutilation is a morbid form of self-help. In the hands of special individuals who are able to control the behaviour, it provides some benefits' (Favazza, 1996, p.xix).

That the group of prisoners who injured themselves felt 'better' afterwards, provides further evidence for this hypothesis.

12.10 Preventing Attempted Suicide and Self-Injury

Chapter 11 examined participants' views regarding the effects of imprisonment and its possible impact on suicidal behaviours. The vast majority of participants believed that their most recent suicide attempt or episode of self-injury was *exacerbated*, if not caused by, imprisonment itself. There were no differences between the groups when comparisons were conducted on the basis of behavioural outcome or age. Thus, neither those who attempted suicide or adults (when compared with participants who had injured themselves and young offenders) were more likely to report that they felt prison had *caused* their problems. However, men were more likely than women to report that being in prison had contributed to their recent actions. The fact that more men than women had given what were perceived as 'external' reasons for their suicidal behaviours may be a related issue.

Having established that the majority of participants felt imprisonment had *caused* or exacerbated their problems, the subsequent analysis aimed to establish in what way

participants thought this to be the case. Content analysis revealed nine different explanation categories, as follows: loneliness; lack of control over situation; lack of help/support; boredom/too much time; fear; innocence; hopelessness; drug-related. The subsequent analysis involved an application of the 'internal'/'external' attributional dimension (Heider, 1958) to the data arising from the above analysis. Interestingly, the majority of explanation categories (six out of nine) were ascribed to the former (internal) attributions category, a finding that has resonance with Peterson et al's (1982) suggestion that depression and suicidal behaviours are most commonly associated with internal attributions.

Chapter 11 also examined participants' views as to the prevention of suicidal behaviours in prisons. A number suggested relatively straightforward and achievable changes such as improvement to prison regimes to increase the possibilities for being involved in work, education or training. Others suggested that they felt they would benefit from specialised forms of psychological intervention. Others suggested that more positive attitudes from staff (which could be nurtured through training) would be helpful. Some suggested that less dangerous means of self-harm (including sterilised razor blades and/or packs to dress wounds) would be useful. Others felt that that simply having somebody to talk to would be invaluable. This finding was interesting given that, as outlined in Chapter 7, most reported that they did have at least one person in whom they could confide in and discuss their problems with, but most chose not to. It is possible, of course, that they did not want to discuss their problems with friends/family or peers, but with someone in a position of authority. Snow (2000) reported a similar finding in respect of prisoner-led support schemes. These issues will be discussed in more detail in Section 12.18.

As a further measure of the widely reported functional aspect of self-injury (as distinct from attempted suicide) Chapter 11 examined the extent to which participants injured themselves as a way of managing their distressing feelings. The results showed that women were almost twice as likely as men to use self-injury for this purpose. An illustrative example is the case of MR40 who gave a description of the functions self-injury serves for her:

> *I feel powerless and it* [self-injury] *is a way of getting some control ..... of helping me cope. It's become a habit, a way of controlling my anger, but it's a repetitive viscous circle. I feel anger, want to exert control over something, so I*

cut myself. Then I feel angry with myself and I remember the reasons for it [sexual abuse].

Having examined the background, motivational and functional aspects of suicidal behaviours in prisons, the research findings are now drawn together into a differential 'pathway' to suicide and self-injury.

12.11 Dual Path Model of Attempted Suicide/Self-Injury

The findings presented in Chapters 6 to 11, in relation to the differences in aetiology of attempted suicide and self-injury are now drawn together and presented in Figure 12.1 below. The research examined various background factors (such as socio-demographic, criminological, psychiatric health-related, social-situational, social support and negative life experiences) in an attempt to distinguish between participants in the sample who had attempted suicide and those who had injured themselves. These variables were chosen as they had, relatively consistently, been associated with *either* completed or attempted suicide or self-injury, in the prison context or in general community studies. The overall results of the current research suggest, however, that there are very few differences between prisoners who injure themselves and those who attempt suicide on the various background characteristics examined.

Factors that may explain why the background characteristics of prisoners who attempt suicide do not differ from those who injure themselves are now provided.

12.12 Reasons that Background Factors did not discriminate Between Attempted Suicide and Self-Injury

There are a number of possible explanations for the fact that the variables included in the analysis, which were well-known risk factors drawn from previous research studies, did not successfully discriminate between participants who had attempted suicide and those who injured themselves. Firstly, the prison-based studies reviewed in Chapters 3 and 4 have tended to focus on attempted suicide *or* self-injury. Consequently, the findings are not necessarily comparable to those of the current study, which focused on attempted suicide *and* self-injury with the aim of identifying differences and similarities between these behaviours.

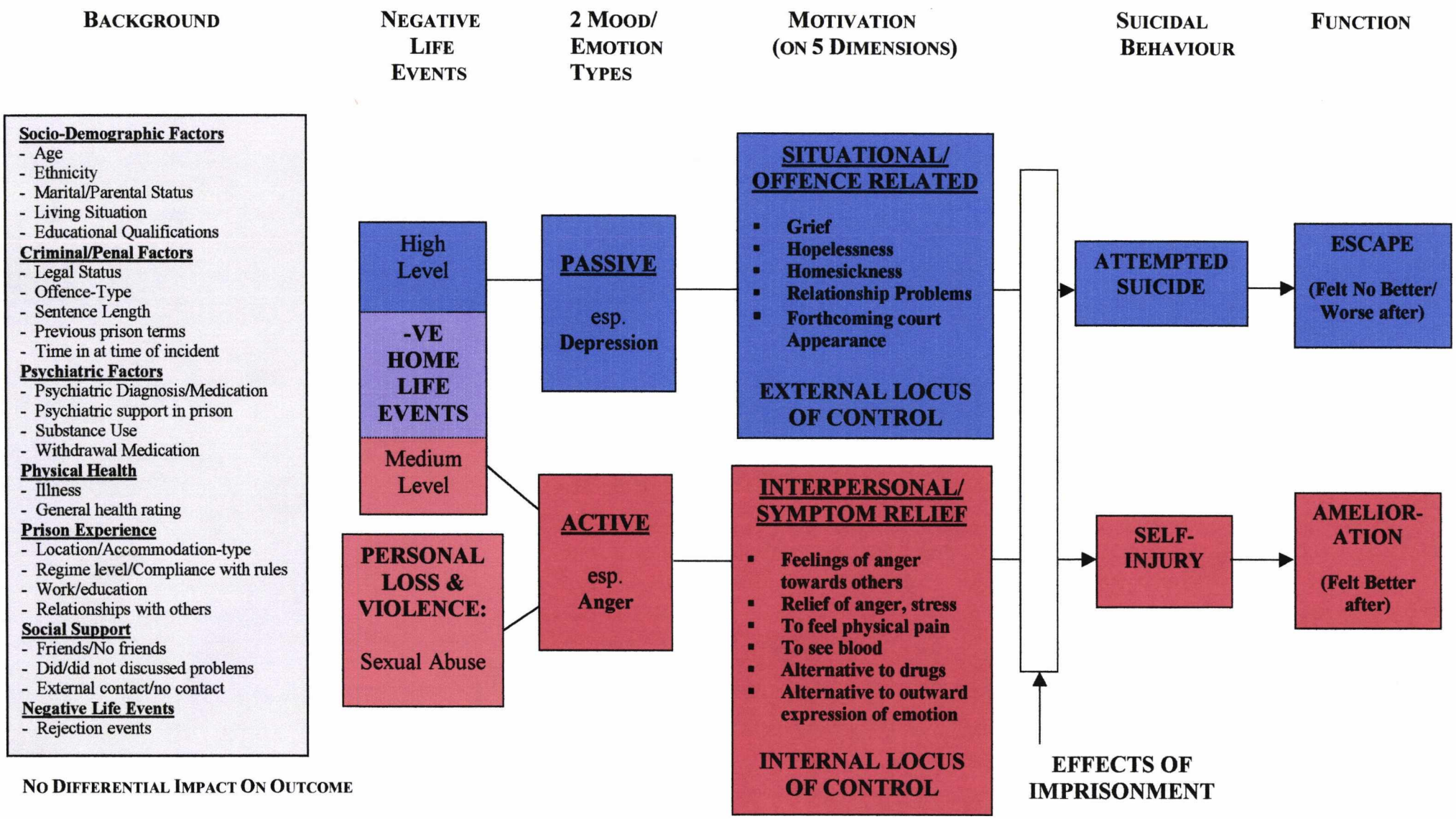


Figure 12.1Dual Path Model of Attempted Suicide and Self-Injury

Secondly, the studies that have examined attempted suicide and self-injury were criticised for their lack of operational definition of what was taken to constitute these behaviours (e.g., Wool and Dooley, 1987) or their very small sample sizes (e.g., Dexter and Towl, 1995). Hence, when research is designed specifically to address these differences, the findings appear to be simply that the groups are more similar than different. As discussed, and as shown in Figure 12.1, the factors that clearly distinguish between participants who attempted suicide and those who injured themselves were:

- Their generalised mood states;
- Their emotions prior to the attempt at suicide or incident of self-injury;
- Their motivations for engaging these behaviours and;
- Their views concerning the function of these behaviours.

These factors are now discussed in more detail, with the main focus on the differences in cognitive style that may exist between attempted suicide and self-injuring prisoners.

12.13 COGNITIVE FACTORS

This section considers some of the cognitive factors that have been associated with the broad spectrum of suicidal behaviours, and which may account for the differences between attempted suicide and self-injury in the current population and the dual paths that they follow. More specifically, the current research suggests that individuals' *interpretations* of events (such as their socio-demographic or criminal backgrounds, or their current situations) may account for the differential behavioural outcomes following the experience of these events. This is important as it has been argued that focussing on people's interpretations of events is a more accurate method of assessing people's motivations than focussing on their observable behaviours which may not accurately provide information on their intentions. It is well known that it is easy to make erroneous attributions about the causes of observable behaviour (e.g., Heider, 1958; Jones and Davis, 1965; Jones and McGillis, 1976).

In research which compared prison officers' attributions of prisoners' behaviour with that of prisoners' own accounts, the officers' attributed motivations were often significantly different (Snow, 1997). A clear example would be that prisoners who tie

ligatures around their necks (and are subsequently cut down) do not always report they intended to die, yet this is the conclusion prison staff would typically draw when faced with this observable behaviour.

To elucidate further, the cognitive factors associated with suicidal and self-injurious behaviours that were outlined in Chapter 2 are re-examined. The discussion begins with a consideration of the concepts of depression and hopelessness.

12.13.1 Depression, Hopelessness and Future-directed Thinking

Whilst there is ample evidence that depression is a very strong indicator of suicidal ideation and attempted and completed suicide (Barraclough et al., 1974; DSM-IV, 1994; Morgan et al., 1998), an important development is that this relationships is mediated by hopelessness (Beck et al., 1974). Hopelessness, defined as an individual's profound negative feelings about themselves and their future is, in fact, said to outweigh depression as *the* most significant psychological factor contributing to suicidal behaviour. Indeed, Beck et al., argue that the statistical relationship between suicide and depression is actually an artefact resulting from its association with hopelessness. Similarly, Drake and Cotton (1986) argue that depression is only indicative when it is coupled with hopelessness.

In contrast, although self-injury is widely associated with various psychiatric and psychological problems and, most notably, Borderline Personality Disorder (Walsh and Rosen, 1985; Pattison and Kahan, 1983; Favazza, 1996) it is less commonly associated with depression. For example, Simeon et al., (1992) compared self-injuring and non-self-injuring Borderline Personality Disordered individuals and found that the former group scored higher on one measure of depression, but not on two others. Whilst those who injured themselves had higher levels of aggression and were more anti-social, importantly, they were *less* hopeless. The authors theorise that the lower levels of hopelessness among those who injure themselves may be the consequence of a healing component to self-injury that has the effect of inducing a more hopeful affect. The current findings support this hypothesis. Participants who had attempted suicide were significantly more likely to describe their generalised mood-state as depressed. This

was not the case for participants who injured themselves for reasons other than cessation of life.

Further support for the relationship between (in this case) attempted suicide and hopelessness, is supported by the finding that those who attempted suicide were significantly more likely to describe feelings of hopelessness as main motivators to their attempts. Again, this was clearly not the case for participants who injured themselves without suicidal intent. Although, of course, there may be numerous reasons for feeling hopeless, which may account for the difference between the groups, it is important to reiterate that very few of the background or other characteristics included in the analysis were statistically more likely to have occurred among those who attempted suicide. A possible rationale for the higher levels of hopelessness among the attempted suicide group lies in their interpretation of these events which, in turn, may be affected by cognitive differences. In an attempt to further develop this argument, attention now turns to the concepts of thought rigidity and 'coping' or adaptive strategies.

12.13.2 Rigidity of Thought

Beck and colleagues (1974) suggest that cognitive rigidity, or thinking in very 'black and white' or 'all or nothing' terms is characteristic of both depression and suicidal ideation. This and other related thought processes, such as over-generalisation, inexact labelling and selective abstraction (Beck et al., 1975) are said to make individuals more sensitive to suicide when they occur in the presence of negative life events (Schotte and Clum, 1982). Over-generalisation is the tendency to view situations, or indeed the whole world, completely negatively. Selective-abstraction consists of selecting out only negative parts of a situation and ignoring all others (Williams, 1997). Finally, inexact labelling is the tendency to views oneself in wholly negative terms and subsequently reacting to that label rather than the situation at hand. An example of selective-abstraction in the current context may relate to an individual's concerns about a probation report undertaken about their offending behaviour in preparation for a forthcoming court appearance. If for example, the probation officer reported that the prisoner had a serious drug problem, but had taken positive steps to address it by engaging in a rehabilitation programme: 'the judge will think I'm nothing but a junkie and give me a long sentence' would be a selective abstraction. Another person may

interpret the same report very differently, thinking that the probation officer was in fact doing their best to support the individual.

In the current case, as has been mentioned, the offence-related or criminal factors did not differentiate between participants who had attempted suicide and those who had injured themselves. This means, for example, that the former group was no more likely to have committed a more serious offence that could, realistically, lead to a longer prison term. It is interesting, therefore, that participants in this group were significantly more likely to report that their concern about a forthcoming court appearance was a primary motivator for attempting suicide. Again, those who injured themselves without suicidal indent did not. It is plausible that those who had attempted suicide interpreted their situation differently perceiving, as is characteristic of those who selectively abstract, over-generalise or think dichotomously, that the worst would happen. This is perhaps an avenue for future research.

An alternative explanation is that they have reached the limit of their 'coping' or adaptive strategies, a possibility that is examined in the following section.

12.13.3 Adaptive Strategies

There is some evidence that suicidal individuals feel that they have exhausted all alternative options and that they have no strategies for coping with their current situations (e.g., Beck et al., 1974; Beck et al., 1975; Shneidman, 1976, 1985, 1996). It may be that their usual mechanisms for coping with stressful situations have proved ineffective and that they have no alternative resources for managing the difficulties they face. O'Connor and Sheehey (2000) highlight what they perceive to be the 'dysfunction' of suicidal individuals in this regard, in the sense that they feel that death is the only option. In the current case, those who had attempted suicide stressed that suicide was their only option. For example, a number of participants said that they had reached the "end of their tether" or that they had no alternative option. This finding has clear relevance to Shneidman's (1996) suggestion that *psychological constriction* (a belief that no alternative to suicide exists) is a key element of the 'suicidal mind'.

Again, this is in direct contrast to participants who injured themselves. For this group self-injury was, in itself, regarded as a strategy for coping with or managing their problems. As one prisoner (MR40) remarked, "I feel powerless and it [self-injury] is a way of getting some control ..... of helping me cope". Other prisoners reported that they injured themselves as a way of coping with their problems in the absence of more commonly used alternatives, such as alcohol or drugs, as indicated in the following excerpt (XM97). "I felt ..... stressed and didn't have drugs to help me forget things.... which means I'm forced to think about things when I'm not ready to face up to them".

These examples suggest that self-injury, at least in this context, may be seen as a coping strategy, albeit one that is often regarded as dysfunctional (see for example, Favazza, 1996). In this sense, the person who injures themselves can be seen to be carrying out the very *reverse* of self-destructiveness. Rather than trying to end their lives, the person who injures themselves is struggling to survive (Babiker and Arnold, 1997).

12.13.4 Interpersonal Problem Solving

Another factor that may be related to an individual's belief that suicide is the *only* option to a problem they face, is the theory on interpersonal problem solving. For example, Platt et al. (1975) demonstrated that suicidal individuals were able to propose not only *fewer* but also less *relevant* solutions to problems. They also found that depressed individuals who attempted suicide (compared with those who had not) provided less active and more passive solutions to problems. The current findings suggest clear differences between those who attempted suicide and those who injured themselves for reasons other than cessation of life in this regard. A number of participants in the former group reported that they felt suicide was their only option, the only *escape from* their problems. Conversely, those who injured themselves without suicidal intent saw self-injury as a way of *dealing with* their problems. This difference is evident in the following quotations from the research interviews. The first of these quotes is by a prisoner who attempted suicide. He reported that he was motivated by, among other things, concern about being released from prison and returning to his previous (unhappy) domestic situation. He had been having relationship problems since the death of his son, some months before:

I'm worried about being released, about going back to ..... my previous life now I'm facing release [from prison] *I can't cope* (VS71)

The second example is a quotation by a prisoner who harmed himself, without suicidal intent, in order to affect a change in his circumstances because of his relationship with others inside prison:

I was getting hassle from others on the unit. I'm always getting picked on - getting my stuff nicked and getting hit – and when I hit back I' m the one that gets punished (SB54).

These quotations illustrate the different functional aspects of attempted suicide and self-injury with regards to interpersonal problem solving. In the first case, the prisoner wanted to *end his life* because, at least in part, of his relationship problems. In the second case, the prisoner injured himself in order to *affect a change in his circumstances* because of his problems with other prisoners.

12.13.5 Attributional Style

As outlined in Chapter 1, attributions relate to interpretations of behaviour, both an individual's own behaviour and that of others. Heider (1958) suggested that when interpreting observable behaviour, an individual explains it in one of two ways, namely personal (internal) or environmental (external). Thus, when an individual is making an attribution, they attempt to ascertain if the behaviour was due to something within the individual, over which they had some control, or if it is due to something 'outside' the person, such as luck, which again, links this process to the theory of locus of control.

Peterson et al. (1982) working on a more complex version of this type of dichotomy to explain individuals' attributions for events, also consider factors relating to time and the extent of influence. They found that depressed and suicidal individuals tend to adopt a depressogenic (negative) attributional style when describing events. Having asked their sample to consider twelve situations (of which six were positive and six were negative) and consider what they felt to be the situation's main cause, they found that depressed individuals attributed the negative events to internal, stable and global causes. In other words, they blamed themselves for the event; they thought it would always be present; and they thought it would interfere with every aspect of their lives.

Although a detailed examination of participants' attributional styles was beyond the scope of the current study, it is important to acknowledge the potential dissimilarity in attributional styles between participants who attempted suicide and those who injured themselves. It was demonstrated that those who attempted suicide were significantly more likely to explain the event as being related to hopelessness, grief, homesickness, relationship problems and forthcoming court appearances. Taking Peterson et al's (1982) distinction between the three specific causes of events, it is plausible that those who attempted suicide attributed their problems (or the factors preceding their actions) to internal, stable and global causes. In other words, they may blame themselves for the event, they may feel it would always be present (at least for the foreseeable future) and they may feel that it dominated every aspect of their lives.

Interestingly, the reasons that participants gave for injuring themselves without suicidal intent, which included a desire to feelings anger, frustration or tension, may also be perceived as internal (at least in part). Whilst they may also be seen as global (i.e., affecting every part of their lives), they did not seem to be stable, in fact they were the reverse. A substantial proportion said that they injured themselves specifically to *end* these negative feelings. This has been a consistent research finding, particularly in the prison context (see for example, Coid et al., 1992; Cullen, 1985). Although there is no research equivalent to Peterson et al's on the attributional style of individuals who injure themselves but who are not suicidal, there is substantial evidence that some people injure themselves because of feelings of guilt, blame and/or a desire to punish themselves (Babiker and Arnold, 1997). Again, these factors may be regarded as 'internal'.

Elements of Heider's (1958) attribution theory were also applied to prisoners' expressed reasons regarding the causative nature of imprisonment. More specifically, prisoners' responses were classified as being either internal or external in origin. Interestingly, the majority of explanation categories (six out of nine) were ascribed to the former (internal) attributions category, a finding that has resonance with Peterson et al's (1982) suggestion that 'suicidal behaviours' are commonly associated with internal attributions.

12.13.6 Cognitive Factors: A Summary

It is interesting that participants in the attempted suicide and self-injury groups did not, statistically speaking, undergo *different* background events or experiences, but they did perhaps react to them very differently. The groups disclosed very different feelings; both in terms of their generalised mood states and in their emotions precipitating their incidents of attempted suicide or self-injury. Participants in the former group were much more likely to report feeling depressed and to have a generalised mood that was defined as 'passive', whereas those who injured themselves were much more likely to describe 'active' emotions, such as anger and frustration. One explanation for this difference, based on the theoretical approaches outlined above, is that the groups *interpreted* these events or experiences differently. The resultant emotion for those who tried to kill themselves was depression; whilst those who injured themselves experienced anger. This finding has resonance with Peterson et al's (1982) application of the three dimensions of attribution theory.

12.14 Social Influence and The Effects of Being in Prison

Having discussed the cognitive processes which may account for the differences in attempted suicide and self-injury, attention now turns to the effect being in prison may have on these processes in leading to suicidal behaviours. As revealed in Chapter 11, the majority of participants believed imprisonment to play a significant role in their behaviour.

Skinner's (1953) principle of *operant conditioning* and *reinforcement* suggest that all behaviour can be understood by identifying the contingencies which have shaped and that maintain (or reinforce) it (Stillion and McDowell, 1996). Similarly, Bandura's (1973) development of social learning theory emphasises modelling and imitation as prime factors in learning. In terms of the current sample, it is possible that participants witnessed or experienced others attempting suicide or injuring themselves and therefore perceived it as an acceptable behaviour. Indeed, Fishbein and Ajzen's (1977) Theory of Reasoned Action posits that one's intentions are clearly influenced not only by one's attitudes, but by the prevailing social norms.

Seligman (1975) who developed the concept of *learned helplessness*, to describe passive acceptance of painful or negative stimuli, found that the solvability (or not) of problems was relevant. When students were faced with problems that were not solvable, coupled with negative stimuli (noise) they were unable to learn how to escape the stimuli. The reverse was found when students were confronted with solvable problems or with no problems at all; in this case they were able to escape or avoid the stimuli. Seligman drew a parallel with *learned helplessness* and reactive depression, suggesting that the latter may lead to suicidal behaviour if it is the result of traumatic event/s that could not be controlled or warded off.

As has been discussed, the whole spectrum of 'suicidal behaviours' is far more common in prisons than the general community. It is feasible that prisoners learn this pattern of dealing with their situations from others around them. The *group epidemic model*, which suggests that people who injure themselves (particularly in 'institutional' contexts) are influenced by others around them and that there is a contagious effect, is also relevant here (see for example Grunebaum and Klerman, 1967).

Similarly, self-injury may be learnt behaviour, with reward or punishment being contingent on the behaviour. Carr (1977) suggests that negative reinforcement can maintain the behaviour in situations whereby the avoidance or termination of an aversive stimulus following self-injury maintains the behaviour. Although self-injury does not necessarily share the 'passive' element of learned helplessness (as in the case of attempted suicide) it may be that those who injure themselves are at least influenced by others around them (either engaging in the behaviour or reinforcing the injurer's behaviour). This is most likely if they feel that those who injure themselves are 'rewarded' in some way. An example of this might be a prisoner who wanted a transfer from their current location (because of bullying perhaps), who then injured themselves and was transferred to the prison hospital (i.e., a different location). The behaviour is 'reinforced' in the sense that it is reacted to (and in this case positively). Consequently others who are being bullied may have learnt that injuring themselves is a way of dealing with this problem.

The notion of the *appeal* model (Bostock and Williams, 1974; Bennun, 1984) is also relevant here. According to this model, self-injury (or attempted suicide) is a form of communication. The person who injures themselves conveys a tacit message to those

around them without explicitly revealing the content of their communication. It may be that the individual is not able to express, verbally, how they feel. Within this model, self-injury is understood as an appeal to the individual's social network, including those in positions of authority (i.e., staff). One of the key components of the appeal model is the possibility of a change in circumstances resulting from the injury. Indeed, Bostock and Williams (1974) described the function of *operant* self-injury as a way of generating an active response from within the individual's environment. In the current situation a significantly higher proportion of individuals who injured themselves without suicidal intent said that they did so as an alternative to outward expression of emotion. This was not the case for those who attempted suicide. In cases of self-injury the incident had (whether this was desired or not) resulted from some form of recognition by staff. These participants were chosen because they had been identified as having harmed themselves (i.e., their injuries had been reported to the liaison officer and, for this to take place, they had to be documented). Consequently, staff would have had to respond in some way, even if only to treat their injuries.

12.15 Reflection on Theories of Suicide and Self-Injury in Light of Current Findings

Differential models of suicidal and self-injurious behaviours were discussed in Chapter 1. To reiterate, this began with a discussion of the work of Durkheim (1897) and Freud (1917). Durkheim's (sociological) approach focuses on the social factors that may influence suicidal behaviours. His understanding of 'fatalistic' suicide, which is said to occur among individuals with 'futures pitilessly blocked and passions violently choked by oppressive disciplines' (Giddens, 1971, p.26) has most relevance to the current study. As has been outlined, a number of participants said that they attempted suicide (or injured themselves) largely because they felt they lacked control over any aspect of their lives. Freud's influential theory of introjected hostility has also been given some support by the current findings, in the sense that some prisoners said they would rather harm themselves than others. As this type of explanation was significantly more common among women, an important gender difference may be in operation. Again, the concept of internal and external attributions, as well as the issue of locus of control, resonate here.

Whilst the works of Durkheim and Freud retain some theoretical relevance, the current study did not set out to test them directly. Rather, it attempted to apply more recent psychological theories (which may, in part, have been influenced by these earlier ideas) to attempted suicide and self-injury in prisons, as outlined in Sections 12.14 and 12.15. Attention now turns to what are arguably the most influential and comprehensive psychological theories of suicidal and self-injurious behaviours, namely those proposed by Shneidman (1985) and Walsh and Rosen (1988).

An outline of the characteristics of suicide proposed by Shneidman (1985) was provided. These were contrasted to the characteristics of self-injury as proposed by Walsh and Rosen (1998). The focus in this section is on exploring if such clear differences existed in the current sample. This will be undertaken by referring to the pertinent concepts outlined by Shneidman and contrasted with those of Walsh and Rosen. Excerpts from prisoner' accounts of the suicide attempts and incidents of self-injury will be included throughout the discussion in order to highlight these differences.

1. Shneidman argues that the common *stimulus* to suicide is enduring, inescapable psychological pain, from which permanent escape is its *purpose*. In contrast, Walsh and Rosen argue that self-injury (without suicidal intent) is characterised by short-term and intermittent psychological pain, which can be ameliorated by the very act of self-injury. Suicide is a permanent escape from a situation whilst self-injury is a short term, non-permanent alleviation to distress. These characteristics appear to hold true on the basis of the current research. They are illustrated in the following excerpts. The first is an example of 'enduring psychological pain' experienced by a participant who attempted suicide.

> *I didn't want anyone to find me. I felt depressed..... like everything was getting too much. Nothing can make me feel better. I want to die. Why won't they [staff] just leave me alone to get on with it?* (RS1).

This is in contrast to the 'emotional' (short-term) pain experienced by a participant who injured themselves, without suicidal intent:

> *The emotional pain became too much to handle and I wanted to overtake it with physical pain. If I hadn't* [inflicted pain on herself] *it would have come out in another way.... I would have hurt someone else* (BM101).

2. Shneidman (1985, 1996) suggests that the common *emotion* in suicidal behaviour is hopelessness. This is a common observation (see for example, Beck et al., 1974; Beck et al., 1975; Williams, 1997) and is supported by the current research. As discussed in Chapter 10, expressed feelings of hopelessness was one of the key factors that distinguished between those who had attempted suicide and those who injure themselves for other reasons. Those who attempted suicide were statistically more likely to describe such feelings. An example is provided in the following explanation:

> *It was my first night in prison. I'd lost everything – my home, my job, my family [who had disowned him]..... my girlfriend is dying of cancer. The reality of my situation kicked in at bang-up. I felt deeply distressed, depressed and hopeless* (RM55).

Those who injured themselves were far less likely to describe such feelings and, in fact, very rarely did. Instead, they often described feelings of anger or frustration, feelings that were ameliorated by self-injury. The current data provides support for Walsh and Rosen's (1988) suggestion that those who injure themselves have a resource at their disposal for managing their feelings and so do not feel hopeless. This adds further verification for the functional aspects of self-injury.

3. For Shneidman (1985), the common *cognitive* state of the suicidal is 'constriction', in that there is no alternative to their current situation and that suicide is the only way out. Beck and colleagues (1974, 1975) proposed a similar theory, suggesting that those who attempted suicide tend to think in dichotomous terms. Examples of such thinking were given in the words of some prisoners who had attempted suicide, for example RSI and RM55. Walsh and Rosen (1988) describe the *cognitive* state of those who injure themselves as one of 'fragmentation', in the sense that they can draw from multiple sources in order to address their feelings. This theory is supported by the current data which showed that prisoners who injured themselves without suicidal intent often did so in the absence of alternative sources, namely drugs and alcohol, as illustrated by the following statements:

> *I was feeling uptight, agitated and stressed..... If I feel like this on the out I take drugs..... but I can't get any in here* (TR5).

> *I felt depressed, stressed and didn't have drugs to help me forget things.... which means I'm forced to think about things when I'm not ready to face up to them* (XM97).

These findings add empirical support to the theory that self-injury is an 'escape' behaviour, used as a way of managing problems in the absence of other methods (e.g., Cullen, 1985). Such behaviour is likely to be more common in prison, as access to more conventional means of managing or dealing with problems are curtailed (e.g., alcohol and/or drugs).

4. Finally, Shneidman (1985) suggests that both attempted suicide and self-injury are *consistent* behaviours. They are not, generally speaking, departures from the norm but are part of an individual's behavioural pattern and a way of dealing with their problems. Whilst there are some obvious distinctions in degree between attempted suicide and self-injury in this respect, in that suicide (if successful) is *permanent* whilst self-injury provides *temporary* relief from problems, the vast majority of the sample had injured themselves or attempted suicide at least once, if not many times before.

In summary, Shneidman's and Walsh and Rosen's influential theoretical models are given empirical support by the findings of the current study. There were very clear distinctions between participants who injured themselves and those who attempted suicide on a number of important dimensions, especially in terms of the motivational drivers and functional aspects of these behaviours.

The previous discussion has described the findings of the current research, models of suicidal behaviours and their contribution to theories of suicide and self-injury. Attention turns now to limitations of the current study and to possibilities for future research.

12.16 Limitations of the Current Research: Methodological Issues

It is widely understood that 'real world' (Robson, 1993) or 'idiographic' (Uzzell, 1995) research is somewhat different from laboratory-based experiments. Robson (1993) argues that one of the challenges in carrying out investigations in the 'real world' is in 'seeking to say something sensible about a complex, relatively poorly controlled and generally 'messy' situation' (Robson, 1993, p.3). Unlike technical experiments, real world research does not easily lend itself to the random selection of participants, which facilitates the generalisation of the findings. Nor does it allow for the random allocation

of participants to different experimental conditions, which enables the detection of clear causal relationships. It does, however, capture the richness and complexity of the phenomenon under investigation (Uzzell, 1995). Whilst it may not be possible to generalise the findings or establish causal relationships from the current research, it makes a clear contribution to the theory of suicide, both in prisons and in the general community, and has major practical implications for the management of suicidal and self-injurious behaviours

12.16.1 The Sample

Criticisms could be levelled at the sample on which the current research was conducted, both in terms of their recruitment and in terms of their representativeness. The first issue is that all participants were approached by a member of the organisation in which they were held and directly asked if they would participate in the research. Whilst it could be argued that some participants may have felt obliged to participate, as they had been approached by a member of staff who is, by definition, in a position of relative power. However, each was given ample opportunity to withdraw their consent. Following initial agreement, all participants were asked, again, if they consented. The researcher approached them, reiterated the aims of the study, and asked them to read and sign a consent form to record their agreement to participate. The reason this approach was adopted was to ensure that some control over the types of behaviours included in the study could be taken. Given the definitional problems inherent in the broad spectrum of suicidal behaviours (as outlined in Chapters 1, 3 and 4) it was deemed essential that criteria for inclusion were drawn-up and adhered to. If the researcher simply asked for volunteers to come forward, an initial vetting process (to ensure the chosen behaviours were included) would have been necessary. Within the time restrictions that were faced, this was deemed unnecessary.

The second issue relates to the participants' representativeness. Although, when compared with some other prison-based studies of attempted suicide and self-injurious behaviours, the current sample (of 124) is relatively sizeable, the gender difference between the groups is cause for concern. Of the total of 124, only 39 women were included in the analysis (representing 31% of the total). Ideally, a 50/50 split of men and women would have been chosen. However, because women comprise only 5% of

the prison population (HM Prison Service, 2002) it proved very difficult to recruit women, within the time allocated for data-collection.

12.16.2 The Focus on Explanation rather than Prediction

Less than a third of prisoners who die by suicide had been identified as being at elevated risk at the time of death (HM Prison Service, 2002). It could be argued, therefore, that improved prediction and/or risk assessment should be a priority among those conducting research into suicidal behaviours in prisons. However, the notion of risk-prediction has been criticised both in the literature and in practice mainly because of its imprecision (Liebling, 1992). Risk identification in the area of suicide is notoriously imprecise (Towl and Crighton, 2000), largely because it tends to over-identify those who are not suicidal (false positives) and under-identify those who become suicidal (false negatives) (Liebling, 1992).

Whilst this is clearly an important endeavour, it was beyond the scope of the current research, which aimed to further develop *theoretical understandings* of attempted suicide and self-injury. The justification for this focus arises, in part, from the view that attempted suicide and self-injury are *distinct* behaviours, at least in motivation and intent. The current Prison Service policy, which is generic in the sense that it is aimed at managing prisoners who attempt suicide *or* injure themselves, can be criticised for being inherently flawed in its broad focus. Further support for developing theoretical understandings of these behaviours lies in the observation that, despite the introduction of a new strategy aimed at reducing suicide (in 1994) suicides have continued to increase. Arguably, any effective intervention strategy must be based on a full understanding of individuals' motivations for engaging in these behaviours. Further, it should be based, in part, on prisoners' perspectives on what they say they need (Howard League, 2001). The current research is a positive first-step in this direction.

A second justification for not conducting research which was aimed at predicting suicidal behaviours lies in the findings outlined above, that few of the factors widely associated with risk of suicide and self-injury did in fact distinguish between the participants in the current sample. Whilst, of course, this could not be known until the research was designed and the data collected and interpreted, it adds further support that

a focus on understanding and interpreting suicidal behaviours is perhaps the best way forward.

12.16.3 Comparison of descriptive and multivariate statistics, MDS approaches and qualitative techniques

The research presented in this thesis used a combination of descriptive and multivariate statistics (such chi-squared tests, t-tests, binomial tests, analysis of variance and logistic regression), qualitative statistical procedures (such as MSA, POSA and SSA-1) and wholly qualitative procedures, such as content analysis. Various between-groups comparisons were conducted on the variables included in the analysis. Whilst the descriptive and multivariate analyses revealed some differences between the various sub-groups (as summarised in Section 12.2) far more similarities than differences between the groups were found.

A possible explanation for this is that single variables are not able to distinguish between the participant groupings although, in this case, multivariate analyses also failed to distinguish between those who attempted suicide and those who injured themselves. Consequently, a multidimensional approach was adopted within subsequent chapters to examine specific groups of variables. Such techniques examine variables at a more individual level, which allows the identification of differences at a more local and specific level. The multidimensional analyses reported facilitated the development of psychological models of attempted suicide and self-injury using groups of variables that are hypothesised to be measuring the same underlying dimensions and which may, therefore, contribute cumulatively to explaining the differences between these behaviours.

Further, it is important to state that the division of the sample into six sub-groups, coupled with the numerous variables in the analysis (which was necessary to capture all factors relevant to these behaviours) meant that a substantial number of comparisons were drawn. It is necessary, therefore, to acknowledge the Bonferroni principle, in the sense that some of these comparisons would be expected to yield statistical significance, simply because so many were drawn.

12.16.4 Future Research Directions

In the light of the conducted research, there are a number of issues worthy of consideration for future research. Firstly, it would be advantageous to collect standardised and validated measures of suicidal intent, depression and hopelessness. Whilst, from the outset, this had been intended in the current study, the practical problems, in terms of time constraints and participants' reluctance to answer more questions following in-depth interviews, meant that this had to be abandoned. Instead, primary focus was given to the in-depth interview approach. That the study was based, almost wholly, on self-report was not considered problematic. An alternative would have been to conduct a records-based study, an approach that is severely limited by its reliance on data not collected for scientific analysis (O'Connor and Sheehey, 2000).

Secondly, research including a discrete control group, with which to compare findings, would be useful. This is, perhaps, a shortcoming of the current research that inhibits the generalisibility of the findings. In this sense it is not possible to show whether any of the factors associated with attempted suicide and self-injury in the current sample are factors characteristic of this sample only, or of the particular prison population from which they are drawn. Whilst it could be argued that this limits the findings of the research, the counter argument is that because of the very broad range of factors associated with all types of suicidal behaviours, it would be very difficult to decide which specific factors should be controlled for. Caution should be given in generalising the findings to all prisoner or all suicidal behaviours.

Finally, a more detailed exploration of the possible alternatives to self-injury would be beneficial. Although this was beyond the scope of the current study, the findings reported here have indicated very clear differences in the reasons for suicidal and self-injurious behaviours. With regards to self-injury (as distinct from attempted suicide), the vast majority of those who engaged in this type of behaviour did so frequently and repeatedly. In this sense, self-injury was part of their everyday life and was the main way in which they managed their problems, particularly when in prison. Very few participants had received any help for the problems that contributed to this behaviour. In this sense, the development, implementation and evaluation of more positive alternatives to self-injury is worthy of future examination.

Despite these concerns, the current research has made a significant contribution to the understanding of suicidal behaviours in prisons, which while theoretically significant, also has important practical implications.

12.17 Practical and Policy Implications

The research has highlighted a number of issues that have implications for Prison Service policy and practice with regards to the management of suicidal and self-injurious behaviours. Each of these is now discussed in turn.

Firstly, given the very clear distinctions (in terms of motivations, preceding emotions and perceived functions of) attempted suicide and self-injury, the current 'generic' approach is worthy of reconsideration. Given that people who attempted suicide or injure themselves do so for very different reasons, it follows that they require different management approaches and interventions.

Despite the theoretical and empirical distinction between prisoners who attempt suicide and those who injure themselves for other reasons, it is acknowledged that the latter are substantially more likely (than those who do not injure themselves) to die by suicide (Gunnell and Frankel, 1994). Consequently, all should be perceived as being at *some* risk of suicide. The current Prison Service strategy, which is based on the dichotomy 'suicidal' or 'not suicidal', is perhaps not sensitive enough in this regard. A three-tiered approach (i.e., suicidal, self-injuring, no perceived risk of either suicide or self-injury) may be preferable.

The research demonstrates how prisoners' interpretations of events play a key role in their suicidal behaviours. As mentioned, almost none of the prisoners who injured themselves in order to manage negative feelings or experiences, had received any help or therapeutic support since being in prison. The psychological impact of self-injury – on the individuals concerned, on their families, on other prisoners and on prison staff – is substantial. It follows, therefore, that enabling such prisoners to express themselves or manage their feelings in more positive ways, would be hugely beneficial. Structured interventions (such as Cognitive Behavioural Therapy, Cognitive Analytical Therapy and Problem-Solving Therapy) have been shown to be effective in other settings (e.g., Linehan, Armstrong, Saurez, Allmon and Heard, 1991). A range of services, such as

individual counselling, group therapy, psychotherapy, as well as the cognitive-behavioural approaches outlined above, should be offered to prisoners who repeatedly injure themselves. Such support options should, of course, also be available to suicidal prisoners. Any such intervention should be individually tailored and based on the factors that precipitate these behaviours.

Further, a number of practical and less resource-intensive steps could be taken to improve prisoners' day-to-day lives. A number were suggested by the current participants, such as the provision of more constructive activities, involving work or education and allowing them more time out of cell. A number of participants in the current sample complained that they had nothing to do but sit in their cell (for up to 23 hours a day) and ruminate on their problems. Clearly, if somebody is depressed, this is unlikely to be helpful.

As outlined in earlier chapters, most suicides in prison occur as the result of 'hanging'. It is probable, however, that a proportion of prisoners who die by self-inflicted means did not intend to do so. Further, there is evidence to suggest that prison staff equate prisoners' intentions with the method employed. For example, Snow (1997) found that prison staff were more likely to classify as attempted suicide an incident that involved hanging. As has been shown in this thesis, a person's choice of method does not necessarily equate with their expressed intentions, a finding provides further support for earlier findings (e.g., Wool and Dooley, 1987). Thus, the tendency to make assumptions about prisoners' intentions solely on the basis of the method they employ is flawed. This finding has implications for the development of Prison Service staff training, and follows a recent Home Office recommendation (Home Office, 1999). It may also be beneficial to educate prisoners about the potential lethality of their behaviour, when attempting to hang or strangle themselves. A small but important minority of the current sample (which was comprised mainly of young offenders) had engaged in these behaviours without the intention of ending their lives. They were not aware that what they were doing could be lethal.

Having considered some practical implications based on the current research findings, a number of conclusions are now drawn.

12.18 RESEARCH QUESTIONS REVISITED

Before discussing the conclusions arising from the presented research, the original research questions are revisited. To reiterate, the research had three broad research aims, as follows:

1. To explore the relationship between suicidal behaviours, background factors and previously identified 'risk' factors.
2. To explore *why* prisoners attempt suicide or injure themselves.
3. To explore the nature/extent of any age or gender differences.

The extent to which each of these was addressed is now discussed.

1. The current findings suggest that, on the whole, previously identified risk factors (including socio-demographic, criminological, situational and psychiatric factors) do not *clearly* discriminate between prisoners who attempt suicide and those who injure themselves without suicidal intent. A plausible explanation for this finding is that the backgrounds of those engaging in 'suicidal behaviours' in the broadest sense are essentially similar. The research from which the majority of these background factors were drawn tends to be based on *either* attempted suicide or self-injury, as compared with non-injuring or non-suicidal comparisons. Conversely, the current research compared attempted suicide *and* self-injury.

Interestingly, however, very clear differences were found between the groups on other measures, such as their generalised mood-states and their emotions before attempting suicide or injuring themselves. For example, those who attempted suicide were much more likely to demonstrate 'passive' mood-types (including depression) whilst those who injured themselves were much more 'active' (having described feelings such as anger or anxiety).

2. The research has provided a full description of *why* prisoners attempt suicide or injure themselves. Further, it has demonstrated very clear differences in the motivations *between* these behaviours. These findings represent a very important departure from previous research, which is limited on a number of grounds. Firstly, most available research completely avoids the issue of motivation (e.g., Meltzer et al., 1999). That

which does fails to clearly distinguish between attempted suicide and self-injury without suicidal intent (e.g., Liebling, 1992) or is retrospective in nature (e.g., Dooley, 1990).

3. Finally, a number of age and gender differences were identified, most notably in terms of prisoners' motivations for attempting suicide or injuring themselves. For example, adults were more likely (than young offenders) to attribute their actions to drug withdrawal, whilst young offenders were more likely (than adults) to refer to audio or visual hallucinations. Conversely, women (who most commonly injured themselves) were more likely to attribute their behaviour to negative feelings or emotions, whilst men described *concrete* events (such as the end of a relationship) as being the main motivators to their suicide attempts. These findings have important practical implications for the management of suicidal behaviours in prisons.

12.19 CONCLUSIONS

It has been argued that, despite the substantial body of prison-based research into completed and attempted suicide, as well as self-injury (without suicidal intent), that these behaviours remain poorly understood. The current research aimed to improve this understanding by drawing on wider theoretical models of these behaviours, such as those proposed by Shneidman (1985) and Walsh and Rosen (1988), as well as broader social and behavioural psychological theories.

The conclusions drawn from the current research have implications for academic psychology as well as policy and practical implications for the Prison Service. In summary, these are as follows:

- Background factors do not clearly discriminate between those who attempt suicide and those who injure themselves for other reasons.

The majority of the participants in the sample had experienced similarly negative life events and experiences. The analysis identified different typologies of such events, of which few discriminated between those who tried to kill themselves and those who did not. Theoretically, it would be interesting to explore further what leads some of these people to attempt suicide, but others to intentionally injure themselves without wishing to die. In practical terms the vulnerability of those in the sample, by virtue of their very

high levels of background life events and experiences (which may or may not be equivalent to the general prison population), could be ameliorated through the provision of a more supportive and therapeutic environment. Participants were very clear in their declaration that they receive little or no support in addressing their problems and that imprisonment serves to exacerbate them.

- It is possible to distinguish between the generalised mood-states and emotions of those attempt suicide and injure themselves for other reasons.

A model of moods and emotions preceding their suicidal behaviours was developed which indicates two broad dimensions: active and passive. Very clear differences were found between prisoners who attempted suicide and those who injured themselves in their generalised mood states, providing further support for previous work that has drawn the distinction between these two groups (e.g., Williams, 1997). For example, feelings of depression ('passive' mood types) characterised those who attempted suicide. Those who injured themselves were far more likely to report feelings of anger, anxiety or stress. This has important practical implications in the sense that any therapeutic interventions should be based on the specific group's needs, rather than being generalised to all of those who engage in the broad spectrum of 'suicidal behaviours'.

- Prisoners attempt suicide and injure themselves for very different reasons.

A model of prisoners' motivations for their suicidal behaviours was developed. It shows how motivations operate within five different dimensions: Offence, Interpersonal, Symptom relief, Instrumental and Situational. A number of different motivational factors were found to be more prevalent among participants who attempted suicide. These included, for example, relationship problems, concerns about forthcoming court appearances and factors relating to drug withdrawal. Those who attempted suicide were more likely to report that *concrete events* or experiences had affected their decision to act in the way they did. On the other hand, those who injured themselves without suicidal intent were much more likely to describe precipitating factors related to *negative feelings* or *emotions*. For example, a substantial proportion reported that they injured themselves in order to relieve feelings of anger, stress or frustration, or that they would prefer to hurt themselves than direct their anger towards

others. There was a small, but important, minority who injured themselves with the sole intention of affecting a change in their circumstances. Again, these findings have important practical implications.

- There are clear distinctions between attempted suicide and self-injury in the functions they serve.

Prisoners who injured themselves felt significantly better after doing so. This was not the case for those who attempted suicide, who invariably felt no better or worse. This finding provides further support for theories regarding the functional aspects of self-injurious behaviours. This is not to suggest, however, that the Prison Service should accept as inevitable that some prisoners will injure themselves. Rather, it should explore ways of channelling prisoners' negative experiences and resultant emotions in more positive and less destructive ways.

- Prison was believed to be a significant cause of suicidal behaviours by the majority of participants (when they were asked directly).

- These findings are drawn together in a Dual Path Model, indicating the different psychological routes to attempted suicide and self-injury.

In conclusion, the current research has made a significant contribution to the understanding of suicidal and self-injurious behaviours in prisons. It has applied influential models of these behaviours to the prison-context, an application hitherto unachieved. It has provided empirical support to some of the earlier work on suicide and self-injury in prisons. Further, it has developed a richer picture of prisoners' lives in relation to their suicidal behaviours. Combined, the research provides a more sophisticated view of attempted suicide and self-injury from which the Prison Service can develop future policy. This could lead to the more effective management of suicide and self-injury which, in turn, is likely to result in an improvement in some prisoners' lives.

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APPENDICES

APPENDIX A

PRISON HEALTH RESEARCH ETHICS COMMITTEE
ROOM 802 CLELAND HOUSE
PAGE STREET
LONDON SW1P 4LN
☎: 0171 217 6602
Fax: 0171 217 6412

Chairman: Professor Anne Johnson
Secretary: Mr John Allen

2 July, 1999

Ms Louisa Snow
Department of Psychology
Keynes College
University of Kent
Canterbury
KENT CT1 7NP

Dear Ms Snow

APPLICATION TO PHREC: SUICIDAL BEHAVIOUR AMONG PRISONERS

Further to your letter of 28 April about your research project. The amendments you submitted were put to the Committee on 12 May. It endorsed the Chairman's recommendations. I am writing to let you know the that this application is now fully approved and you may go ahead with your study.

Please note that it is important that you notify the Committee of any adverse events or changes (name of investigator etc) relating to this project You should also notify the Committee on completion of the project or indeed if the project is abandoned.

Yours sincerely

JOHN ALLEN

Copy

KENT

UNIVERSITY OF KENT
AT CANTERBURY

Department of Psychology

Mr J Allen
Secretary
Prison Service Health Research Ethics Committee
Room 802, Cleland House
Page Street, London
SW1P 4LN

28 April 1999

Dear Mr Allen,

SUICIDAL BEHAVIOUR AMONGST PRISONERS

I refer to your letter of 27 April, following my application to the Prison Service Health Research Ethics Committee.

As requested, please find enclosed an amended Participant Information Leaflet, for re-submission to the Committee's next meeting on 12 May 1999.

I trust that these amendments are sufficient to satisfy the Committee's criteria and look forward to receiving your confirmation that ethical approval has been granted.

I look forward to hearing from you.

Yours sincerely,

Louisa Snow

Keynes College
University of Kent at Canterbury
Canterbury, Kent CT2 7NP, UK

6

Suicidal Behaviour Amongst Prisoners:
An analysis of antecedents, individual and situational factors

Participant Information Leaflet

I am conducting a study of suicide, attempted suicide and self-injury/harm amongst prisoners. This leaflet provides you with information about the study, in which I would like to invite you to participate.

The main purpose of the study is to improve understandings of why some people harm themselves whilst in prison; I hope that a better understanding of these reasons may enable the Prison Service to make improvements in the provision of care for suicidal prisoners.

I am interviewing prisoners as soon as possible after they have harmed themselves. All participants will be asked questions about the following: life before prison; life in prison; any recent problems/stressful events; and, finally, about their reasons for self-harm/injury. All participants will be asked to complete four standard questionnaires. With your permission I would like to collect information from your prison records.

I would like to make it clear that I am a researcher and, as such, will not be able to give you any direct advice about problems you may have. For such help, you should go through the normal channels, for example, speaking to your personal officer or making an application to see the governor.

All the answers you give will be treated in confidence with the normal exceptions: that is, if what you say has implications for security or if you tell me that you are planning to harm yourself. If such cases, I am obliged to pass this information on.

The information you give will be used for research purposes only. It will be kept confidential to me and will be coded and analysed in such a way that you cannot be identified personally in any reports arising from the research.

Louisa Snow
Department of Psychology
University of Kent

PRISON HEALTH RESEARCH ETHICS COMMITTEE
ROOM 802 CLELAND HOUSE
PAGE STREET
LONDON SW1P 4LN
☎: 0171 217 6602
Fax: 0171 217 6412

Chairman: Professor Anne Johnson
Secretary: Mr John Allen

27 April, 1999

Ms Louisa Snow
Department of Psychology
Keynes College
University of Kent
Canterbury
KENT CT1 7NP

Dear Ms Snow

RESEARCH PROJECT - SUICIDAL BEHAVIOUR AMONG PRISONERS

Professor Johnson kindly agreed to consider the amendments to your application to the Prisons Health Research Ethics Committee. She considers that you have adequately addressed the concerns members raised about your project subject to two minor amendments to the Participant Information Leaflet. The changes are as follows:

1. Para 1: Change "I would like your participation...." to "I would like to invite you to participate.".

2. Para 3: Replace "In addition, I am going to collect information...." to "With your permission I would like to collect information....".

I should be grateful if you could resubmit the Participant Information Leaflet with the amendments in time for the Committee's next meeting on 12 May 1999.

Yours sincerely

JOHN ALLEN

4

From: Martin McHugh
Head of Suicide Awareness Support Unit
Room 714
Cleland House
Tel: 6490
Email: MM11

cc Tony Pearson
Mary Piper
Graham Towl
Louisa Snow

16 April 1999

John Allen
Secretary
Health Research Ethics Committee

RESEARCH INTO ATTEMPTED SUICIDE & SELF-INJURY: Louisa Snow SASU/Kent University

I am anxious that the Ethics Committee considers this as soon as possible.

2. As you will be aware, when the Ethics Committee considered the project earlier this year, they made some helpful comments and required some relatively minor adjustments to the protocol before they could give it approval. Kirk Coulson-Gilmer wrote to Louisa indicating that on re-submission the Committe Chair would decide whether it could be dealt simply by correspondence rather than requiring consideration at the next meeting (12 May). Your recent E-mail to Louisa implies that the Chair is not being consulted and that it has to go to the next meeting.

3. I am afraid we simply cannot wait for that. This is a collaborative project between the Prison Service and Kent University on which substantial background work has already been completed. We commissioned the work with HMCIP's Thematic Review in mind. The Review is to be published on 11 May and, exactly as we predicted, includes a recommendation that more research is done on this topic. It is essential that we include confirmation of this research in our response to the Chief Inspector. I wish neither myself, nor Martin Narey, still then to be waiting for the green light.

4. I would be grateful if, as a matter of urgency, you could expedite the revised application to the Chair of the Ethics Committee, as originally agreed, to be considered via correspondence. I am happy to discuss if there is a problem.

Martin McHugh

KENT
UNIVERSITY OF KENT
AT CANTERBURY

Department of Psychology

Mr J Allen
Secretary
Prison Service Health Research Ethics Committee
Room 802, Cleland House
Page Street, London
SW1P 4LN

18 March 1999

Dear Mr Allen,

I refer to Mr Coulson-Gilmer's letter of 12 February. Following my application for ethical approval, a number of issues were raised by the Committee and I enclose documentation in response. Firstly, enclosed is a Participant Information Leaflet; as requested, it sets out the purpose/objectives of the proposed study. Secondly, enclosed is an amended Consent Form which, I hope, satisfies the stipulated criteria. Thirdly, enclosed is a re-ordered, and slightly amended, interview schedule.

Finally, I was asked to provide a more detailed account of the action I would take if any participant exhibited psychological distress. The following is an account of proposed action:

If, during interview, any participant exhibited psychological distress, I would establish whether or not they wished to continue with the interview. If so, after a suitable intermission, the interview would recommence (and the following action would take place after completion). If the participant expressed a wish to terminate the interview, I would ascertain what, if any, sources of support were immediately available to them. The range of options would be explored and I would recommend that they seek support from the sources available to them. If they suggested that no such support was available, or if they could or did not wish to utilise their usual support networks, I would recommend that they speak to a member of staff or a Listener, as appropriate. If, after interview, I felt that anything other than ordinary supervision was required, I would discuss the prisoner's situation with the immediate staff involved. If F2052SH procedures were in place, I would make a detailed entry in the 'Daily Supervision and Support Record'. If F2052SH procedures were not in place, I would ensure that they were initiated.

I hope these amendments are sufficient to satisfy the Committee's criteria and look forward to hearing from you in due course.

Yours sincerely,

Louisa Snow

Keynes College
University of Kent at Canterbury
Canterbury, Kent CT2 7NP, UK

Participant Information Leaflet

I am conducting a study on suicide, attempted suicide and self-injury/harm amongst prisoners. This leaflet provides you with information about the study, in which I would like your participation.

The main purpose of the study is to improve understandings of why some people harm themselves whilst in prison; I hope that a better understanding of these reasons may enable the Prison Service to make improvements in the provision of care for suicidal prisoners.

I am interviewing prisoners as soon as possible after they have harmed themselves. All participants will be asked questions about the following: life before prison; life in prison; any recent problems/stressful events; and, finally, about their reasons for self-harm/injury. All participants will be asked to complete four standard questionnaires. In addition, I am going to collect information from prison records.

I would like to make it clear that I am a researcher and, as such, will not be able to give you any direct advice about problems you may have. For such help, you should go through the normal channels, for example, speaking to your personal officer or making an application to see the governor.

All the answers you give will be treated in confidence with the normal exceptions: that is, if what you say has implications for security or if you tell me that you are planning to harm yourself. In such cases, I am obliged to pass this information on.

The information you give will be used for research purposes only. It will be kept confidential to me and will be coded and analysed in such a way that you cannot be identified personally in any reports arising from the research.

Louisa Snow
Department of Psychology
University of Kent

Suicidal Behaviour Amongst Prisoners:
An analysis of antecedents, individual and situational factors

Consent Form

I_____ (Name) at _____(Prison)

have been asked to take part in the research being conducted by Louisa Snow (from the Department of Psychology at the University of Kent). I have been given the information leaflet describing the study and understand that the main purpose of the research is to help understand the reasons why some people harm themselves whilst in prison.

I agree to take part in the research and to be interviewed about my experiences before and during imprisonment. I understand that the interview will be conducted by the researcher and is likely to last about an hour. In addition, I agree to complete (or answer questions from) four questionnaires. Finally, I agree that the researcher can obtain additional information from my prison records.

I understand that my participation in the study is purely voluntary. I am free to refuse to answer specific questions and I may withdraw from the study at any time without being required to give any explanation. I also understand that my participation will not affect my position in prison in any way.

I understand that the information I provide will remain strictly confidential, with the following exceptions: unless what I disclose is likely to have security implications or if I disclose that I am planning to harm myself. In either case, the information will be passed on to a member of staff.

I understand that the information I give will be used solely for research purposes: it will be coded and analysed in such a way that I cannot be identified personally in any reports arising from the research.

My signature below indicates that I have read this and the information leaflet and that I agree to participate in the research. The researcher/interviewer will also sign the form to guarantee the conditions stated above.

_____

Participant's signature Date

_____

Interviewer's signature Date

DRAFT INTERVIEW SCHEDULE FOR PILOT INTERVIEWS 18 MARCH 1999

SUICIDAL BEHAVIOUR AMONGST PRISONERS: AN ANALYSIS OF ANTECEDENTS, INDIVIDUAL AND SITUATIONAL FACTORS

PART 1: BACKGROUND INFORMATION

1a. How long have you been in this prison? (current offence).....

1b. What have you been charged with?.....

1c. Are you: Sentenced/Remand/Convicted Unsentenced

SENTENCED PRISONERS

2a. How long is your sentence?.....

2b. When were you sentenced?.....

2c. How does this compare with what you expected? Shorter/About the same/Longer

3a. How long have you served?.....

3b. When do you expect to be released?.....

3c. What plans, if any, have you made for your release?.....
.....
.....
.....

REMAND/UNSENTENCED PRISONERS

4a. How long have you been on remand?

4b. Do you think you will be convicted/sentenced? Yes/No/Don't Know

4c. When are you expecting to be sentenced?.....

4d. When is your next court appearance?.....

ALL PARTICIPANTS

5a. Is this the only establishment you have been in (current term)? Yes/No

5b. How many other establishments have you been in?.....

5c. Where were you previously?.....

5d. Why did you move to this prison?.....
.....
.....

.....

5e. Do you prefer this or your previous establishment? Current/Previous/No Preference

5f. Why?.....

.....

.....

.....

6a. Is this your first time in prison? Yes/No

6b. How old were you when you were first in prison?.....

6c. When were you last released?.....

6d. How long did you serve?.....

6e. For what offence?.....

7a. Do you have any other convictions? Yes/No

7b. For what?.....

7c. When?.....

PART 2: ALCOHOL/DRUG HISTORY & FAMILY SUICIDE HISTORY

8a. Did you drink alcohol before you came to prison? Yes/No

8b. Units per week.....

8a. Have you ever taken drugs? Yes/No

8b. What?.....

8c. How often?.....

9a. Would you say you were dependent on alcohol/drugs? Yes/No

9b. Have you ever been in trouble because of drinking/drugs? Yes/No

9c. Please explain.....

.....

.....

.....

10. Have you received any detoxification/rehab for alcohol/drug dependency? Yes/No

11a. Has any member of your family/close friend ever attempted or died by suicide? Yes/No

11b. Who.....

11c. When.....

PART 3A: LIFE IN PRISON – WORK & EDUCATION

12. What type of wing do you live on?.....

13. What regime level are you on? Enhanced/Standard/Basic

14a. Have you ever been in a strip cell/solitary confinement? Yes/No

14b. How many times?.....

14c. Why were you there [last occasion]?.....
.....
.....

15a. What type of cell are you in? Single/Shared/Dormitory

15b. Generally, do you get on with your cell mate/s: Always/Sometimes/Never

15c. In what ways don't you get on?.....
.....
.....
.....

16a. Would you prefer to share a cell or be on your own? Own/Share/No preference

16b. Why do you think this is? .....
.....
.....
.....

17a. Do you have a job? Yes/No

17b. What do you do?.....

17c. Generally, do you enjoy your job? Yes/No

17d. What do you like/dislike about it?.....
.....
.....
.....

18. Why don't you work?.....
.....
.....
.....

19a. Given the choice, would you work or not? Work/Not Work/No Preference

19b. Why?.....
.....

20a. Are you involved in education? Yes/No

20b. What do you do?.....

20c. Generally, do you enjoy education? Yes/No

20d. What do you like or dislike about it?.....

21a. If you do not attend education, why do you think this is?.....

21b. Would you like to be involved in education? Yes/No

22a. Are you on any programmes (e.g., SOTP, ETS, Anger Management)? Yes/No

22b. Generally, do you find them/it beneficial? Yes/No

22c. Please explain.....

23. On average, how many hours a day do you spend in your cell?.....

24a. How many times a week is there association?.....

24b. Do you always go on association? Yes/No

24c. If not, on average, how many times a week do you stay in your cell?.....

24d. Why do you decide to stay in your cell instead of going on association?.....

25a. Generally, would you say you feel bored? Never/Rarely/Always

25b. What do you do to keep occupied or prevent your boredom?.....

26a. Do you think opportunities exist for you to do positive things in prison? Yes/No

26b. What?.....

.....

.....

.....

PART 3B: LIFE IN PRISON – INTERPERSONAL RELATIONSHIPS

27a. Do you have any friends in prison? Yes/No

27b. Do you have: Lots of friends/A few friends/One close friend/No friends

28a. Is you relationship with other prisoners: Good/Bad/Neither good or bad

28b. In what ways?.....

.....

.....

.....

29a. Generally, is your relationship with staff? Good/Bad/Neither Good or Bad

29b. In what ways?.....

.....

.....

.....

30a. If you have a problem is there someone (in prison) you can talk to? Yes/No

30b. Who?.....

.....

.....

.....

31a. What are the worst things about being in prison?.....

.....

.....

.....

31b. How do you manage or cope with these things?.....

.....

.....

.....

32a. Generally, how well do you think you have adjusted to imprisonment? Have you had:

No problems Minor/Tolerable Problems Major Problems

32b. What problems have you had?.....

.....

.....

.....

PART 3C: LIFE IN PRISON – EXTERNAL CONTACT

33a. Who do you miss most from the outside?.....
.....
.....
.....

33b. Are you in contact with them? Yes/No

33c. Who else are you in contact with?.....
.....
.....
.....

34a. Do you have visits? Yes/No

34b. Who from?.....
.....
.....
.....

34c. How often? Daily/Weekly/Monthly/3 monthly/6 monthly

35a. Do you receive letters? Yes/No

35b. Who from?.....
.....
.....
.....

35c. How often? Daily/Weekly/Monthly/3 monthly/6 monthly

36a. Do you make telephone calls/send letters? Yes/No

36b. Who to?.....
.....
.....
.....

36c. How often? Daily/Weekly/Monthly/3 monthly/6 monthly

36d. Why not?.....
.....
.....
.....

37a. Do you have any problems maintaining contact with people outside? Yes/No

37b. Please explain.....
.....
.....

38a. Does keeping in touch with friends/family make prison: Easier/Neither/More Difficult

38b. Why do you think this is?.....
.....
.....
.....

PART 4A: RECENT PROBLEMS/LIFE EVENTS

39a. Have you experienced any problems or stressful events recently? Yes/No

40. Have you experienced any of the following?

(a) Domestic (e.g., relationship difficulties/problems with visits) ☐

(b) Prison Related (e.g., bullying/concerns about court appearance) ☐

(c) Emotional (e.g., feeling depressed, angry or frustrated) ☐

(d) Medical (e.g., physical/psychological or drug related problems) ☐

(e) Other

40f. Please explain.....
.....
.....
.....
.....
.....
.....
.....
.....

41a. Has anything else been worrying you? Yes/No

41b. Please explain.....
.....
.....
.....

PART 4B: SUICIDE ATTEMPT/SELF-INJURY

42a. [I know that you injured yourself recently. Can you talk me through what happened?]
.....
.....
.....
.....
.....
.....
.....

42b. Can you tell me why you think you did it?.....
.....
.....
.....
.....
.....
.....

43a. **[if not already discussed]** What did you do? [method] .....
.....

43b. **[if not already discussed]** Why did you chose this method?.....
.....
.....

44a. **[if not already discussed]** When did you do it? (date/time).....

44b. **[if not already discussed]** Where were you?.....

45a. Were you alone? Yes/No

45b. Who was with you?.....

45c. **[if during night lock-up]** Were they asleep? Yes/No

46a. Did they do anything to try to stop you? Yes/No

46b. What did they do?.....

47a. Did you tell anyone what you were going to do? Yes/No

47b. Who?.....

47c. What was their reaction?.....
.....
.....
.....

48a. Did you realise that you were putting your life at risk? Yes/No

48b. Did you want to die? Yes/No

48c. If yes, please try to explain why?.....
.....
.....
.....
.....
.....
.....

49. If you didn't want to die, why did you hurt yourself? Was it to:

a. Relieve stress/tension/anger ☐

b. Let people know you are in distress ☐

c. Punish yourself in some way ☐

d. Because you were going to be moved to another wing/unit/prison ☐

e. Another reason ☐

49f. Explain.....
.....
.....
.....

50. Try to describe your feelings before you hurt yourself.....
.....
.....
.....
.....

51. Try to describe your feelings after you were found.....
.....
.....
.....
.....

52a. Now do you feel relieved that you are alive? Yes/Indifferent/ No

52b. Try to explain why.....
.....
.....
.....

53a. Are you angry, annoyed or upset that you are still alive? Yes/Indifferent/No

53b. Try to explain why.....
.....
.....
.....
.....

54a. Have you hurt yourself intentionally before? Yes/No

54b. Roughly how may times?.....

54c. When did you last hurt yourself?.....

54c. What did you do?.....

2

55a. Why do you think you hurt yourself then?.....
.....
.....
.....

55b. How did you feel before you hurt yourself?.....
.....
.....
.....

55c. How did you feel afterwards?.....

56a. How old were you when you first hurt yourself intentionally?.....

56b. Was this before you were in prison? Yes/No

56c. Where were you?.....

56d. What did you?.....
.....
.....
.....

57a. Do you know why you hurt yourself then?.....
.....
.....
.....

57b. How did you feel before you hurt yourself?.....
.....
.....
.....

57c. How did you feel afterwards?.....

57a. Do you think that you are likely to hurt yourself again in the near future? Yes/No

57b. Have you made a plan for what you will do and when you will do it? Yes/No

PART 4C: STRESS/PROBLEM MANAGEMENT

58a. Have you spoken to anyone about the things that have been worrying you? Yes/No

58b. Who?.....
.....
.....
.....

58c. How did you feel after speaking to them? Better/No Different/Worse

58d. Try to explain your answer.....
.....
.....
.....

59. Why do you think you didn't speak to someone?.....
.....
.....
.....

60a. Apart from talking, did you do anything else to alleviate the problem? Yes/No

60b. What?.....
.....
.....
.....

60c. How did this make you feel? Better/No Different/Worse

60d. Why do you think this is?.....
.....
.....
.....

61a. Did you either wait or hope that the problem would go away? Yes/No

61b. Did you feel that you couldn't **do** anything about the problem? Yes/No

61c. Why?.....
.....
.....
.....

62a. Did you do anything to avoid/take you mind off the problem? Yes/No

62b. What?.....
.....
.....
.....

62c. How did this make you feel? Better/No Different/Worse

62d. Why do you think this is?.....
.....
.....
.....

63a. Looking back, is there any else you could have done to help the situation? Yes/No

5

63b. What?.....
.....
.....
.....

64a. Do you think there is anything you can do now? Yes/No

64b. What?.....
.....
.....

65a. Is there anything anyone else could have done? Yes/No

65b. What?.....
.....
.....

66a. Is there anything anyone else can do now? Yes/No

66b. What?.....
.....
.....

67. When you are under stress or have problems (outside of prison) how do you relax or take your mind off things?.....
.....
.....

68a. Generally, when in prison, how do you relax or calm down?.....
.....
.....

68b. Did you try that on this occasion? Yes/No

68c. Did it help you? Yes/No

68d. In what ways did it help or not?.....
.....
.....
.....

69a. Do you feel that you are now able to cope with the problems you are facing? Yes/No

69b. Please explain?.....
.....
.....

70. What is the single most important thing that would improve the quality of your life?
.....
.....
.....

PRISON HEALTH RESEARCH ETHICS COMMITTEE
ROOM 802 CLELAND HOUSE
PAGE STREET
LONDON SW1P 4LN
Telephone: 0171 217 6022
Fax: 0171 217 6412

Chairman: Professor Anne Johnson
Secretary: Mr John Allen

12 February, 1999

Ms Louisa Snow
Department of Psychology
Keynes College
University of Kent
Canterbury
Kent
CT1 7NP

Dear Ms Snow,

The Prison Service Health Research Ethics Committee considered your application for ethical approval of your research proposal, "Suicidal Behaviour among Prisoners, etc", at its meeting on 4 February.

The committee concluded that you should provide a Patient Information Leaflet which sets out the purpose and objectives of your study clearly, in language which the participants are likely to understand and which can be kept by the participant.

Members thought the consent form should describe the nature, likely duration and frequency of the interviews, provide guarantees about the confidentiality of any written or recorded material obtained and explain that participants may withdraw from the study at any time without being required to offer an explanation and without this affecting their care and that it should confirm that the participant has read and understood the information leaflet. The researcher should sign the form as well as the patient/participant.

The committee is unable to grant your request for access to form F2169a (First Reception Health Screening Form). This should be directed to the Heads of Health Care concerned and to the participating prisoners in each case. Provided this is granted and all data treated confidentially, the committee has no ethical objection to access.

Members considered your draft schedule for pilot interviews which they felt should be re-orded. They thought that the most sensitive and direct

questions in Sections A and B should be asked after some of the less sensitive ones in respect of the participants' prison and life experiences. In their view it is important to establish some rapport between the interviewer and the participant before addressing the most difficult issues.

Finally, the committee has asked if you could provide a more detailed account of the action which you propose to take if psychological distress is shown by interviewees. In particular, members would like to know what support and psychiatric back-up will be available.

The committee will meet again in about 12 weeks. However, it would be helpful if you could forward an amended consent form and Patient Information Leaflet, a re-ordered schedule of questions for pilot interviews and a memorandum addressing the issues in the preceding paragraph within the next eight weeks. The committee will then decide whether to deal with this matter by correspondence or at its next meeting (to which you could be invited).

Please address all future communications to:

Mr John Allen
Secretary
HREC
Room 802 Cleland House
Page Street
London SW1P 4LH
(0171 217 6022)

Yours sincerely,

KIRK COULSON-GILMER

jj14WordHRECls52

HM PRISON SERVICE HEALTH CARE

HEALTH MATTERS

PEER REVIEW APPLICATION FORM
HEALTH RESEARCH IN PRISONS
(FORM A)
Please type throughout and return this form with nine photocopies

1. Applicant	Applicant 1	Applicant 2	Applicant 3
Surname	**Snow**		
Forename(s)	**Louisa Claire**		
Age	**29**		
Title	**Ms**		
Post Held	**Researcher**		
No. of hours pw on project	**35**		

2. Funding institution/Authority

HM Prison Service (Planning Group)

Addresses at which the work will be done

A sample of HM Prison Establishments (to be identified)

---

3. Title of investigation *(not* exceeding 116 characters including spaces)

Suicidal Behaviour among Prisoners: an analysis of the relevance of antecedents, individual and situational factors.

4. Type of grant sought

None

---

5. Abstract of research *(not* exceeding 250 words)

The proposed study will focus upon the differences between prisoners (adult/young offender, men and women) who have attempted suicide and those who have engaged in relatively minor self-injury.

In essence, it aims to isolate the key cognitive/emotional identifiers which cannot, by definition, be elicited from completed suicide. Those who have engaged in self-injury (with the absence of suicidal intent) will be the comparison group.

A range of psychometric tests will be applied. The main data collection process will be via the a semi-structured interview, which will be formalised following pilot interviews.

6. Proposed starting date **April 1999** Proposed duration (in months) **9 months (data collection)**

7. Summary of support requested	Year 1	Year 2	Year 3	Year 4	Year 5	TOTAL
STAFF	Nil	Nil	Nil	Nil	Nil	Nil
CONSUMABLES	Nil	Nil	Nil	Nil	Nil	Nil
TRAVEL & SUBSISTENCE	Nil	Nil	Nil	Nil	Nil	Nil
EQUIPMENT	Nil	Nil	Nil	Nil	Nil	Nil
SUB-TOTAL	Nil	Nil	Nil	Nil	Nil	Nil
INDIRECT COSTS (40% of Staff costs)	Nil	Nil	Nil	Nil	Nil	Nil
ESTIMATED COSTS TO PRISON SERVICE	Nil	Nil	Nil	Nil	Nil	Nil
GRAND TOTAL	Nil	Nil	Nil	Nil	Nil	Nil

8a. Does the project require Local Ethical Committee approval? [redacted]/No

8b. The proposal will require Prison Service Ethics Committee approval. Has the form been completed and attached? Yes/[redacted]

9. DECLARATION

Applicants

1 have read the standard conditions for research set out in the notes 'Health Research in Prisons' and agree to abide by them 'and any amendments which may subsequently be issued. 1 shall be actively engaged in, and in day-to-day control of, the project.

To be signed by	Signature	Name in block capitals	Date
APPLICANT 1		**LOUISA CLAIRE SNOW**	**30/1/99**
APPLICANT 2			
APPLICANT 3			

0. This application should be submitted by/through (1) the Head of Department and (ii) the officer who will be responsible for funding any rant that may be awarded. Each should sign the following declaration: 1 confirm that 1 have read this application and, that if granted, the vork will be accommodated and funded by the Department/institution in accordance with the conditions in the Notes 'Health Research in Prisons'. The staff gradings- and salaries quoted are correct and in accordance with the normal practice of the institution.

(i) Signature of ~~Head of Department~~ SUPERVISOR

N. CLARK.

Title

SENIOR LECTURER IN PSYCHOLOGY

N.B. OVERALL APPROVAL FOR THE PROJECT WAS GIVEN WHEN MS. SNOW COMMENCED HER PhD BY OUR HEAD OF DEPT. IF FURTHER CONFIRMATION IS REQUIRED PLEASE LET MS. SNOW KNOW.

To be appended in typescript or block capitals

Name and initials (of (1) above)

DR N K CLARK

Institution

UNIVERSITY OF KENT

Address

DEPARTMENT OF PSYCHOLOGY
KEYNES COLLEGE
UNIVERSITY OF KENT
CT2 7NP

Date:
30/1/99

(ii) Signature of **Funding Authority**

Finance Officer/Bursar/Registrar/Secretary of Institution (delete as appropriate)

To be appended in typescript or block capitals

Name and initials (of (5) above

Institution

Address, telephone number and fax number if available (including STD code from London and extension)

Date:

11. Name, address, telephone number (including STD code from London and extension) and fax number in typescript (or block capitals) of the officer who should be contacted regarding the administration if awarded, if different from (ii) above

CLASSIFICATION: OFFICE USE ONLY

12. HISTORY OF THE PROPOSED RESEARCH

TITLE OF INVESTIGATION:

Suicidal Behaviour among Prisoners: an analysis of the relevance of antecedents, individual and situational factors

(A) Which outside body (other than the Prison Service) is funding your research? **None**

If so, please indicate (on additional sheets if necessary):

(1) the topic

(ii) the supporting organisation

(iii) the value

(iv) the tenure

Is this or a related application currently being submitted elsewhere? **No**

If so,

to which organisation
by what date is a decision expected

(C) Has this application been submitted elsewhere over the past year? **No**

If so,

(1) to which organisation

(ii) what was the result

(D) Is the proposed research likely to patenable or otherwise commercially exploitable results? **No**

If so, please give brief details.

13. Full official postal address of all applicants

APPLICANT 1

NAME **Louisa Snow**

DEPARTMENT **Department of Psychology**

INSTITUTION **University of Kent**

ADDRESS **Keynes College**
University Of Kent
Canterbury
Kent

POST CODE **CT1 2DG**

TELEPHONE No (including STD code from London) **01227 823090 (direct)** EXTENSION

ALTERNATIVE TELEPHONE No **01227 471332**

FAX No **01227 827030/01227 471332**

APPLICANT 2

NAME

DEPARTMENT

INSTITUTION

ADDRESS

POST CODE

TELEPHONE No (including STD code from London) EXTENSION

ALTERNATIVE TELEPHONE No

FAX No

APPLICANT 3

NAME

DEPARTMENT

INSTITUTION

ADDRESS

POST CODE

TELEPHONE No (including STD code from London) EXTENSION

ALTERNATIVE TELEPHONE No

FAX No

14. Full official postal address of all Collaborators**

COLLABORATOR 1

NAME

DEPARTMENT

INSTITUTION

ADDRESS

POST CODE

TELEPHONE No (including STD code from London) EXTENSION

COLLABORATOR 2

NAME

DEPARTMENT

INSTITUTION

ADDRESS

POST CODE

TELEPHONE No (including STD code from London) EXTENSION

COLLABORATOR 3

NAME

DEPARTMENT

INSTITUTION

ADDRESS

POST CODE

TELEPHONE No (including STD code from London) EXTENSION

** on whom the validity of the proposal is dependant. A copy of a statement of willingness to cooperate should be enclosed with the application.

PROPOSED INVESTIGATION

1. Title

2. Purpose

3. Background

4. Plan of investigation

5. Detailed justification for support requested

1. Suicidal Behaviour among Prisoners: an analysis of the relevance of antecedents, individual and situational factors.

2. To further develop the current Prison Service strategy for the identification and management of prisoners who are at heightened risk of suicide/self-injury by:

- **Eliciting prisoners' reasons for engaging in suicidal/self-injurious behaviours, by examining their perceptions of the factors that precipitated their actions.**
- **Exploring how suicidal feelings may alter over time.**
- **Establishing the extent to which the prison environment may be a contributory factor.**
- **Examining the nature of the relationship between prisoners' adjustments to imprisonment and completed and attempted suicide and self-injury.**
- **Further considering the differences and similarities between attempted suicide and self-injury.**

3. A detailed explanation of the background of the research can be found in Form B.

4. A more detailed plan of the investigation can be found in Form B. The timetable of research is as follows:

Feb/Mar 1999: Conduct detailed analysis of the incidents of self-harm reported (between 1/1/98 and 31/12/98) via the Inmate Reporting System; this will provide information on the types of establishments reporting the greatest incidence of attempted suicide.

Mar 1999: Submit a detailed proposal to each (male/female, adult/young offender) establishment which (following analysis) appears to experience the greatest incidence of attempted suicide. Request their participation in the research.

Early April 1999: Make preliminary visits to each establishment.

Mid April 1999: Pilot draft interview schedule (at identified establishments).

Late April 1999: Revise draft interview schedule in light of the results of the pilot study.

May – Oct 1999: Begin data collection. This will continue until the required sample of prisoners in each group has been interviewed. During this period data will be coded, anonyimised and input on computer.

[Dec 1999: If feasible, conduct follow-up interviews with a sample of prisoners who originally participated].

Jan 2000-: Analyse data, write and submit PhD thesis (October 2000).

5. See Form B. The application is solely for ethical purposes.

CONTINUE ON NO MORE THAN:
(1) 5 SEPARATE A4 SHEETS FOR PROJECT OR SPECIAL PROJECT GRANT
(11) 9 SEPARATE A4 SHEETS FOR PROGRAMME GRANT Applications which exceed this length will be returned as unacceptable

6. Brief summary of your current perception of the 1 significance of the research for H.M. Prison Service

The proposed research has been identified (by the Suicide Awareness Support Unit) at Prison Service Headquarters as being of value to the development of the current strategy for the identification and management of suicidal prisoners.

In addition, the HMCIP is currently conducting a review of suicide/self-injury amongst prisoners in England and Wales. It is anticipated that one of the conclusions of the review is that more research should be undertaken on attempted, as opposed to completed, suicide.

7. Brief summary of how the proposed research fits into the strategic objectives of H.M. Prison Service (see notes)

The proposed research fits in with the Prison Service goals and values on providing a safe environment for prisoners.

The research proposal has the full support of the Suicide Awareness Support Unit at Prison Service Headquarters.

8. Briefly outline how the proposed research findings will be disseminate on completion of the project.

The research findings will be disseminated through presentation at relevant conferences and publications. Internal dissemination will be decided in consultation with the relevant policy divisions at Prison Service Headquarters.

DETAILS OF RESOURCES REQUIRED (summarised in Section 7 of the application form)

DETAILS OF POSTS (see NOTES) NAME	Grade	Start Point on Scale	Incremental Date	Starting Salary £	London Weighting £	Other Allowances £	Combined Superann and National Insurance £	Total Costs in Year 1 £
(A1) RESEARCH STAFF								
1								
2								
3								
4								
(B1) TECHNICAL STAFF								
1								
2								
3								
4								
(C1) OTHER STAFF								
1								
2								
3								

ANNUAL COSTS OF ABOVE POSTS	Effort	on Project	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	TOTAL
(A2) RESEARCH STAFF	%	months						
1								
2								
3								
4								
TOTAL A2								
(B2) TECHNICAL STAFF								
1								
2								
3								
4								
TOTAL A2								
(C2) OTHER STAFF								
1								
2								
3								
TOTAL C2								
GRAND TOTAL (A2) + (B2) + (C2)								

3. CONSUMABLES please specify	Year 1 £	Year 2 £	Year 3 £	Year 4 £	Year 5 £	TOTAL £
TOTAL ANNUAL COSTS £						

4. TRAVEL AND SUBSISTENCE DESTINATION and PURPOSE (see NOTES)	Number of Journeys	 Days	MODE of TRANSPORT	FARE/ MILEAGE	SUBSISTENCE	FEES	TOTAL
Within the UK							
TOTAL ANNUAL COSTS £	Year 1		Year 2	Year 3	Year 4	Year 5	

5. PRISON RESOURCES REQUIRED	Detail items applied for (see NOTES)	TOTAL

TOTAL ANNUAL COST £	Year 1	Year 2	Year 3	Year 4	Year 5	

6. EQUIPMENT Description of items and Country of Manufacture	EXPIRY DATE OF QUOTATION	LIKELY DELIVERY RATE	BASIC PRICE £	IMPORT DUTY £	VAT £	TOTAL £
(1)						
(2)						
(3)						
(4)						
(5)						
(6)						
(7)						
(8)						

ANNUAL COST OF ABOVE ITEMS	Year 1	Year 2	Year 3	Year 4	Year 5	
(1)						
(2)						
(3)						
(4)						
(5)						
(6)						
(7)						
(8)						

TOTAL ANNUAL COST £						

CURRICULUM VITAE OF APPLICANT ANNEX III page 1

1. Surname	Forename(s)	Age	29
SNOW	LOUISA CLAIRE	d.o.b.	3/6/69

2. Degree, etc. (subject, class, university, and date)

BA (Hons) Sociology 2:1 Goldsmiths' College, University of London, 1994
MA Sociology Pass with Distinction Goldsmiths' College, University of London, 1997

3. Posts held (with dates); please identify tenure and source of funding of present post.

AO Suicide Awareness Support Unit HM Prison Service Headquarters (Nov 1995 - Dec 1997)

Researcher (p/t) Suicide Awareness Support Unit HM Prison Service Headquarters (Jun 1998 - current)

4. Recent publications; also papers in press

Snow, L. 'A Pilot Study of Self-Injury Amongst Women Prisoners' in Towl, G.T. (Ed) Suicide and Self-Injury in Prisons', in Towl, G. J (Ed) *Suicide and Self-Injury in Prisons*, Issues in Criminological and Legal Psychology, 28, Leicester: DCLP.

Snow, L (in press) 'Self-Injury Amongst Women Prisoners', paper presented at DCLP Conference, Cambridge 1997.

Snow, L. (submitted for publishing) 'An Evaluation of Prison Listener Schemes', paper presented at DCLP Conference, Durham 1998.

You may wish to retain a copy of this report for updating in the context of future applications to H.M. Prison Service.

CURRICULUM VITAE OF PROPOSED RESEARCH STAFF/VISITING SENIOR SCIENTIST

1. Surname | Forename(s) | Age d.o.b.

2. Degree, etc (subject, class, university, and date)

3. Posts held (with dates); please identify tenure and source of funding of present post.

4. Recent publications; also papers in press

1. Surname | Forename(s) | Age d.o.b.

2. Degree, etc (subject, class, university, and date)

3. Posts held (with dates); please identify tenure and source of funding of present post.

4. Recent publications (title and reference)

Please return form on completion to: Research Co-ordinator and planning, DHC, Cleland House, Page St, London SW1P 4LN.

For each and every research project which you or any one of your co-applicants has carried out in prison and which has begun terminated over the past five academic years, please give the information requested below, copying this sheet as necessary using sheet for each project.

1. **A Pilot Study of Self-Injury amongst Women Prisoners**

2. Started:

June 1997

3. Finished

September 1997

4. Grant holder(s):

No grant was received for the project.

5. Brief summary of your current perception of the significance of the work done (e.g. as increment to knowledge, conceptual methodological advance, contribution to medical practice, training, industrial exploitability/applicability/spin-off), and of the project significance for your own, your assistants', and your colleagues' scientific development.

The research contributed to the understanding of staff and women prisoners' motivations for engaging in self-injurious behaviours; the importance of such differences, in terms of the management of self-injury was highlighted.

6. Scientific papers directly resulting from this grant (full papers published or 1n press" in refereed journals With title, full pagination and authorship: please asterisk the key paper(s) and. underline the names of any assistant(s) on the grant among the authors). For "Shar, Equipment Grants" with three or more sub-projects, you could cite up to two papers per sub-project to illustrate the use to which t equipment was put.

The results were published as detailed above (Snow, 1997). Copy attached.

You may wish to retain a copy of this report for updating in the context of future applications to H.M. Prison Service.

For each and every which you or any one of your co-applicants has carried out in prison and which has begun or terminated over the past five academic years, please give the information requested below, copying this sheet as necessary using on sheet for each project.

1. Project title:

Monitoring, Recording and Classifying Instances of Self-Injury and Suicide Attempts.

2. Started:

January 1998

3. Finished

April 1998

4. Grant holder(s):

No grant was provided.

5. Brief summary of your current perception of the significance of the work done (e.g. as increment to knowledge, conceptual or methodological advance, contribution to medical practice, training, industrial exploitability/applicability/spin-oft), and of the project's significance for your own, your assistants', and your colleagues' scientific development.

The research was intended to highlight the difficulties of establishing the actual rate at which suicide attempts and instances of self-injury occur within a sample of HM Prison Service establishments. A number of recommendations for improving current recording and monitoring practices were made.

6. Scientific papers directly resulting from this grant (full papers published or 1n press" in refereed journals with title, full pagination and c authorship: please asterisk the key paper(s) and. underline the names of any assistant(s) on the grant among the authors). For "Shar, Equipment Grants" with three or more sub-projects, you could cite up to two papers per sub-project to illustrate the use to which t equipment was put.

The results of the research have not been published but have been used in internal Prison Service (Suicide Awareness Support Unit) business planning. Copy of summary report attached.

You may wish to retain a copy of this report for updating in the context of future applications to H.M. Prison

Service.

REPORT ON PREVIOUS PRISON SERVICE RESEARCH **ANNEX IV page 1**

For each and every research project which you or any one of your co-applicants has carried out in prison and which has begun terminated over the past five academic years, please give the information requested below, copying this sheet as necessary using sheet for each project.

1. **An evaluation of staff, prisoner and Listeners' views on prison Listener Schemes was undertaken at a sample of establishments .**

2. Started:

May 1998

3. Finished

September 1998

4. Grant holder(s):

No grant was provided.

5. Brief summary of your current perception of the significance of the work done (e.g. as increment to knowledge, conceptual methodological advance, contribution to medical practice, training, industrial exploitability/applicability/spin-off), and of the project significance for your own, your assistants', and your colleagues' scientific development.

The research was based on an analysis of staff, prisoner and Listener views regarding the value of Listener Schemes. Although such schemes have proliferated in recent years, little research on individual perceptions of the such support networks has been undertaken. Particular focus was on the types of support available for a group of suicidal and a group of non-suicidal prisoners.

6. Scientific papers directly resulting from this grant (full papers published or 1n press" in refereed journals with title, full pagination and co authorship: please asterisk the key paper(s) and. underline the names of any assistant(s) on the grant among the authors). For "Shar, Equipment Grants" with three or more sub-projects, you could cite up to two papers per sub-project to illustrate the use to which t equipment was put.

The results of the research were presented at the DCLP Conference (Durham) in September 1998; conference proceedings are currently in press.

You may wish to retain a copy of this report for updating in the context of future applications to H.M. Prison Service.

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REPORT ON PREVIOUS PRISON SERVICE RESEARCH ANNEX IV page

For each and every research project which you or any one of your co-applicants has carried out in prison and which has begun terminated over the past five academic years, please give the information requested below, copying this sheet as necessary using sheet for each project.

1. **An examination of the (comparatively) low rate of suicide amongst prisoners in New York City Department of Corrections facilities (Rikers Island) was conducted. Focus was on the Department's suicide prevention strategy and, in particular, on the 'Inmate Observation Aide Program' .**

2. Started:

17 September 1998

3. Finished

21 September 1998

4. Grant holder(s):

No grant was provided. Funding was available (via the University of Kent) from the applicant's research grant.

5. Brief summary of your current perception of the significance of the work done (e.g. as increment to knowledge, conceptual methodological advance, contribution to medical practice, training, industrial exploitability/applicability/spin-off), and of the project significance for your own, your assistants', and your colleagues' scientific development.

The work formed part of the researcher's ongoing research into the importance of support and social networks for suicidal prisoners. An examination of the differences between the US and HM Prison Service's models was undertaken. A number of comparisons between NYC and HM Prison Service were drawn, which may go some way to explaining why the former's strategies are not immediately transferable to the UK.

6. Scientific papers directly resulting from this grant (full papers published or 1n press" in refereed journals With title, full pagination and co authorship: please asterisk the key paper(s) and. underline the names of any assistant(s) on the grant among the authors). For "Shar, Equipment Grants" with three or more sub-projects, you could cite up to two papers per sub-project to illustrate the use to which t equipment was put.

The findings from the research have not been published, although a report has been submitted to, amongst others, the Prisons Minister, the Director General of the Prison Service and HMCIP (in light of their forthcoming review into suicide/self-injury).

You may wish to retain a copy of this report for updating in the context of future applications to H.M. Prison Service.

1. Introduction

The number of self-inflicted deaths amongst prisoners (in England and Wales), has increased relatively steadily (from 50 per 100,000 (annual average population) in 1990 to 83 per 100,000 in 1998, representing an overall increase of 66%. The *rate* of suicide (when calculated against the average prison population) has not been marked by such a dramatic increase, rising from 110 to 127 per 100,000 (annual average population) in 1998 (representing an overall increase of 15%); however, suicide in prisons in England and Wales is currently over six times the total suicide rate for men and nearly ten times the rate for both sexes[1] (The Samaritans, 1998).

Researchers concerned with suicide (particularly amongst prisoners) have, almost exclusively, conducted retrospective analyses, focusing on identification of the (individual) characteristics of those who die, such that their 'profile' is relatively well understood; see, for example, Topp, 1979; Dooley, 1990; Bogue & Power, 1995; Crighton & Towl, 1997; Towl & Crighton, 1998). Whilst such studies are intended to improve practitioners' understandings of the salient features associated with high or heightened risk of suicide (thus enhancing the possibility of identifying suicidal individuals, thereby aiding suicide prevention) the criteria applied and characteristics identified probably apply to a vast number of people who will never engage in suicidal behaviour/s, as well as those who will. It is likely that a proportion of the prison population share the characteristics associated with suicide; in this sense, such retrospective analyses have little predictive value. In other words, the rate of false positive identification is likely to be far too high to base detection of those at heightened risk entirely on such factors – especially amongst an already (potentially) high risk population. Furthermore, such analyses provide little (if any) insight into individuals' motivations and/or intentions underlying their suicidal behaviours; a factor that may have important management and policy implications. Moreover, such analyses do not examine, in sufficient detail, the role that environmental or situational factors play in influencing suicidal behaviour/s; similarly, such factors may have important implications for the management of suicidal prisoners.

Research Aims

To further inform and develop strategies for the identification and management of suicidal prisoners by:

- Eliciting prisoners' expressed reasons for engaging in suicidal behaviour/s, focusing on their perceptions of the factors that precipitated their actions;
- Establishing the extent to which the prison environment may be a contributory factor.
- Understand more fully how prisoners suicidal feelings alter over time (via follow-up interviews);
- Exploring the nature of the relationship between prisoner's integration or adjustment to imprisonment and completed and attempted suicide and self-injury.
- Further exploring the differences and similarities between attempted suicide and self-injury.

2. Scientific Background

There is a wealth of literature relating to completed and attempted suicide and self-injury; for the sake of brevity, the following is a brief account of particularly pertinent research in the area (see Annex B(i) for references). The focus in on previously identified factors associated with attempted suicide/self-injury. Particular attention is given to the following four distinct (although inter-related) areas: individual factors (e.g., previous suicidal behaviour, the significance of psychological/psychiatric distress); individual's strategies for managing distressing experiences (e.g., strategies for coping with stress both inside and outside of prison), situational factors (e.g., location and regime level) and sources of social support (e.g., quality of relationships with others both inside of prison and within the wider context).

[1] A difference that may partially be explained by the fact that, nationally, suicide statistics are based on deaths classified as suicide by a coroner and deaths by undetermined cause (ICD codes E980-989). The Prison Service employs the definition 'self-inflicted deaths' and, as such, is over-inclusive.

Psychiatric Disorders

Individual propensity to suicidal behaviour/s is routinely associated with a broad range of psychiatric/psychological disorders. Whilst evidence remains ambiguous, the following associations have been made: borderline personality disorder (Walsh & Rosen, 1973; Coid *et al.*, 1984; Franklin, 1988); disorders of impulse control (Pattison & Kahan, 1984; Wilkins and Coid, 1991); obsessive compulsive disorder (Favazza, 1992; Bland et al., 1990); multi-impulsive personality disorder (Lacey & Evans, 1986); and schizophrenia (Bach-Y-Rita, 1974).

Psychological Difficulties: depression, hopelessness and anxiety

The association between self-injury/attempted suicide and depression is apparent for both adult prisoners and young offenders, men and women (Bach-Y-Rita & Veno, 1974; Lester, 1990; Ivanoff and Jong, 1991). However, as Livingston (1997) suggests, depression may not necessarily *cause* self-injurious behaviour/s but, rather, act as a trigger in the presence of other factors. Hopelessness (extreme pessimism about one's future, coupled with the belief that one's situation is unlikely to improve) has consistently been linked with suicidal behaviour (see, Beck, 1975, 1979; Ivanoff & Jong, 1991). Similarly, increased levels of anxiety have strong associations with suicidal behaviour/s (for example, Wilkins and Coid, 1991). Research clearly supports the notion that acts of self-injury are preceded by feelings of anxiety, followed by reductions in anxiety levels after such incidents (see Winchel and Stanley, 1991; Snow, 1997). As Ianoff *et al* (op cit) maintain, such methods of anxiety reduction are likely to be accepted as valid by those incarcerated in secure settings where individual's previously utilised methods (such as reliance on alcohol and/or illicit substances) are significantly reduced (see also Zamble and Porporino, 1994).

Alcohol/substance use/misuse

Community based studies consistently highlight the apparent correlation between dependence on alcohol/illicit substances and completed and attempted suicide (Morgan, 1998). Studies conducted within the prison context draw similar conclusions, variously suggesting that between a half and three quarters of prisoners who engage in self-injurious behaviour/s were dependent on illicit drugs prior to incarceration (for example, Haycock, 1989; Wilkins & Coid, 1991). Some caution should be taken when interpreting such data, however, as other researchers have highlighted the fact that dependence on drugs and/or alcohol may be equally prevalent amongst the prison population as a whole (Livingston, 1997).

Recent Negative Life Events

A number of researchers have highlighted the importance of recent negative events preceding suicidal behaviour/s, both generally and within the prison context (Wool and Dooley, 1987; Ivanoff and Jong, 1991; Coid *et al.*, 1992). Consistently, studies have emphasised the significance of problems associated with recent interpersonal loss, in terms of the breakdown or potential breakdown of domestic relationships or the death of a loved-one; such problems are frequently cited as the main precursors to self-injury and attempted suicide. Whilst the contribution of negative life events to suicidal behaviour/s is relatively clear in the case of adult prisoners, such effects are less obvious in the case of young offenders, such that some researchers suggest that recent events in one's immediate environment may be more important (Livingston, 1997). It is important to point out that the exploration of particular problems that prisoners experience does not necessarily imply a causal connection, for there may be many others who have undergone similar experiences and not resorted to suicidal acts. What is important are prisoners' perceptions of the difficulties/problems they are experiencing.

Prison induced stress/'Coping' with Imprisonment

A number of researchers have criticised what they regard as the over-reliance on individual factors in the explanation of suicidal behaviour/s (Liebling, 1992). Scant attention has been paid to individual's experiences of imprisonment and how those experiences impact on one's general well-being. Liebling (1995) highlights a number of important 'situational' factors that have a bearing on suicidal behaviour/s, including problems relating to prisoners' charges, frustration and upset at being in prison and bullying and implied that interpretation of such

factors is influenced by one's ability to cope with imprisonment.

Similarly, Zamble & Porporino (1988) suggest that vulnerability to suicide is, at least partially, associated with one's ability to 'cope' with imprisonment. Others, (such as Gunn *et al.*, 1978) suggest that the disturbance, distress and psychological discomfort associated with imprisonment generally is maximal during the initial phase of imprisonment and diminishes following adjustment. Such observations are especially pertinent to the study of suicides in prison, given that research has consistently shown that the majority of deaths occur shortly after admission to prison, at a time when it is likely that prisoners face the greatest amount of uncertainty (e.g., Crighton & Towl, 1977; Towl & Crighton, 1998).

Recognising the importance of individuals' understandings of their experiences, Power *et al* (1997) examined prisoners' perceptions of their abilities to cope with imprisonment. As the authors highlight, generally, one's coping abilities are determined by a combination of experiences, skills, competencies, current emotions and demands. Coping with imprisonment, however, requires further skills; in particular it depends largely on one's ability to interact successfully, form alliances, develop social networks and, most importantly, acquire acceptance (1997:390). Because, for many such integration may be impossible to achieve, already present feelings of isolation, rejection and/or despair may be exacerbated. This is a theme emphasised by Liebling (1992) who suggested that prisoners' difficulties in coping with imprisonment (manifested by, for example, a lack of friends and little external support) may distinguish the suicidal from the non-suicidal.

As intimated above, one's ability to cope with imprisonment depends on a complex combination of factors such as previous experiences, acquired techniques of managing distress (the utilisation of which may be curtailed by one's incarceration), one's current psychological/psychiatric state, the cultivation of relationships and networks with one's peers (determined by one's ability to socialise), one's personal relationships with those in the outside world and the development and continuation of such relationships. Such influences (or sources or support) are likely to become more significant when one experiences problems or difficulties whilst in prison. Those who have no such sources of support are likely to become further isolated; such isolation (when coupled with other factors) may precede suicidal behaviour/s. These are issues which will be more formally during the proposed study.

3. Peer Review

Although the scientific basis of the study has not yet been subject to peer review, a number of experienced Forensic Psychologists have been consulted regarding the feasibility of the research design, the interview schedule and appropriate data analysis techniques. Amongst those consulted are Martin McHugh (Head of the Suicide Awareness Support Unit, HM Prison Service Headquarters), Graham Towl (Area Forensic Psychologist, Kent Area) and Dr Noel Clark (Senior Lecturer in Psychology, University of Kent). Furthermore, members of the Kent Forensic Psychiatric Services have agreed to provide necessary training in relation to interviewing and working with the suicidal and in the use of psychometric measures. The KFPS staff will include Dr Phillip Sugarman (Consultant Psychiatrist and Clinical Director) and Dr Lona Roberts (Consultant Forensic Clinical Psychologist and Head of Forensic Clinical Psychology, Invicta Healthcare NHS Trust).

4 Subjects Involved

It is intended that participants be drawn from four groups within the prison population: adult men, young offender[2] men, adult women and young offender women (this will allow a comparison of the differences and similarities between each group on a number of variables). The main criteria for inclusion in the study is that each prisoner (at the establishments included within the study) will have engaged in an instance of self-injury (according to the criteria discussed below) within two weeks of the date from which the research begins. Because of the difficulties in recording and monitoring suicide attempts and instances of self-injury[3] and, thereby establishing the rate at which

[2] Young Offenders (aged between 18 and 21) will be included in the study; juvenile prisoners (aged between 15 and 17) will not.

[3] A number of reasons account for such difficulties: for example, the Prison Service applies no definition of what constitutes an act of self-injury or an attempt at suicide; also, there are a number of channels through which such

it occurs, it is necessary to set clear criteria for which types of behaviours are to be considered self-injurious. For the current purposes, those who attempted to hang themselves and had to be cut down by another person and/or those who cut themselves either on one or both or their wrists or on the neck (and required treatment at outside hospital) will be regarded as suitable for inclusion. It is envisaged that a naturally-occurring comparison group will arise – those who engaged in self-injury (according to the above criteria) but who were deemed to be not suicidal, either by their own affirmation (during interview) or following the administration of the various psychometric measures). It is intended that a sample size of 120 (i.e., fifteen participants from each of the participant and comparison groups) will be sufficient to detect the most significant factors. It is proposed that prisoners from a variety of legal backgrounds (i.e., sentenced, remand and convicted/unsentenced) with a variety of offence backgrounds, will participate.

It is envisaged that four establishments will be included in the study: one each that holds adult men, adult women, young offender men and young offender women. The establishments to be included in the study will be identified following an examination of the patterns of self-injury and attempted suicide reported via IRS (currently under analysis).

Recruitment to the study

Upon identification of the establishments in which the study will take place, exploratory visits will be undertaken as a means of establishing links with staff and prisoners and, in particular, to identify a suitable prison liaison officer (usually a member the local Suicide Awareness Team) who agrees to act as the initial liaison between researcher and participants. The IRS will be the starting point for the recruitment of participants in the study, as all incidents of self-injury should be reported through this channel. Prisoners who fulfil the researcher's criteria will be approached by the liaison officer, given brief details of the study and given the opportunity to decide whether they wish to participate. Upon agreement, the researcher will travel to the establishment in question, clarify the purposes of the study to the prisoner, provide answers to question, give assurances of anonymity and confidentiality (see Section 9), obtain written consent and begin the research process. Participants will be assured that participation is voluntary and that their agreement or non-participation will have no impact on their treatment in prison. The question of allowing a suitable time period to elapse between the incident and interview requires careful consideration. It is proposed that, on average, a period of around seven days should have elapsed; this should allow time for recovery to begin. As individuals may well still be at heightened risk of suicide after such a period, careful consideration will be given to prisoners' care/support plans and advice from staff will be sought in each case.

5. Health Records

Whilst access to prisoner's complete medical records is not required, access to form F2169/a (First Reception Health Screening Forms) would be advantageous and its approval is sought here. Access is required in order to verify information about previous attempts at suicide/incidents of self-injury and to gain information regarding family history of suicidal behaviour/s, the occurrence of previous/current drug/alcohol use/misuse and evidence of psychological/psychiatric illness and previous treatments. As mentioned above, such factors are strongly correlated with completed suicide, suicide attempts and self-injury. Further, given the widely-documented relationship between various other background characteristics (including, individual and socio-demographic factors) and completed and attempted suicide, it is proposed that various information relating to participants' lives, backgrounds, current offences, previous offences/custodial histories, etc., will be collected via the Local Inmate Database System and Core Records (F2050). All data gained will be coded to ensure anonymity prior to entry on computer.

6. Hazards, Discomfort and Distress

Given that the participants will have recently engaged in an act of self-injury (either with or without suicidal intent), some may be distressed. Every effort will be made to ensure that they are not distressed further. Participants will be informed from the outset that expression of suicidal ideation cannot be kept confidential; if, during the research process, such ideation is expressed or if the researcher considers that the participant is suicidal, the prison liaison

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incidents are reported, seemingly resulting in inconsistencies in recording practices.

officer (or, if not available, staff immediately involved) will be informed and management under local procedures will be initiated (i.e., an F2052SH raised) if not already in place. Where a prisoner is already under F2052SH procedures, the key worker will be contacted if there are any concerns.

7. Procedures/Questionnaires

It is proposed that, after adequate training, measurement of suicidal intent, depression and hopelessness will be undertaken via the administration of Beck's Scale for Suicidal Ideation, Depression Inventory and Hopelessness Scale. In addition, it is intended that the General Health Questionnaire (Goldberg, 1972) is administered, as a means of measuring participant's psychological well-being.

The principal data collection will be via interviews, conducted on a one-to-one basis with the aid of a semi-structured interview schedule (draft attached). The schedule is intended to measure a number of possible risk factor domains including: recent life events/forthcoming stressors, stress management, environmental/situational factors, social context/adaptation to imprisonment and social support networks (both inside and outside of prison). It is proposed that the interview schedule be piloted (on at least one prisoner from each group) in order that its validity (including the comprehension of questions) and appropriateness can be ascertained (i.e., whether or not the schedule is likely be yield data that is of interest). The schedule will be revised in the light of the pilot study. The data will be subjected to a variety of quantitative (descriptive and multivariate) statistical tests and a number of qualitative data interpretation techniques.

8. Informed Consent

A draft consent form is attached.

9. Confidentiality

Assurance of confidentiality will be given with the following exceptions: if disclosed information has security implications or if a prisoner discloses that he/she feels actively suicidal.

10. Declaration of Interest

The proposed research forms the main study of the applicant's Ph.D.

11. Incentives

No rewards or incentives will be offered to participants.

12. Detected Ill Health or Abnormalities

Given the nature of the research (i.e., non medical) and the structure of the interview schedule, it is not envisaged that undetected illnesses/abnormalities will be detected.

13. Cost to Prison Service

The Prison Service are funding the applicant's Ph.D. research, of which the current proposal will form the main study. It is not envisaged that further costs, in addition to those previously agreed, will be incurred.

14. Data Protection Act

Data will be not be recorded automatically. Prior to recording on computer, all data will be anonyimised so detection of individual cases will not be possible.

15. Indemnity

As the research is sanctioned by the University of Kent (Department of Psychology) it is covered by the University's insurance policies with respect to injury.

16. Publication

The researcher does intend to publish results of the research.

17. Other factors

None.

FORM C

HEALTH RESEARCH ETHICS COMMITTEE

APPLICATION DETAILS - SUMMARY INFORMATION

Both sides of this form must be completed and attached to the outline requested by Form B.

NAMES OF RESPONSIBLE INVESTIGATORS: **Louisa Snow**	QUALIFICATIONS AND APPOINTMENTS: **BA (Hons) Sociology (2:1) Goldsmiths College (1994)** **MA Sociology (Pass with Distinction) Goldsmiths' College (1997)** **AO Suicide Awareness Support Unit HM Prison Service Headquarters (Nov 1995 - Dec 1997).** **Researcher (p/t) Suicide Awareness Support Unit HM Prison Service Headquarters (Jun 1998 - current).**

ADDRESS OF PRINCIPAL RESEARCHER:

Department of Psychology
Keynes College
University of Kent
Canterbury
Kent
CT2 7NP

TITLE OF PROJECT:

Suicidal Behaviour among Prisoners: an analysis of the relevance of antecedents, individual and situational factors.

FUNDING BODY:

HM Prison Service (via Planning Group).

STUDY POPULATION:

A sample of suicidal and non-suicidal adult (men and women) and young offender (men and women) prisoners (for a fuller explanation of the research aims and participant requirements see Form B).

ESTABLISHMENT(S):
(List establishments involved in the research, whether their consent has been obtained and if so from whom)

See discussion in Form B.

OVER/

OBJECTIVES OF STUDY:
(include where possible the hypothesis to be tested or research questions to be answered)

The main aim of the study is to further inform and develop the current Prison Service strategy for the identification and management of suicidal prisoners by:

- **Eliciting prisoners' expressed reasons for engaging in suicidal behaviour/s, focussing on their perceptions of the factors that precipitated their actions;**
- **Establishing the extent to which the prison environment may be a contributory factor.**
- **Understand more fully how prisoners suicidal feelings alter over time (via follow-up interviews);**
- **Exploring the nature of the relationship between prisoner's integration or adjustment to imprisonment and completed and attempted suicide and self-injury.**
- **Further exploring the differences and similairties between attempted suicide and self-injury.**

OUTLINE OF STUDY DESIGN AND ITS DURATION:

For an outline of the proposed research see Form B. The data collection period for the proposed study is from April 1999 to January 2000. The data will then be analysed and the research findings completed for submission of PhD in October 2000.

SIGNATURE OF APPLICANT:

Signed .....

FOR OFFICE USE ONLY:

DATE SUBMITTED TO COMMITTEE: .....

COMMITTEE RECOMMENDATION: .....

PRISON SERVICE HEALTH RESEARCH ETHICS COMMITTEE

INFORMATION FOR RESEARCHERS

Background

1. In order to protect the subjects of research from harm and to preserve a subject's rights, all research on human subjects should conform to ethical principles and the investigators should not be the sole judge of whether their research does so conform. These principles have been set out in a number of international and professional codes.

2. All medical research organisations in the UK now require independent ethical approval usually obtained from the Local Research Ethics Committees (LRECs) set up under guidance from the Department of Health or, when the research is in other disciplines, from other appropriate professional bodies.

3. These arrangements were set up mainly to cover research on patients in hospitals or primary care and on healthy volunteers. Prison Service health research has operated largely outside these structures and has not therefore been under the same pressure always to consider the ethical implications of research. Prison health research must nonetheless abide by the same ethical principles which apply to all other health research.

4. The Prison Service has, on occasion, used the existing national network of LRECs to approve research on prisoners. However, much prison research is multicentre which necessitates a costly and unwieldy approach to several LRECs. In addition, many of the existing research ethics committees lack the necessary expertise or familiarity with the special problems of research in prisons. There is no national research ethics committee at present.

5. For these reasons the Prison Service has established its own health research ethics committee under the auspices of the independent Health Advisory Committee. This Committee facilitates the provision of ethical approval and advice to researchers, Governors and others in the Prison Service concerning the conduct of health research in prisons in England and Wales.

The Prison Service Health Research Ethics Committee

6. The Prison Service Health Research Ethics Committee has been set up to give ethical approval and to provide independent advice to the Prison Service on the ethics of research proposals concerning the physical or mental health of prisoners or prison staff, including research involving the use of their health records.

Constitution of the Committee

7. The membership will include an independent health professional as Chairman who is not a member of the Health Advisory Committee. Other members will be drawn from the Health Advisory Committee or externally but not from the Prison Service. Similarly, additional members may be co-opted where special expertise is required for particular studies. Membership will include at least one woman, a nurse and two lay members.

8. The Secretariat is provided by the Directorate of Health Care, HM Prison Service.

Objectives and Purpose of the Committee

9. In conformity with accepted principles, the objectives of the Committee are to promote the ethical standards of the practice of health research, to protect the subjects of such research from harm, to protect the subjects' rights and to provide reassurance to the public and prison authorities that this is being done. To these ends the Committee will consider the ethics of health research projects involving human subjects in prisons in England and Wales.

Class of work for Consideration

10. There are two main classes of research (RCP 1990) which raise ethical principles and are therefore appropriate for consideration by the Health Research Ethics Committee:

    a. that which involves making observations without any direct interference with the subject (eg research involving existing data or records of named individuals).

    b. that which involves interference with the subject (eg psychological intrusion into privacy or physical invasion).

11. Any research which seeks to study mental and physical health of prisoners, or uses medical techniques (eg blood sampling, administration of pharmacological preparations), or requires access to individual clinical records will be regarded as "health" research and appropriate for submission to the Committee.

12. It is however accepted that ethical approval is not needed for normal processes of quality control, clinical audit and the analysis of information for monitoring service provision and effectiveness, providing always that the information used has been gained in the normal course of clinical care and information so gained is in a form which cannot identify the individual.

13. "Clinical audit" may be defined as the systematic analysis of information gained in the normal course of clinical care by those responsible for that care. "Research" usually involves the collection of additional information from an individual or scrutiny of individual health records by those who may not be involved in providing clinical care.

Special Consideration for Research on Prisoners

14. Research on prisoners, because of the custodial setting and character of the prison population, raises a number of ethical issues not normally applicable to other subjects of research.

15. Most significant is the question of free and informed consent. There is always the real or perceived risk that undue pressure may be brought to bear on prisoners to participate in research or not to withdraw from it. There is, therefore, a need to ensure that free consent is being exercised and that full information is provided to inform this consent. Care needs to be taken in respect of the mental capacity of some prisoners, and to language or literacy problems.

16. Some types of research on mentally disordered offenders require careful consideration because of the often abnormal personality of the subject or the effects of the mental disorder on their health or judgment.

17. Similarly, health research concerned with influencing the mental state or behaviour of individuals can raise particularly sensitive human rights and other ethical issues.

Consent

18. No research involving human subjects in prison should be undertaken without the consent of the subject normally given in writing.

19. For those under 16 years, the consent of parent or guardian must be obtained, and without such consent the subject may not enter the research study.

20. For those 16 - 18 years, the consent of parent or guardian should also be obtained, wherever reasonably practical to do so.

21. Parental consent cannot override the subject's refusal to participate. However parental refusal overrides consent by the subject under 18 years of age.

22. No reward or inducement should be offered to encourage participation in research. Trivial and appropriate gifts in recognition of inconvenience may, however, be acceptable.

Health Research Ethics approval

23. All clinical staff and governors within the Prison Service are instructed as to the necessity for ensuring that independent ethical approval has been obtained before health research is undertaken in their establishments.

24. Ethical approval for health research proposals can be obtained from the Prison Service Health Research Ethics Committee. This can be particularly useful for multicentre studies. Proposals should be forwarded to the Secretariat, Directorate of Health Care, Room 802 Cleland House, Page Street, London SW1P 4LN. Advice and standard forms can be obtained by calling 0171 217 6895.

25. Research proposals submitted to the Committee will be considered and discussed at a formally convened meeting of the Committee. The Committee will meet quarterly. Proposals will not normally be considered by correspondence.

26. Exceptionally, where a proposal involves no risks or trivial inconvenience to prisoners and where ethical considerations are minimal, the Chairman (or in his absence the Vice Chairman) may, if appropriate, approve the project on behalf of the Committee, reporting such decisions to a forthcoming meeting of the Committee.

27. If a major project requires urgent consideration, it may be approved by the Chairman or Vice-Chairman in correspondence without a meeting of the Committee. However should any member raise significant objection, then a full meeting of the Committee would be convened as soon as possible.

28. Badly designed or unscientific research particularly if it entails any risk, or interferes with, or inconveniences prisoners or invades their privacy, can be deemed to be unethical. The Committee is not set up to judge the scientific merit or quality of the proposed research. Where doubts exist the Committee will wish to assure itself that the researcher has obtained independent expert advice on the project. Exceptionally, the Committee may wish to seek its own independent advice.

29. The Committee may on occasions wish to seek other independent advice (eg advice on ethnic minority concerns) before coming to a decision.

Format of Submissions

30. Applications for the Committee should be in a standardised format details of which will be provided to researchers.

31. Researchers will normally be invited to attend the meeting at which a proposal is being considered in order to answer questions which may be raised by members.

APPENDIX B INFORMATION LEAFLET/CONSENT FORM

This leaflet provides you with information about a study in which I would like your participation. The study is about suicide, attempted suicide and self-injury/harm amongst prisoners. It is being conducted by myself (Louisa Snow) and is being funded by the Prison Service. I am based in the Department of Psychology at the University of Kent.

The purposes of the research are to understand the reasons that some people hurt themselves whilst in prison, with a view to establishing what support or other services may help prevent attempted suicide and self-harm.

I am interviewing some prisoners as soon as possible after they have harmed themselves – whether they have attempted suicide or harmed themselves for another reason. All participants are being asked questions about their life in prison, about any problems they may have had and about the reasons that they have harmed themselves. Also, participants are being asked to complete three separate questionnaires about the reasons for harming themselves. In addition to this, I am going to collect information from prison records.

It is important to point out that I am simply collecting information, so if you have any particular problems now, I will not be able to help or offer any therapy. For this you must go through the normal channels – for example, speaking to your personal officer or making an application to see the governor.

All answers that you give will be treated in the strictest of confidence – unless what you say has implications for security or if you tell me that you are planning to harm yourself or someone else. In either case, I will have to pass this information on to a member of staff. All of your answers will be coded in such a way that you will not be able to be identified. The data is used solely for research. The information you give me will not be released to any other person without first obtaining your written permission.

The results of the study will be given to Prison Service Headquarters and some or part of the results may be published, where they will be freely available for anyone to read. If you agree to participate, I can provide you with a summary of the results when the study is finished. If you would like me to do this, could you please give me an address where you would like it sent.

CONSENT FORM

I_____(Name) at _____(Prison) have been asked to take part in the research being conducted by Louisa Snow (from the Department of Psychology at the University of Kent). I have been given the information leaflet describing the study and understand that the main purpose of the research is to help understand the reasons that some prisoners harm themselves whilst in prison.

I agree to take part in the research and to be interviewed about my life before prison, my experiences in prison and the reasons that I have harmed myself. I also agree to complete (or answer questions from) three questionnaires. Finally, I agree that the research can obtain additional information from my prison records. I understand that my participation in the study is purely voluntary and that I am free to refuse to answer specific questions or that I may withdraw from the study at any time. I also understand that my participation will not, in any way, affect my position in prison: it will not count for or against me in any way.

I understand that any information (with the following exceptions) will remain strictly confidential: unless what I disclose is likely to have security implications or if I disclose that I am planning to harm either myself or somebody else.

I understand that the information I give will be used for research purposes only and that the answers I give will be coded in such a way that I cannot be identified in any reports arising from the research.

My signature below indicates that I have read this (the consent form) and the information form and that I agree to participate. I give my consent to the researcher having access to my prison and medical files. The interviewer will also sign the form to guarantee the conditions stated above.

_____

Participant's signature Date

_____

Louisa Snow Date

Please give an address of where you would like a summary report of the research to be sent when it is completed:

_____

_____

_____

APPENDIX C: INTERVIEW SCHEDULE

PART 1: DEMOGRAPHIC/PERSONAL INFORMATION

1. Name_____ 2. Prison Number_____
3. Date of Birth/Age_____ 4. Gender Male/Female
5. Religion_____ 6. Country of Birth/Ethnicity _____
7. Marital Status_____ 8. No. of Children _____
9. Age left full time education_____ 10. Qualifications: None/GCSE/A Level +
11. Before you were in prison, who did you live with?_____

PART 2: PSYCHOLOGICAL AND PHYSICAL HEALTH & WELL-BEING

12. How would you rate your health generally? Very Good/Good/Fair/Poor /Very Poor

13a. Do you have any long-standing physical illness or health problems? Yes/No
13b. Specify_____

14a. Outside of prison, have you been treated for psychiatric or emotional problems? Yes/No
14b. Diagnosis_____

15. Have you ever been an in-patient in a psychiatric hospital/secure unit? Yes/No

16a. Have you received psychiatric help or support since being in prison? Yes/No
16b. Specify_____

17a. Are you on any medication? Yes/No
17b. Specify (type and reason)_____

18. How many cigarettes do you smoke a day? None/1-5/6-9/10-19/20+

19a. How much alcohol did you drink before you were in prison (units per week)?_____
19b. Would you describe yourself as a social drinker? Yes/No
19c. Would you say you were a heavy drinker or an alcoholic? Yes/No
19d. Have you received any detoxification/rehabilitation for alcohol dependency? Yes/No

20a. Have you ever taken drugs? Yes/No
20b. Specify (type and frequency)_____
20c. Would you say you were dependent on drugs? Yes/No
20d. Have you received any detoxification rehabilitation for drug dependency? Yes/No

PART 3: KEY LIFETIME EVENTS

21. Have you ever experienced any of the following:
a. Been expelled from school _____ Yes/No
b. Been sacked or made redundant from your job_____ Yes/No
c. Run away from home _____ Yes/No
d. Been homeless _____ Yes/No
e. Had serious money worries_____ Yes/No
f. Been bullied _____ Yes/No
g. Suffered violence at work _____ Yes/No
h. Suffered violence at home _____ Yes/No
k. Experienced the death of: spouse, partner or child _____ Yes/No
l. parent/sibling _____ Yes/No
m. close friend _____ Yes/No

PART 4A: OFFENCE/SENTENCE RELATED INFORMATION

22. Are you: Sentenced/Remand/Convicted Unsentenced/JR

23a. What is your main (or alleged main) offence?_____
23b. Other charges_____

24. How long have you been in prison (current term)? _____

25a. Is this the only prison you have been in (current term)? Yes/No
25b. Number of other establishments (current term) _____
25c. Length of time at current establishment _____
25d. Why were you moved to this establishment?_____
25e. Do you prefer this or previous establishment? Current/No Preference/Previous
25f. Why?_____

PART 4B: SENTENCED PRISONERS

26a. How long is your sentence? _____
26b. When were you sentenced? _____
26c. How does this compare with what you expected? Shorter/As Expected /Longer
26d. When do you expect to be released? _____
26e. What plans, if any, have you made for your release?_____
_____

PART 4C: CONVICTED/UNSENTENCED PRISONERS

27a. When were you convicted? _____
27b. When is your next court appearance? _____
27c. Were you sent here awaiting reports? Yes/No
27d. Specify _____

PART 4D: REMAND PRISONERS

28a. How long have you been on remand? _____
28b. When is your next court appearance? _____
28c. Do you think you will be convicted/sentenced? Yes/No/Don't Know
28d. How long do you expect to get? _____

PART 5: PREVIOUS IMPRISONMENT/CONVICTIONS

29a. Is this your first time in prison? Yes/No
29b. How old were you when you were first in prison? _____
29c. When were you last released? _____
29d. How long was your last sentence? _____
29e. For what offence/s?_____

30a. Do you have any other convictions? Yes/No
30b. Specify_____

PART 6: LIFE IN PRISON – WORK, EDUCATION & PROGRAMMES

31a. What wing are you on? Name_____
31b. Type: Normal/HCC/Segregation/VPU
31c. What regime are you on? Enhanced/Standard/Basic

32a. Do you have a job? Yes/No
32b. What do you do? _____
32c. Would you say you enjoy your job? Always/Most of the Time/Sometimes/Rarely/Never
32d. What do you like/dislike about it?_____
_____

33. Why don't you work?_____

34a. Given the choice, would you work or not? Yes/No Preference/No
34b. Why?_____

35a. Do you go to education? Yes/No
35b. What do you do?_____
35c. Would you say you enjoy it? Never/Rarely/Sometimes/Most of the Time/Always
35d. What do you like/dislike about it?_____
_____

36. Why don't you go to education?_____

37a. Given the choice, would you go to education or not? Yes/No Preference/No
37b. Why?_____

38a. Are you on any programmes (e.g., SOTP, ETS, AM)? Yes/No
38b. Specify_____
38c. Generally, do you find them/it useful? Very Useful/Quite Useful/Not at All Useful
38d. In what ways is it/are they useful or not? _____
_____

39a. How many times have you been in a strip/protective cell in the last three months?
Never/Once/Two or More Times
39b. When were you last in a strip cell? _____
39c. Why were you there?_____

40a. How many times have you been in the Segregation Unit in the last three months?
Never/Once/Two or More Times
40b. When were you last there? _____
40c. Why were you there? _____

41a. How many times have you been on governors report within the last three months?
Never/Once/Two or More Times
41b. When was the last time? _____
41c. For what reason? _____

PART 7: LIFE IN PRISON – INTERPERSONAL RELATIONSHIPS

42a. What type of cell are you in? Single/Shared/Dormitory or Ward
42b. Would you say you get on with your cell-mates: Always/Sometimes/Never
42c. In what ways don't you get on?_____

43a. Would you prefer to be in a single or shared cell? Single/No Preference/Shared
43b. Why?_____

44a. Would you say you get on with other prisoners: Always/Sometimes/Never
44b. What problems have you had?_____
_____

45a. Do you feel threatened by other prisoners: Always/Sometimes/Never
45b. Can you give me an example?_____

46a. Generally, do you get on with officers: Always/Sometimes/Never
46b. What problems have you had?_____
_____

47a. Do you feel threatened by officers: Always/Sometimes/Never
47b. Can you give me an example?_____

48a. How many friends do you have here that you could talk to? None/One or Two/Lots
48b. How many associates do you have? None/One or Two/Lots
48c. How many people would you say you feel close to (in/outside)? 0/1-3/4-8/9+
48d. Would you say that you lack social support? Severely/Moderately/Not at All
48e. If you have a problem who, in prison, would you talk to?_____

49. How many hours did you spend in your cell yesterday? 0-14/15-18/19-22/23-24

50a. What do you do when you are in your cell?_____
50b. What else do you do to keep occupied?_____

51a If there is association do you go? Never/Rarely/Sometimes/Most of the Time/Always
51b. Why don't you go?_____

I am now going to give you a list of feelings or moods that you might have experienced since being in prison. As I give you each feeling, could you tell me how often you have felt like this since being in prison. I'd like to know how often you have these feelings *generally* and not just recently. Would you say that you have felt [bored, angry, etc] never, rarely, sometimes, most of the time or always?

52. How often do you feel bored? Always/Most of the Time/Sometimes/Rarely/Never
53. How often do you feel angry? Never/Rarely/Sometimes/Most of the Time/Always
54. Do you feel that your life is stressful? Always/Most of the Time/Sometimes/Rarely/Never
55. How often do you feel anxious? Always/Most of the Time/Sometimes/Rarely/Never

56. How often do you feel depressed? Always/Most of the Time/Sometimes/Rarely/Never

57. How often do you feel lonely? Never/Rarely/Sometimes/Most of the Time/Always

58a. Generally, how does prison compare to life outside?
A Lot Easier/A Bit Easier/Neither/A Bit More Difficult/A Lot More Difficult

58b. In what way?_____

59. What are the worst things about being in prison?_____
_____

60a. Is there anything positive about being in prison? Yes/No

60b. What?_____

PART 8: EXTERNAL CONTACT

61. Are you in contact with: Family/Partner/Friends/Solicitor/Nobody/Other

62a. How often do you have visits?
Every Day/Every Week/Every Month/Every Few Months/Never

62b. Who from?_____

63a. How often do you receive letters?
Every Day/Every Week/Every Month/Every Few Months/Never

63b. Who from?_____

64a. How often do you write letters?
Every Day/Every Week/Every Month/Every Few Months/Never

64b. Who to?_____

65a. How often do make you telephone calls?
Every Day/Every Week/Every Month/Every Few Months/Never

65b. Who to?_____

66a. Would you say that keeping in touch with people outside makes your time:
Easier/More Difficult/Neither

66b. In what way?_____

67a. Would you say that not keeping in touch with people outside makes your time:
Easier/More Difficult/Neither

67b. In what way?_____

PART 9: INCIDENT OF SELF-INJURY/SUICIDE ATTEMPT

As we discussed at the beginning of the interview, I am aware that you hurt yourself recently. I'm now going to ask you to describe, *in your own words*, exactly what happened and why you think it happened.

68. _____

69. When was this? _____

70a. What did you do? _____
70b. Why did you choose this method? _____

71. Where were you? _____

72a. Were you alone when it happened? Yes/No
72b. Who was with you? _____
72c. Were they involved? Yes/No
72d. In what way? _____
72e. Did they do anything to try and stop you? Yes/No
72f. What? _____

73a. Did you tell anyone what you were going to do? Yes/No
73b. Who? _____
73c. What was their reaction? _____

74. Why didn't you tell anyone? _____

75. Did you realise that you were putting your life at risk? Yes/No

76a. Did you want to die? **If no, go to Question 77** Yes/No/Indifferent

76b. What was the final straw for you/what was it that made you want to end your life?

76c. Can you explain your feelings beforehand? _____

76d. How did you feel after you were found? _____

76e. At the moment how do you feel about being alive?_____

_____

_____

76f. Can you explain why?_____

_____

_____

_____

76g. If there is anything that could have stopped you from hurting yourself, what would it be?

_____

_____

_____

77a. If you didn't want to die, can you explain why you hurt yourself?_____

_____

_____

_____

_____

_____

77b. Can you explain your feelings beforehand?_____

_____

_____

_____

77c. Is this what you usually do if you have those feelings? Always/Usually/Sometimes/Never

77d. How did you feel after it happened?_____

_____

_____

_____

77e. If there is anything that could have stopped you from hurting yourself, what would it be?

_____

_____

_____

78a. Do you think you are likely to hurt yourself again in the near future? Yes/No/Don't Know

78b. Have you planned what you will do? Yes/No

PART 10: PREVIOUS EPISODES

79. How many times have you hurt yourself on purpose before? Never/Once/Two or More Times
If never, go to Question 81.

80a. How old were you when you first hurt yourself? _____

80b. How long ago was this? _____

80c. What did you do?_____

80d. Where were you?_____

80e. Why do you think you hurt yourself then?_____

_____

_____

_____

80f. Were you trying to kill yourself? Yes/No

80g. Can you explain why?_____

_____

_____

_____

80h. If not, why did you hurt yourself?_____

_____

_____

81. If you have never hurt yourself before, can you explain why you think you did recently?

_____

_____

_____

_____

82. How many times have you thought about killing yourself? Never/Once/Two or More Times

83a. How many times have you attempted suicide? Never/Once/Two or More Times

83b. When was the last time (before the recent injury)?_____

Part 11:

Reiterate reasons for incident (as stated above) in relation to the following. You told me that you hurt yourself because .....

84a. Do you think problems that led to this were caused or made worse by being in prison? Yes/No/Don't Know

84b. In what way?_____

_____

_____

_____

85a. Did you speak to anyone about what was worrying you? Yes/No

85b. Who?_____

85c. How did you feel after speaking to them?
A Lot Better/A Bit Better/No Different/A Bit Worse/Much Worse

85d. Why do you think this is?_____

86. Why do you think you didn't speak to anyone?_____

87a. Looking back, do you think there is anything you could have done to help the situation? Yes/No/Don't Know

87b. What?_____

88a. Could anyone else have been done anything? Yes/No/Don't Know

88b. Who?_____

88c. What?_____

89a. Do you think there is anything that can be done to help now? Yes/No/Don't Know

89b. What?_____

90a. Can you see any solution to the problem/s? Yes/No/Don't Know

90b. What?_____

91. What is the single most important thing that would improve the quality of your life?_____

_____

_____

_____

92. What do you think would help to prevent you stopping you from harming yourself in the future?_____

_____

_____

_____

93. Is there anything important about why you hurt yourself that we haven't covered?_____

_____

_____

94. Is there anything else you would like to say?_____

_____

_____

APPENDIX D

DESCRIPTIVE STATISTICS

Variable	Comparison Group	Statistical Test	Result
Chapter 6			
Age	Attempted Suicide/Self-Injury	t-test	t (120) = -1.187, p=0.238
Age	Male: Attempted Suicide/Self-Injury	t-test	t (82) = 0.20, p=0.977
Age	Female: Attempted Suicide/Self-Injury	t-test	t (36) = -0.998, p=0.325
Age	Adult Men: Attempted Suicide/Self-Injury	t-test	t (33) = -0.520, p=0.606
Age	Adult Women: Attempted Suicide/Self-Injury	t-test	t (25) = -0.235, p=0.816
Age	YO Men: Attempted Suicide/Self-Injury	t-test	t (47) = 0.300, p=0.766
Age	YO Women: Attempted Suicide/Self-Injury	t-test	t (9) = -2.954, p=0.016
Ethnicity	Ethnic Group: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (2, N = 124) = 2.690, p = 0.261
Marital Status	Single Attempted Suicide/self-Injury	Pearson χ^2	χ^2 (1, N = 124) = 0.046, p = 0.831
Marital Status	Married/Cohabiting Attempted Suicide/self-Injury	Pearson χ^2	χ^2 (1, N = 124) = 2.452, p = 0.484
Marital Status	Divorced/Separated Attempted Suicide/self-Injury	Pearson χ^2	χ^2 (1, N = 124) = 2.350, p = 0.125
Marital Status	Widowed Attempted Suicide/self-Injury	Pearson χ^2	χ^2 (1, N = 124) = 0.008, p = 0.927
Marital Status	Single Men/Women	Pearson χ^2	χ^2 (1, N = 124) = 12.112, p = 0.001
Marital Status	Married/Cohabiting Men/Women	Pearson χ^2	χ^2 (1, N = 124) =0.448, p = 0.503
Marital Status	Divorced/Separated Men/Women	Pearson χ^2	χ^2 (1, N = 124) = 9.660, p = 0.004
Marital Status	Widowed Men/Women	Pearson χ^2	χ^2 (1, N = 124) = 4.430, p = 0.035
Marital Status	Single Adults/Young Offenders	Pearson χ^2	χ^2 (1, N = 124) = 15.468, p = 0.000
Marital Status	Married/Cohabiting Adults/Young Offenders	Pearson χ^2	χ^2 (1, N = 124) = 6.955, p = 0.013
Marital Status	Divorced/Separated Adults/Young Offenders	Pearson χ^2	χ^2 (1, N = 124) = 5.399, p = 0.033
Marital Status	Widowed Adults/Young Offenders	Pearson χ^2	χ^2 (1, N = 124) =1.906, p = 0.167
Domestic Situation	No Fixed Abode Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N = 114) = 1.303, p = 0.254
Domestic Situation	Hostel Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N = 114) = 0.391, p = 0.532
Domestic Situation	Parents Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N = 114) =0.959, p = 0.327
Domestic Situation	Partner Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N = 114) = 0.132, p = 0.716
Domestic Situation	Shared Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N = 114) = 2.995, p = 0.084
Domestic Situation	Alone Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N = 114) = 0.008, p = 0.930
Domestic	No Fixed Abode	Pearson χ^2	χ^2 (1, N = 114) = 0.019, p = 0.890

Variable	Comparison Group	Statistical Test	Result
Situation	Men/Women		
Domestic Situation	Hostel Men/Women	Pearson χ^2	χ^2 (1, N = 114) = 0.085, p = 0.771
Domestic Situation	Parents Men/Women	Pearson χ^2	χ^2 (1, N = 114) = 2.514, p = 0.113
Domestic Situation	Partner Men/Women	Pearson χ^2	χ^2 (1, N = 114) = 0.001, p = 0.978
Domestic Situation	Shared Men/Women	Pearson χ^2	χ^2 (1, N = 114) = 0.218, p = 0.640
Domestic Situation	Alone Men/Women	Pearson χ^2	χ^2 (1, N = 114) = 5.978, p = 0.020
Domestic Situation	No Fixed Abode Adult/Young Offender	Pearson χ^2	χ^2 (1, N = 114) = 0.026, p = 0.873
Domestic Situation	Hostel Adult/Young Offender	Pearson χ^2	χ^2 (1, N = 114) = 1.155, p = 0.283
Domestic Situation	Parents Adult/Young Offender	Pearson χ^2	χ^2 (1, N = 114) = 3.488, p = 0.062
Domestic Situation	Partner Adult/Young Offender	Pearson χ^2	χ^2 (1, N = 114) = 6.295, p = 0.012
Domestic Situation	Shared Adult/Young Offender	Pearson χ^2	χ^2 (1, N = 124) = 0.700, p = 0.403
Domestic Situation	Alone Adult/Young Offender	Pearson χ^2	χ^2 (1, N = 124) = 0.470, p = 0.493
Qualifications	None: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N = 115) = 0.004, p = 0.947
Qualifications	GCSE/O'Level: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N = 115) = 0.935, p = 0.334
Qualifications	A Level or Higher: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N = 115) = 0.013, p = 0.911
Qualifications	None: Men/Women	Pearson χ^2	χ^2 (1, N = 115) = 1.894, p = 0.169
Qualifications	GCSE/O'Level: Men/Women	Pearson χ^2	χ^2 (1, N = 115) = 0.596, p = 0.440
Qualifications	A Level or Higher: Men/Women	Pearson χ^2	χ^2 (1, N = 115) = 4.124., p = 0.107
Qualifications	None: Adult/Young Offender	Pearson χ^2	χ^2 (1, N = 115) = 0.101, p = 0.750
Qualifications	GCSE/O'Level: Adult/Young Offender	Pearson χ^2	χ^2 (1, N = 115) = 0.287, p = 0.592
Qualifications	A Level or Higher: Adult/Young Offender	Pearson χ^2	χ^2 (1, N = 115) = 1.802, p = 0.179
Legal Status	Sentenced/Unsentenced Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N = 124) = 0.991, p = 0.320
Legal Status	Sentenced/Unsentenced Men/Women	Pearson χ^2	χ^2 (1, N = 124) = 7.421, p = 0.006
Legal Status	Sentenced/Unsentenced Adult/Young Offender	Pearson χ^2	χ^2 (1, N = 124) = 12.799, p = 0.001
Offence Type	Violence: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N = 123) = 0.014, p = 0.905
Offence Type	Sexual: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N = 123) = 0.036, p = 0.849
Offence Type	Burglary: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N = 123) = 1.204, p = 0.272
Offence Type	Robbery: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N = 123) = 0.769, p = 0.381
Offence Type	Theft: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N = 123) = 2.046, p = 0.153
Offence Type	Fraud: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N = 123) =1.756, p = 0.185

Variable	Comparison Group	Statistical Test	Result
Offence Type	Drugs: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N = 123) = 1.366, p = 0.243
Offence Type	Other: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N = 123) =0.262, p = 0.609
Offence Type	Violence: Men/Women	Pearson χ^2	χ^2 (1, N = 123) = 0.055, p = 0.814
Offence Type	Sexual: Men/Women	Pearson χ^2	χ^2 (1, N = 123) =3.446, p = 0.096
Offence Type	Burglary: Men/Women	Pearson χ^2	χ^2 (1, N = 123) = 2.779, p = 0.096
Offence Type	Robbery: Men/Women	Pearson χ^2	χ^2 (1, N = 123) = 0.016, p = 0.899
Offence Type	Theft: Men/Women	Pearson χ^2	χ^2 (1, N = 123) = 0.117, p = 0.732
Offence Type	Fraud: Men/Women	Pearson χ^2	χ^2 (1, N = 123) = .0944, p = 0.331
Offence Type	Drugs: Men/Women	Pearson χ^2	χ^2 (1, N = 123) =0.639, p = 0.424
Offence Type	Other: Men/Women	Pearson χ^2	χ^2 (1, N = 123) = 4.608, p = 0.032
Offence Type	Violence: Adult/Young Offender	Pearson χ^2	χ^2 (1, N = 123) =0.114, p = 0.736
Offence Type	Sexual: Adult/Young Offender	Pearson χ^2	χ^2 (1, N = 123) =0.250, p = 0.617
Offence Type	Burglary: Adult/Young Offender	Pearson χ^2	χ^2 (1, N = 123) =6.956, p = 0.008
Offence Type	Robbery: Adult/Young Offender	Pearson χ^2	χ^2 (1, N = 123) = 0.212, p = 0.649
Offence Type	Theft: Adult/Young Offender	Pearson χ^2	χ^2 (1, N = 123) = 0.026, p = 0.872
Offence Type	Fraud: Adult/Young Offender	Pearson χ^2	χ^2 (1, N = 123) = 1.874, p = 0.171
Offence Type	Drugs: Adult/Young Offender	Pearson χ^2	χ^2 (1, N = 123) = 0.007, p = 0.934
Offence Type	Other: Adult/Young Offender	Pearson χ^2	χ^2 (1, N = 123) = 0.366, p = 0.040
Sentence Length	<12 months Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N = 124) = 0.366, , p = 0.545
Sentence Length	>12 months < 3 years Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N = 124) = 2.403, p = 0.121
Sentence Length	> 3 years Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N = 124) = 0.019, p = 0.891
Sentence Length	Life Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N = 124) = 0.458, p = 0.499
Sentence Length	<12 months Men/Women	Pearson χ^2	χ^2 (1, N = 124) = 0.177, p = 0.674
Sentence Length	>12 months < 3 years Men/Women	Pearson χ^2	χ^2 (1, N = 124) = 0.299, p = 0.584
Sentence Length	> 3 years Men/Women	Pearson χ^2	χ^2 (1, N = 124) = 1.110, p = 0.292
Sentence Length	Life Men/Women	Pearson χ^2	χ^2 (1, N = 124) = 7.872, p = 0.012
Sentence Length	<12 months Adult/Young Offender	Pearson χ^2	χ^2 (1, N = 124) = 2.085, p = 0.149
Sentence Length	>12 months < 3 years Adult/Young Offender	Pearson χ^2	χ^2 (1, N = 124) = 1.548, p = 0.213
Sentence Length	> 3 years Adult/Young Offender	Pearson χ^2	χ^2 (1, N = 124) = 2.940, p = 0.086
Sentence	Life	Pearson χ^2	χ^2 (1, N = 124) = 5.911, p = 0.028

Variable	Comparison Group	Statistical Test	Result
Length	Adult/Young Offender		
Previous Imprisonment	Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =124) = 1.571, p = 0.210
Age at First Custody	Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (6, N =114) = 3.250, p = 0.777
Previous Convictions	Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (4, N =118) = 1.686, p = 0.194
First time in Prison?	Men/Women	Pearson χ^2	χ^2 (1, N =124) = 1.571, p = 0.210
First time in Prison?	Adult/Young Offender	Pearson χ^2	χ^2 (1, N =124) = 0.083, p = 0.773
Length of time in prison	Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =124) = 1.631, p = 0.202
Length of time in prison	Men/Women	Pearson χ^2	χ^2 (1, N =124) = 5.624, p = 0.018
Length of time in prison	Adult/Young Offender	Pearson χ^2	χ^2 (1, N =124) = 5.623, p = 0.018
Psychiatric Illness	Yes or No: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =123) = 0.118, p = 0.731
Anxiety	Yes or No: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =123) = 0.900, p = 0.343
Depression	Yes or No: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =123) = 2.737, p = 0.098
Psychosis	Yes or No: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =123) = 1.542, p = 0.214
Personality Disorder	Yes or No: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =123) = 0.035, p = 0.851
Multiple	Yes or No: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =123) = 1.295, p = 0.255
Other	Yes or No: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =123) = 0.021, p = 0.885
Psychiatric illness	Yes or No: Men/Women	Pearson χ^2	χ^2 (1, N =123) = 2.885, p = 0.089
Anxiety	Yes or No: Men/Women	Pearson χ^2	χ^2 (1, N =123) = 0.451, p = 0.502
Depression	Yes or No: Men/Women	Pearson χ^2	χ^2 (1, N =123) = 0.884, p = 0.347
Psychosis	Yes or No: Men/Women	Pearson χ^2	χ^2 (1, N =123) = 0.290, p = 0.590
Personality Disorder	Yes or No: Men/Women	Pearson χ^2	χ^2 (1, N =123) = 0.423, p = 0.516
Multiple	Yes or No: Men/Women	Pearson χ^2	χ^2 (1, N =123) = 0.880, p = 0.348
Other	Yes or No: Men/Women	Pearson χ^2	χ^2 (1, N =123) = 0.042, p = 0.838
Psychiatric Illness	Yes or No: Adult/Young Offender	Pearson χ^2	χ^2 (1, N =123) = 0.333, p = 0.564
Anxiety	Yes or No: Adult/Young Offender	Pearson χ^2	χ^2 (1, N =123) = 1.059, p = 0.304
Depression	Yes or No: Adult/Young Offender	Pearson χ^2	χ^2 (1, N =123) = 2.648, p = 0.104
Psychosis	Yes or No: Adult/Young Offender	Pearson χ^2	χ^2 (1, N =123) = 0.263, p = 0.608
Personality Disorder	Yes or No: Adult/Young Offender	Pearson χ^2	χ^2 (1, N =123) = 0.336, p = 0.562
Multiple	Yes or No: Adult/Young Offender	Pearson χ^2	χ^2 (1, N =123) = 0.132, p = 0.717
Other	Yes or No: Adult/Young Offender	Pearson χ^2	χ^2 (1, N =123) = 0.346, p = 0.556

Variable	Comparison Group	Statistical Test	Result
Ever Resident in Hospital?	Yes or No: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =123) = 2.414, p = 0.120
Ever Resident in Hospital?	Yes or No: Men/Women	Pearson χ^2	χ^2 (1, N =123) = 2.419, p = 0.120
Ever Resident in Hospital?	Yes or No: Adult/Young Offender	Pearson χ^2	χ^2 (1, N =123) = 2.380, p = 0.123
Support in Prison?	Yes or No: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =123) = 0.092, p = 0.762
Support in Prison?	Yes or No: Men/Women	Pearson χ^2	χ^2 (1, N =123) =1.772, p = 0.183
Support in Prison?	Yes or No: Adult/Young Offender	Pearson χ^2	χ^2 (1, N =123) = 0.787, p = 0.375
Psychotropic Medication?	Yes or No: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =120) = 0.143, p = 0.705
Psychotropic Medication?	Yes or No: Men/Women	Pearson χ^2	χ^2 (1, N =120) = 11.184, p = 0.001
Psychotropic Medication?	Yes or No: Adult/Young Offender	Pearson χ^2	χ^2 (1, N =120) = 1.874, p = 0.171
Alcohol Consumption	None: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =118) = 0.749, p = 0.387
Alcohol Consumption	Social: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =118) = 1.151, p = 0.283
Alcohol Consumption	Heavy/Alcoholic: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =118) = 0.068, p = 0.795
Alcohol Consumption	None: Men/Women	Pearson χ^2	χ^2 (1, N =118) = 6.245, p = 0.012
Alcohol Consumption	Social: Men/Women	Pearson χ^2	χ^2 (1, N =118) = 1.725, p = 0.189
Alcohol Consumption	Heavy/Alcoholic: Men/Women	Pearson χ^2	χ^2 (1, N =118) = 1.048, p = 0.306
Alcohol Consumption	None: Adult/Young Offender	Pearson χ^2	χ^2 (1, N =118) = 7.485, p = 0.006
Alcohol Consumption	Social: Adult/Young Offender	Pearson χ^2	χ^2 (1, N =118) = 1.395, p = 0.238
Alcohol Consumption	Heavy/Alcoholic: Adult/Young Offender	Pearson χ^2	χ^2 (1, N =118) = 1.895, p = 0.169
Drug Usage	None Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =122) = 0.095, p = 0.758
Drug Usage	Opiates only: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =122) = 0.417, p = 0.518
Drug Usage	Stimulants only: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =122) = 1.409, p = 0.235
Drug Usage	Cannabis only: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =122) = 0.849, p = 0.358
Drug Usage	Multiple inc. Opiates Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =122) = 0.853, p = 0.356
Drug Usage	Multiple exc. Opiates Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =122) = 0.034, p = 0.853
Drug Usage	None Men/Women	Pearson χ^2	χ^2 (1, N =122) = 3.209, p = 0.073
Drug Usage	Opiates only: Men/Women	Pearson χ^2	χ^2 (1, N =122) = 0.302, p = 0.583
Drug Usage	Stimulants only: Men/Women	Pearson χ^2	χ^2 (1, N =122) = 0.191, p = 0.662
Drug Usage	Cannabis only: Men/Women	Pearson χ^2	χ^2 (1, N =122) = 0.235, p = 0.628
Drug Usage	Multiple inc. Opiates Men/Women	Pearson χ^2	χ^2 (1, N =122) = 1.677, p = 0.195
Drug Usage	Multiple exc. Opiates Men/Women	Pearson χ^2	χ^2 (1, N =122) = 0.000, p = 0.992

Variable	Comparison Group	Statistical Test	Result
Drug Usage	None Adult/Young Offender	Pearson χ^2	χ^2 (1, N =122) = 1.070, p = 0.301
Drug Usage	Opiates only: Adult/Young Offender	Pearson χ^2	χ^2 (1, N =122) = 0.146, p = 0.702
Drug Usage	Stimulants only: Adult/Young Offender	Pearson χ^2	χ^2 (1, N =122) = 0.146, p = 0.702
Drug Usage	Cannabis only: Adult/Young Offender	Pearson χ^2	χ^2 (1, N =122) = 0.530, p = 0.467
Drug Usage	Multiple inc. Opiates Adult/Young Offender	Pearson χ^2	χ^2 (1, N =122) = 0.127, p = 0.722
Drug Usage	Multiple exc. Opiates Adult/Young Offender	Pearson χ^2	χ^2 (1, N =122) = 1.474, p = 0.225
Dependent on Opiates Ever?	Yes/No Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =117) = 2.103, p = 0.147
Dependent on Opiates Ever?	Yes/No Men/Women	Pearson χ^2	χ^2 (1, N =117) = 0.407, p = 0.523
Dependent on Opiates Ever?	Yes/No Adult/Young Offender	Pearson χ^2	χ^2 (1, N =117) = 1.801, p = 0.180
At time of Imprisonment	Yes/No: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =117) = 1.393, p =0.238
At time of Imprisonment	Yes/No: Men/Women	Pearson χ^2	χ^2 (1, N =117) = 0.312, p = 0.577
At time of Imprisonment	Yes/No: Adult/Young Offender	Pearson χ^2	χ^2 (6, N =122) = 3.357, p = 0.067
Detoxification	Yes/No: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =118) = 0.007, p =0.936
Detoxification	Yes/No: Men/Women	Pearson χ^2	χ^2 (1, N =118) = 5.873, p =0.034
Detoxification	Yes/No: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =118) = 1.982, p =0.159
Health Problem	Yes/No Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =115) = 0.319, p =0.572
Health Problem	Yes/No Men/Women	Pearson χ^2	χ^2 (1, N =115) = 5.524, p =0.019
Health Problem	Yes/No Adult/Young Offender	Pearson χ^2	χ^2 (1, N =115) = 1.829, p =0.176
Heath Rating	Poor Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =115) = 0.115, p =0.735
Heath Rating	Fair Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =115) = 0.029, p =0.864
Heath Rating	Good Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =115) = 0.005, p =0.943
Heath Rating	Poor Men/Women	Pearson χ^2	χ^2 (1, N =115) = 4.524, p =0.033
Heath Rating	Fair Men/Women	Pearson χ^2	χ^2 (1, N =115) = 0.551, p =0.458
Heath Rating	Good Men/Women	Pearson χ^2	χ^2 (1, N =115) = 4.751, p =0.029
Heath Rating	Poor Adult/Young Offender	Pearson χ^2	χ^2 (1, N =115) = 1.841, p =0.175
Heath Rating	Fair Adult/Young Offender	Pearson χ^2	χ^2 (1, N =115) = 0.489, p =0.484
Heath Rating	Good Adult/Young Offender	Pearson χ^2	χ^2 (1, N =115) = 2.579, p =0.108
Method	Hanging/Strangulation Attempted Suicide/Self-injury	Pearson χ^2	χ^2 (1, N =124) = 27.397, p =0.000
Method	Cutting: wrist/throat/artery Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =124) = 0.699, p =0.403
Method	Cutting: other Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =124) = 35.162, p =0.000

Variable	Comparison Group	Statistical Test	Result
Method	Hanging/Strangulation Men/Women	Pearson χ^2	χ^2 (1, N =124) = 0.153, p =0.696
Method	Cutting: wrist/throat/artery Men/Women	Pearson χ^2	χ^2 (1, N =124) = 1.835, p =0.176
Method	Cutting: other Men/Women	Pearson χ^2	χ^2 (1, N =124) = 0.008, p =0.931
Method	Hanging/Strangulation Adult/Young Offender	Pearson χ^2	χ^2 (1, N =124) = 4.723, p =0.017
Method	Cutting: wrist/throat/artery Adult/Young Offender	Pearson χ^2	χ^2 (1, N =124) = 5.072, p =0.024
Method	Cutting: other Adult/Young Offender	Pearson χ^2	χ^2 (1, N =124) = 0.700, p =0.403
Knew life was at Risk	Yes/No Attempted Suicide/Self-injury	Pearson χ^2	χ^2 (1, N =119) = 93.449, p =0.000
Knew life was at Risk	Yes/No Men/Women	Pearson χ^2	χ^2 (1, N =119) = 2.157, p =0.340
Knew life was at Risk	Yes/No Adult/Young Offender	Pearson χ^2	χ^2 (1, N =119) = 2.073, p =0.355
Alone	Yes Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =121) = 1.657p =0.198
Alone	Yes Men/Women	Pearson χ^2	χ^2 (1, N =121) = 12.723, p =0.000
Alone	Yes Adult/Young Offender	Pearson χ^2	χ^2 (1, N =121) = 0.073, p =0.787
Age at first incident	Attempted Suicide/Self-Injury	Mann-Whitney U	z = -2.036, p = 0.042
Age at first incident	Men/Women	Mann-Whitney U	z = 1.231, p = 0.218
Age at first incident	Adults/Young Offenders	Mann-Whitney U	z = -2.0539, p = 0.011
No. previous incidents	Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (2, N =115) = 1.007, p =0.604
No. previous incidents	Men/Women	Pearson χ^2	χ^2 (2, N = 115) = 5.053, p =0.080
No. previous incidents	Adult/Young Offender	Pearson χ^2	χ^2 (2, N =115) = 0.114, p =0.945
Chapter 7			
Location	Normal: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =116) = 0.139, p = 0.710
Location	Segregation: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =116) = 0.879, p = 0.349
Location	VPU: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =116) = 0.503, p = 0.478
Location	Healthcare: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =116) = 0.767, p = 0.381
Location	Normal: Male/Female	Pearson χ^2	χ^2 (1, N =116) = 4.028, p = 0.045
Location	VPU: Male/Female	Pearson χ^2	χ^2 (1, N =116) = 2.055, p = 0.152
Location	Healthcare: Male/Female	Pearson χ^2	χ^2 (1, N =116) = 4.903, p = 0.027
Location	Normal: Adult/YO	Pearson χ^2	χ^2 (1, N =116) = 0.000, p = 1.000
Location	VPU: Adult/YO	Pearson χ^2	χ^2 (1, N =116) =0.000, p = 1.000
Location	Healthcare: Adult/YO	Pearson χ^2	χ^2 (1, N =116) = 0.690, p = 0.406
Special Cells	Times in strip cell: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (2, N =116) = 0.344, p = 0.842

Variable	Comparison Group	Statistical Test	Result
Special Cells	Times in strip cell: Male/Female	Pearson χ^2	χ^2 (2, N =116) = 2.349, p = 0.309
Special Cells	Times in strip cell: Adult/Young Offender	Pearson χ^2	χ^2 (2, N =116) = 1.367, p = 0.505
Discipline	Times in segregation: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =116) = 5.716, p = 0.017
Discipline	Times in segregation: Male/Female	Pearson χ^2	χ^2 (1, N =116) = 0.154, p = 0.695
Discipline	Times in segregation: Adult/Young Offender	Pearson χ^2	χ^2 (1, N =116) = 0.313, p = 0.576
Discipline	Times on report: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =116) = 3.476, p = 0.176
Discipline	Times on report: Male/Female	Pearson χ^2	χ^2 (1, N =116) = 0.923, p = 0.630
Discipline	Times on report: Adult/Young Offender	Pearson χ^2	χ^2 (1, N =116) = 0.806, p = 0.668
Regime	Regime Level: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (3, N =108) = 1.057, p = 0.787
Regime	Regime Level: Men/Women	Pearson χ^2	χ^2 (3, N =108) = 6.655, p = 0.084
Regime	Regime Level: Adult/Young Offender	Pearson χ^2	χ^2 (1, N =116) = 1.886, p = 0.596
Activities	Employed: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =116) = 3.742, p = 0.53
Activities	Employed: Male/Female	Pearson χ^2	χ^2 (1, N =116) = 5.370, p = 0.20
Activities	Employed: Adult/Young Offender	Pearson χ^2	χ^2 (1, N =116) = 0.287, p = 0.592
Activities	Education: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =116) = 0.230, p = 0.632
Activities	Education: Male/Female	Pearson χ^2	χ^2 (1, N =116) = 1.041, p = 0.308
Activities	Education: Adult/Young Offender	Pearson χ^2	χ^2 (1, N =116) = 12.510, p= 0.000
Activities	Psychological Programmes: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =117) = 4.633, p = 0.039
Activities	Psychological Programmes: Male/Female	Pearson χ^2	χ^2 (1, N =117) = 1.945, p = 0.163
Activities	Psychological Programmes: Adult/Young Offender	Pearson χ^2	χ^2 (1, N =117) = 0.191, p= 0.662
Preference of Cell-type	Wanted to Share: Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =122) = 2.202, p= 0.138
Preference of Cell-type	Wanted to Share: Men/Women	Pearson χ^2	χ^2 (1, N =122) = 0.190, p= 0.663
Preference of Cell-type	Wanted to Share: Adult/Young Offender	Pearson χ^2	χ^2 (1, N =122) = 1.640, p= 0.200
Relationship with prisoners	Good Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (4, N =123) = 0.823, p= 0.364
Relationship with prisoners	Good Men/Women	Pearson χ^2	χ^2 (4, N =123) =0.000, p= 0.988
Relationship with prisoners	Good Adult/Young Offender	Pearson χ^2	χ^2 (4, N =123) = 0.457, p= 0.499
Fear of prisoners	Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (4, N =115) = 2.899, p= 0.575
Fear of prisoners	Men/Women	Pearson χ^2	χ^2 (4, N =115) = 9.770, p= 0.044
Fear of prisoners	Adult/Young Offender	Pearson χ^2	χ^2 (4, N =115) = 3.076, p= 0.545
Relationship	Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (4, N =123) = 1.439, p= 0.215

Variable	Comparison Group	Statistical Test	Result
with staff			
Relationship with staff	Men/Women	Pearson χ^2	χ^2 (4, N =123) = 0.034, p= 0.855
Relationship with staff	Adult/Young Offender	Pearson χ^2	χ^2 (4, N =123) = 5.117, p= 0.024
Fear of staff	Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (2, N =115) = 1.182, p= 0.554
Fear of staff	Men/Women	Pearson χ^2	χ^2 (2, N =115) = 2.634, p= 0.268
Fear of staff	Adult/Young Offender	Pearson χ^2	χ^2 (2, N =115) = 1.182, p= 0.554
Chapter 8			
Life Events	Expelled Attempted Suicide/Self-injury	Pearson χ^2	χ^2 (1, N =110) = 0.093, p= 0.760
Life Events	Sacked Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =110) = 0.702, p= 0.402
Life Events	Run away Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =110) = 0.200, p= 0.655
Life Events	Homeless Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =110) = 0.101, p= 0.751
Life Events	Financial problems Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =110) = 2.383, p= 0.123
Life Events	Bullied Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =110) = 0.969, p= 0.325
Life Events	Violence at Work Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =110) = 0.015, p= 0.904
Life Events	Violence at home Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =110) = 3.654, p= 0.056
Life Events	Death of partner/child Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =110) =1.466, p= 0.226
Life Events	Death of a parent/sibling Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =110) = 0.000, p= 0.994
Life Events	Death of a close friend Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =110) = 1.255, p= 0.263
Life Events	Sexual Abuse Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =110) = 3.055, p= 0.081
Life Events	Expelled Men/Women	Pearson χ^2	χ^2 (1, N =110) = 1.695, p= 0.193
Life Events	Sacked Men/Women	Pearson χ^2	χ^2 (1, N =110) = 5.560, p= 0.018
Life Events	Run away Men/Women	Pearson χ^2	χ^2 (1, N =110) = 1.255, p= 0.263
Life Events	Homeless Men/Women	Pearson χ^2	χ^2 (1, N =110) = 0.112, p= 0.738
Life Events	Financial problems Men/Women	Pearson χ^2	χ^2 (1, N =110) = 0.004, p= 0.947
Life Events	Bullied Men/Women	Pearson χ^2	χ^2 (1, N =110) = 0.112, p= 0.738
Life Events	Violence at Work Men/Women	Pearson χ^2	χ^2 (1, N =110) = 0.000, p= 0.984
Life Events	Violence at home Men/Women	Pearson χ^2	χ^2 (1, N =110) = 0.823, p= 0.364
Life Events	Death of partner/child Men/Women	Pearson χ^2	χ^2 (1, N =110) =2.394, p= 0.122
Life Events	Death of a parent/sibling Men/Women	Pearson χ^2	χ^2 (1, N =110) = 0.537, p= 0.464
Life Events	Death of a close friend Men/Women	Pearson χ^2	χ^2 (1, N =110) = 0.161, p= 0.688
Life Events	Sexual Abuse Men/Women	Pearson χ^2	χ^2 (1, N =110) = 6.687, p= 0.010
Life Events	Expelled Adult/Young Offender	Pearson χ^2	χ^2 (1, N =110) = 1.544, p= 0.214

Life Events	Sacked Adult/Young Offender	Pearson χ^2	χ^2 (1, N =110) = 1.664, p= 0.197
Life Events	Run away Adult/Young Offender	Pearson χ^2	χ^2 (1, N =110) = 5.270, p= 0.022
Life Events	Homeless Adult/Young Offender	Pearson χ^2	χ^2 (1, N =110) = 1.089, p= 0.297
Life Events	Financial problems Adult/Young Offender	Pearson χ^2	χ^2 (1, N =110) = 0.041, p= 0.840
Life Events	Bullied Adult/Young Offender	Pearson χ^2	χ^2 (1, N =110) = 1.267, p= 0.260
Life Events	Violence at Work Adult/Young Offender	Pearson χ^2	χ^2 (1, N =110) = 2.468, p= 0.116
Life Events	Violence at home Adult/Young Offender	Pearson χ^2	χ^2 (1, N =110) = 0.160, p= 0.689
Life Events	Death of partner/child Adult/Young Offender	Pearson χ^2	χ^2 (1, N =110) = 0.584, p= 0.445
Life Events	Death of a parent/sibling Adult/Young Offender	Pearson χ^2	χ^2 (1, N =110) = 0.112, p= 0.738
Life Events	Death of a close friend Adult/Young Offender	Pearson χ^2	χ^2 (1, N =110) = 4.385, p= 0.036
Life Events	Sexual Abuse Adult/Young Offender	Pearson χ^2	χ^2 (1, N =110) = 4.362, p= 0.037
Life Events	Overall Experience Attempted Suicide	ANOVA	F (1, 108) = 0.093, p = 0.761
Life Events	Overall Experience Men/Women	ANOVA	F (1, 108) = 0.216, p = 0.643
Life Events	Overall Experience Adult/Young Offender	ANOVA	F (1, 108) = 6.797 , p = 0.010
Life Events	Rejection Events Attempted Suicide	ANOVA	F (1, 108) = 0.682, p = 0.411
Life Events	Rejection Events Men/Women	ANOVA	F (1, 108) = 4.896, p = 0.030
Life Events	Rejection Events Adult/Young Offender	ANOVA	F (1, 108) = 4.555, p = 0.047
Life Events	Negative Home Life Attempted Suicide	ANOVA	F (1, 108) = 1.263, p = 0.264
Life Events	Negative Home Life Men/Women	ANOVA	F (1, 108) = 0.870 , p = 0.353
Life Events	Negative Home Life Adult/Young Offender	ANOVA	F (1, 108) = 1.408, p = 0.238
Life Events	Personal Loss/Violence Attempted Suicide	ANOVA	F (1, 108) = 0.000, p = 0.989
Life Events	Personal Loss/Violence Men/Women	ANOVA	F (1, 108) = 5.362, p = 0.022
Life Events	Personal Loss/Violence Adult/Young Offender	ANOVA	F (1, 108) = 4.274 , p = 0.041
Life Events	Rejection Events: None Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =110) =0.350, p= 0.554
Life Events	Rejection Events: Expelled Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =110) = 0.736, p= 0.391
Life Events	Rejection Events: Sacked Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =110) = 0.823, p= 0.364
Life Events	Rejection Events: Both Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =110) =0.393, p= 0.530
Life Events	Rejection Events: None Men/Women	Pearson χ^2	χ^2 (1, N =110) = 3.357, p= 0.067
Life Events	Rejection Events: Expelled Men/Women	Pearson χ^2	χ^2 (1, N =110) = 0.125, p= 0.723
Life Events	Rejection Events: Sacked Men/Women	Pearson χ^2	χ^2 (1, N =110) = 2.753, p= 0.097
Life Events	Rejection Events: Both	Pearson χ^2	χ^2 (1, N =110) = 0.184, p= 0.668

	Men/Women		
Life Events	Rejection Events: None Adult/Young Offender	Pearson χ^2	χ^2 (1, N =110) = 2.753, p= 0.109
Life Events	Rejection Events: Expelled Adult/Young Offender	Pearson χ^2	χ^2 (1, N =110) = 0.093, p= 0.760
Life Events	Rejection Events: Sacked Adult/Young Offender	Pearson χ^2	χ^2 (1, N =110) = 2.280, p= 0.131
Life Events	Rejection Events: Both Adult/Young Offender	Pearson χ^2	χ^2 (1, N =110) = 0.860, p= 0.354
Life Events	Negative Home Life: Type 1 Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =110) = 0.349, p= 0.555
Life Events	Negative Home Life: Type 2 Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =110) = 8.386, p= 0.004
Life Events	Negative Home Life Type 3 Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =110) = 9.267, p= 0.002
Life Events	Negative Home Life: Type 1 Men/Women	Pearson χ^2	χ^2 (1, N =110) = 1.234, p= 0.263
Life Events	Negative Home Life: Type 2 Men/Women	Pearson χ^2	χ^2 (1, N =110) = 0.700, p= 0.403
Life Events	Negative Home Life Type 3 Men/Women	Pearson χ^2	χ^2 (1, N =110) = 0.002, p= 0.967
Life Events	Negative Home Life: Type 1 Adult/Young Offender	Pearson χ^2	χ^2 (1, N =110) = 0.292, p= 0.589
Life Events	Negative Home Life: Type 2 Adult/Young Offender	Pearson χ^2	χ^2 (1, N =110) = 0.028, p= 0.868
Life Events	Negative Home Life Type 3 Adult/Young Offender	Pearson χ^2	χ^2 (1, N =110) = 1.460, p= 0.227
Life Events	Personal Violence/Loss Death Child/Partner & Abuse Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =110) = 0.511, p= 0.475
Life Events	Personal Violence/Loss Death Parent/Sibling & Abuse Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =110) = 1.464, p= 0.226
Life Events	Personal Violence/Loss Death Friend & Abuse Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =110) = 0.022, p= 0.882
Life Events	Personal Violence/Loss Death Child/Partner & Abuse Men/Women	Pearson χ^2	χ^2 (1, N =110) = 6.085, p= 0.036
Life Events	Personal Violence/Loss Death Parent/Sibling & Abuse Adult/Young Offender	Pearson χ^2	χ^2 (1, N =110) = 5.044, p= 0.043
Life Events	Personal Violence/Loss Death Friend & Abuse Men/Women	Pearson χ^2	χ^2 (1, N =110) = 0.139, p= 0.710
Life Events	Personal Violence/Loss Death Child/Partner & Abuse Adult/Young Offender	Pearson χ^2	χ^2 (1, N =110) = 2.765, p= 0.096
Life Events	Personal Violence/Loss Death Parent/Sibling & Abuse Men/Women	Pearson χ^2	χ^2 (1, N =110) = 0.340, p= 0.650
Life Events	Personal Violence/Loss Death Friend & Abuse Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =110) = 4.630, p= 0.047
Chapter 9			
Mood	Anger Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =109) = 0.346, p= 0.556
Mood	Stressed Attempted Suicide/Self-injury	Pearson χ^2	χ^2 (1, N =109) = 0.411, p= 0.521
Mood	Anxious Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =107) = 1.446, p = 0.228
Mood	Depressed	Pearson χ^2	χ^2 (1, N =107) = 10.290, p= 0.001

	Attempted Suicide/Self-Injury		
Mood	Lonely Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =105) = 0.625, p= 0.429
Mood	Bored Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (1, N =116) = 0.834, p= 0.361
Mood	Anger Men/Women	Pearson χ^2	χ^2 (1, N =109) = 4.504, p= 0.034
Mood	Stressed Men/Women	Pearson χ^2	χ^2 (1, N =109) = 0.221, p= 0.638
Mood	Anxious Men/Women	Pearson χ^2	χ^2 (1, N =107) = 0.181, p= 0.671
Mood	Depressed Men/Women	Pearson χ^2	χ^2 (1, N =107) = 0.114, p= 0.735
Mood	Lonely Men/Women	Pearson χ^2	χ^2 (1, N =105) = 0.175, p= 0.676
Mood	Bored Men/Women	Pearson χ^2	χ^2 (1, N =116) = 1.200, p= 0.273
Mood	Anger Adult/Young Offender	Pearson χ^2	χ^2 (1, N =109) = 0.011, p= 0.916
Mood	Stressed Adult/Young Offender	Pearson χ^2	χ^2 (1, N =109) = 4.243, p= 0.039
Mood	Anxious Adult/Young Offender	Pearson χ^2	χ^2 (1, N =107) = 0.777, p= 0.378
Mood	Depressed Adult/Young Offender	Pearson χ^2	χ^2 (1, N =107) = 1.343, p= 0.247
Mood	Lonely Adult/Young Offender	Pearson χ^2	χ^2 (1, N =105) = 0.257, p= 0.612
Mood	Bored Adult/Young Offender	Pearson χ^2	χ^2 (1, N =116) = 1.326, p= 0.250
Preceding Emotion	Depression and Anger Attempted Suicide	Binomial Test	p = 0.150
Preceding Emotion	Depression and Anger Men	Binomial Test	p = 0.303
Preceding Emotion	Depression and Anger Adults	Binomial Test	p = 0.585
Preceding Emotion	Depression Attempted Suicide	Binomial Test	p = 0.002
Preceding Emotion	Depression Men	Binomial Test	p = 0.225
Preceding Emotion	Depression Adults	Binomial Test	p = 0.387
Preceding Emotion	Anger Self-Injury	Binomial Test	p = 0.034
Preceding Emotion	Anger Women	Binomial Test	p = 0.009
Preceding Emotion	Anger Adult	Binomial Test	p = 0.013
Feelings Afterwards	Better Self-Injury	Binomial Test	p = 0.001
Feelings Afterwards	No Better Attempted Suicide	Binomial Test	p = 0.001
Feelings Afterwards	Better Women	Binomial Test	p = 0.024
Feelings Afterwards	No Better Men	Binomial Test	p = 0.008
Feelings Afterwards	Better Young Offenders	Binomial Test	p = 0.683
Feelings Afterwards	No Better Adults	Binomial Test	p = 0.665

Motivator Behavioural Outcome	Alternative to Drugs	Pearson χ^2	χ^2 (1, N = 124) = 4.451, p= 0.033
	Anger (towards self)	Pearson χ^2	χ^2 (1, N = 124) = 0.366, p= 0.545
	Anger- others	Pearson χ^2	χ^2 (1, N = 124) = 11.204, p= 0.001
	Argument	Pearson χ^2	χ^2 (1, N = 124) = 1.500, p= 0.221
	Lonely	Pearson χ^2	χ^2 (1, N = 124) = 0.043, p= 0.835
	Being in prison (general)	Pearson χ^2	χ^2 (1, N = 124) = 1.272, p= 0.259
	Bored in cell	Pearson χ^2	χ^2 (1, N = 124) = 0.525, p= 0.469
	Bullying	Pearson χ^2	χ^2 (1, N = 124) = 0.315, p= 0.575
	Concern over children/family	Pearson χ^2	χ^2 (1, N = 124) = 0.001, p= 0.980
	Cleansing element	Pearson χ^2	χ^2 (1, N = 124) = 1.786, p= 0.181
	Concern over someone else	Pearson χ^2	χ^2 (1, N = 124) = 2.737, p= 0.098
	Counteract emotional pain	Pearson χ^2	χ^2 (1, N = 124) = 0.008, p= 0.927
	Depression (unspecified)	Pearson χ^2	χ^2 (1, N = 124) = 2.107, p= 0.147
	Drug withdrawal	Pearson χ^2	χ^2 (1, N = 124) = 2.942, p= 0.086
	Alternative to outward expression of emotion	Pearson χ^2	χ^2 (1, N = 124) = 8.668, p= 0.003
	Get back at somebody	Pearson χ^2	χ^2 (1, N = 124) = 0.458, p= 0.499
	Grief/bereavement	Pearson χ^2	χ^2 (1, N = 124) = 4.233, p= 0.040
	Guilt/shame	Pearson χ^2	χ^2 (1, N = 124) = 1.149, p= 0.284
	In response to hallucinations	Pearson χ^2	χ^2 (1, N = 124) = 3.276, p= 0.070
	Attract help	Pearson χ^2	χ^2 (1, N = 124) = 3.052, p= 0.081
	Influenced by someone else	Pearson χ^2	χ^2 (1, N = 124) = 3.052, p= 0.081
	Innocent	Pearson χ^2	χ^2 (1, N = 124) = 1.811, p= 0.178
	Lost everything/feels hopeless	Pearson χ^2	χ^2 (1, N = 124) = 8.353, p= 0.004
	Let down by someone	Pearson χ^2	χ^2 (1, N = 124) = 0.017, p= 0.895
	Medication (recently changed or wanted it to be changed)	Pearson χ^2	χ^2 (1, N = 124) = .0987, p= 0.320
	Homesickness	Pearson χ^2	χ^2 (1, N = 124) = 5.302, p= 0.021
	No recollection of incident	Pearson χ^2	χ^2 (1, N = 124) = 0.008, p= 0.927
	Other	Pearson χ^2	χ^2 (1, N = 124) = 0.886, p= 0.347
	To experience physical pain	Pearson χ^2	χ^2 (1, N = 124) = 9.559, p= 0.002
	Powerless – to regain a sense of power	Pearson χ^2	χ^2 (1, N = 124) = 1.786, p= 0.181
	Related to previous abuse	Pearson χ^2	χ^2 (1, N = 124) = 0.045, p= 0.831
	Refusal of bail	Pearson χ^2	χ^2 (1, N = 124) = 3.398, p= 0.061
	Relationship problems	Pearson χ^2	χ^2 (1, N = 124) = 3.853, p= 0.050
	Relieve anger, stress, etc.	Pearson χ^2	χ^2 (1, N = 124) = 38.900, p= 0.000
	Scared/afraid	Pearson χ^2	χ^2 (1, N = 124) = 0.366, p= 0.545
	To see blood (calming effect)	Pearson χ^2	χ^2 (1, N = 124) = 6.520, p= 0.014
	Self-punishment	Pearson χ^2	χ^2 (1, N = 124) = 0.787 p= 0.375
	Sentence related (forthcoming court appearance and expectation of lengthy sentence)	Pearson χ^2	χ^2 (1, N = 124) = 10.755 p= 0.001
	To achieve transfer	Pearson χ^2	χ^2 (1, N = 124) = 1.328 p= 0.249
	Unspecified	Pearson χ^2	χ^2 (1, N = 124) = 2.313 p= 0.128
	Following a (bad) visit	Pearson χ^2	χ^2 (1, N = 124) = 1.147 p= 0.284
	Concern about release from prison	Pearson χ^2	χ^2 (1, N = 124) = 0.489 p= 0.485
Motivator Gender	Alternative to Drugs	Pearson χ^2	χ^2 (1, N = 124) = 2.030, p= 0.154
	Anger (towards self)	Pearson χ^2	χ^2 (1, N = 124) = 1.970, p= 0.160
	Anger- others	Pearson χ^2	χ^2 (1, N = 124) = 6.629, p= 0.010
	Argument	Pearson χ^2	χ^2 (1, N = 124) = 0.177, p= 0.674
	Lonely	Pearson χ^2	χ^2 (1, N = 124) = 1.010, p= 0.315
	Being in prison (general)	Pearson χ^2	χ^2 (1, N = 124) = 0.472, p= 0.492
	Bored in cell	Pearson χ^2	χ^2 (1, N = 124) = 2.799, p= 0.094

	Bullying	Pearson χ^2	χ^2 (1, N = 124) = 1.038, p= 0.308
	Concern over children/family	Pearson χ^2	χ^2 (1, N = 124) = 6.846, p= 0.009
	Cleansing element	Pearson χ^2	χ^2 (1, N = 124) = 4.430, p= 0.097
	Concern over someone else	Pearson χ^2	χ^2 (1, N = 124) = 1.425, p= 0.233
	Counteract emotional pain	Pearson χ^2	χ^2 (1, N = 124) = 4.430, p= 0.097
	Depression (unspecified)	Pearson χ^2	χ^2 (1, N = 124) = 2.187, p= 0.139
	Drug withdrawal	Pearson χ^2	χ^2 (1, N = 124) = 0.003, p= 0.955
	Alternative to outward expression of emotion	Pearson χ^2	χ^2 (1, N = 124) = 26.767, p= 0.000
	Get back at somebody	Pearson χ^2	χ^2 (1, N = 124) = 0.010, p= 0.919
	Grief/bereavement	Pearson χ^2	χ^2 (1, N = 124) = 0.302, p= 0.582
	Guilt/shame	Pearson χ^2	χ^2 (1, N = 124) = 4.220, p= 0.040
	In response to hallucinations	Pearson χ^2	χ^2 (1, N = 124) = 1.739, p= 0.187
	Attract help	Pearson χ^2	χ^2 (1, N = 124) = 0.132, p= 0.717
	Influenced by someone else	Pearson χ^2	χ^2 (1, N = 124) = 0.324, p= 0.569
	Innocent	Pearson χ^2	χ^2 (1, N = 124) = 0.029, p= 0.866
	Lost everything/feels hopeless	Pearson χ^2	χ^2 (1, N = 124) = .0472, p= 0.492
	Let down by someone	Pearson χ^2	χ^2 (1, N = 124) = 0.080, p= 0.778
	Medication (recently changed or wanted it to be changed)	Pearson χ^2	χ^2 (1, N = 124) = 0.448, p= 0.503
	Homesickness	Pearson χ^2	χ^2 (1, N = 124) = 3.803, p= 0.051
	No recollection of incident	Pearson χ^2	χ^2 (1, N = 124) = 0.933, p= 0.334
	Other	Pearson χ^2	χ^2 (1, N = 124) = 2.197, p= 0.138
	To experience physical pain	Pearson χ^2	χ^2 (1, N = 124) = 7.947, p= 0.011
	Powerless – to regain a sense of power	Pearson χ^2	χ^2 (1, N = 124) = 0.324, p= 0.569
	Related to previous abuse	Pearson χ^2	χ^2 (1, N = 124) = 11.891, p= 0.001
	Refusal of bail	Pearson χ^2	χ^2 (1, N = 124) = 1.411, p= 0.235
	Relationship problems	Pearson χ^2	χ^2 (1, N = 124) = 4.326, p= 0.062
	Relieve anger, stress, etc.	Pearson χ^2	χ^2 (1, N = 124) = 2.829, p= 0.093
	Scared/afraid	Pearson χ^2	χ^2 (1, N = 124) = 0.317, p= 0.573
	To see blood (calming effect)	Pearson χ^2	χ^2 (1, N = 124) = 2.271, p= 0.132
	Self-punishment	Pearson χ^2	χ^2 (1, N = 124) = 0.660 p= 0.417
	Sentence related (forthcoming court appearance and expectation of lengthy sentence)	Pearson χ^2	χ^2 (1, N = 124) = 0.256 p= 0.613
	To achieve transfer	Pearson χ^2	χ^2 (1, N = 124) = 2.994 p= 0.084
	Unspecified	Pearson χ^2	χ^2 (1, N = 124) = 0.933 p = 0.334
	Following a (bad) visit	Pearson χ^2	χ^2 (1, N = 124) = 2.197 p= 0.138
	Concern about release from prison	Pearson χ^2	χ^2 (1, N = 124) = 0.005 p= 0.943
Motivator Age	Alternative to Drugs	Pearson χ^2	χ^2 (1, N = 124) = 4.460, p= 0.035
	Anger (towards self)	Pearson χ^2	χ^2 (1, N = 124) = 1.681, p= 0.195
	Anger- others	Pearson χ^2	χ^2 (1, N = 124) = 0.139, p= 0.709
	Argument	Pearson χ^2	χ^2 (1, N = 124) = 0.281, p= 0.596
	Lonely	Pearson χ^2	χ^2 (1, N = 124) = 0.172, p= 0.678
	Being in prison (general)	Pearson χ^2	χ^2 (1, N = 124) = 1.805, p= 0.179
	Bored in cell	Pearson χ^2	χ^2 (1, N = 124) = 0.042, p= 0.838
	Bullying	Pearson χ^2	χ^2 (1, N = 124) = 0.921, p= 0.337
	Concern over children/family	Pearson χ^2	χ^2 (1, N = 124) = 2.840, p= 0.092
	Cleansing element	Pearson χ^2	χ^2 (1, N = 124) = 0.002, p= 0.963
	Concern over someone else	Pearson χ^2	χ^2 (1, N = 124) = 0.009, p= 0.925
	Counteract emotional pain	Pearson χ^2	χ^2 (1, N = 124) = 1.906, p= 0.167
	Depression (unspecified)	Pearson χ^2	χ^2 (1, N = 124) = 0.176, p= 0.675
	Drug withdrawal	Pearson χ^2	χ^2 (1, N = 124) = 3.725, p= 0.054
	Alternative to outward expression of emotion	Pearson χ^2	χ^2 (1, N = 124) = 2.160, p= 0.142

	Get back at somebody	Pearson χ^2	χ^2 (1, N = 124) = 2.540, p= 0.111
	Grief/bereavement	Pearson χ^2	χ^2 (1, N = 124) = 0.355, p= 0.552
	Guilt/shame	Pearson χ^2	χ^2 (1, N = 124) = 2.840, p= 0.092
	In response to hallucinations	Pearson χ^2	χ^2 (1, N = 124) = 4.735, p= 0.030
	Attract help	Pearson χ^2	χ^2 (1, N = 124) = 1.911, p= 0.167
	Influenced by someone else	Pearson χ^2	χ^2 (1, N = 124) = 0.002, p= 0.963
	Innocent	Pearson χ^2	χ^2 (1, N = 124) = 0.28, p= 0.633
	Lost everything/feels hopeless	Pearson χ^2	χ^2 (1, N = 124) = 0.029, p= 0.865
	Let down by someone	Pearson χ^2	χ^2 (1, N = 124) = 0.004, p= 0.948
	Medication (recently changed or wanted it to be changed)	Pearson χ^2	χ^2 (1, N = 124) = 1.166, p= 0.280
	Homesickness	Pearson χ^2	χ^2 (1, N = 124) = 1.006, p= 0.316
	No recollection of incident	Pearson χ^2	χ^2 (1, N = 124) = 2.168, p= 0.141
	Other	Pearson χ^2	χ^2 (1, N = 124) = 1.075, p= 0.300
	To experience physical pain	Pearson χ^2	χ^2 (1, N = 124) = 1.473, p= 0.225
	Powerless – to regain a sense of power	Pearson χ^2	χ^2 (1, N = 124) = 1.906, p= 0.167
	Related to previous abuse	Pearson χ^2	χ^2 (1, N = 124) = 0.306, p= 0.580
	Refusal of bail	Pearson χ^2	χ^2 (1, N = 124) = 0.411, p= 0.521
	Relationship problems	Pearson χ^2	χ^2 (1, N = 124) = 0.016, p= 0.898
	Relieve anger, stress, etc.	Pearson χ^2	χ^2 (1, N = 124) = 0.412, p= 0.521
	Scared/afraid	Pearson χ^2	χ^2 (1, N = 124) = 2.085, p= 0.149
	To see blood (calming effect)	Pearson χ^2	χ^2 (1, N = 124) = 1.577, p= 0.209
	Self-punishment	Pearson χ^2	χ^2 (1, N = 124) = 0.905 p= 0.341
	Sentence related (forthcoming court appearance and expectation of lengthy sentence)	Pearson χ^2	χ^2 (1, N = 124) = 0.526 p= 0.468
	To achieve transfer	Pearson χ^2	χ^2 (1, N = 124) = 1.711 p= 0.191
	Unspecified	Pearson χ^2	χ^2 (1, N = 124) = 0.002 p = 0.963
	Following a (bad) visit	Pearson χ^2	χ^2 (1, N = 124) = 0.945 p= 0.331
	Concern about release from prison	Pearson χ^2	χ^2 (1, N = 124) = 0.279 p= 0.597
Chapter 11			
Does prison cause problem	Yes/No Attempted Suicide/Self-Injury	Pearson χ^2	χ^2 (2, N = 110) = 0.068 p= 0.966
Does prison cause problem	Yes/No Men/Women	Pearson χ^2	χ^2 (2, N = 110) = 5.879 p= 0.053
Does prison cause problem	Yes/No Adult/Young Offender	Pearson χ^2	χ^2 (2, N = 124) = 4.300 p= 0.116
Prevention?	Attempted Suicide: Men/Women	Pearson χ^2	χ^2 (2, N = 48) = 2.658 p= 0.265
Prevention?	Attempted Suicide: Adult/Young Offender	Pearson χ^2	χ^2 (2, N = 48) = 0.352 p= 0.839
Prevention?	Self-Injury Men/Women	Pearson χ^2	χ^2 (2, N = 53) = 2.223, p= 0.329
Prevention?	Self-Injury: Adult/Young Offender	Pearson χ^2	χ^2 (2, N = 53) = 6.978, p= 0.031
Usual way of management?	Self-Injury: Adult/Young Offender	Pearson χ^2	χ^2 (2, N = 54) = 3.486, p= 0.175

APPENDIX E

CASE STUDIES: PARTICIPANTS' REASONS FOR ATTEMPTING SUICIDE

RSI, a male young offender, had cut an artery in his arm with glass in an attempt to end his life. He described (unspecified) feelings of depression and hopelessness.

> *I would have taken an overdose, but I'm on liquid medication. It was the only way. I wanted to die..... I didn't want anyone to find me. I felt depressed..... like everything was getting too much. Nothing can make me feel better. I want to die. Why won't they [staff] just leave me alone to get on with it?*

RM55, also a male young offender, had cut his wrist with a plastic knife, which snapped. He was in the process of fashioning a noose (with which he was going to hang himself) when an officer found him. He said he wanted to die, describing a number of precipitating factors, including feelings of depression and hopelessness. He was worried about his ill girlfriend and about a forthcoming court appearance.

> *It was my first night in prison. I'd lost everything – my home, my job, my family [who had disowned him]..... my girlfriend is dying of cancer. The reality of my situation kicked in at bang-up. I felt deeply distressed, depressed and hopeless.*

During evening association prior to the incident RM55 asked an officer if he could make a telephone call to his girlfriend. The officer refused, but said that he would call her to let her know that RM55 was in prison. The officer didn't tell the prisoner that he made contact with the girlfriend until the following day (after the suicide attempt).

TJ68, an adult male, attempted suicide by cutting his throat and wrist with a razor, later requiring thirteen stitches. He felt depressed, upset at being back in prison and was worried that he would receive a lengthy sentence.

I felt upset and depressed about being in prison again. I've only been out for one Christmas since I was 15 [he was 24 at the time of the interview].....*I'm institutionalised.*

TJ68 did not think there was a specific 'trigger', although he described two main precipitators:

I'm in court soon and looking at a long sentence. I was thinking about the abuse [that he'd experienced at the hands of his father]..... *I just don't get the help I need.*

TJ68 had been planning this attempt for a number of days, and did it so as soon as he got a razor to cut himself with. He described feeling "gutted" that he hadn't been successful.

KW26, a female young offender, had tied a shoelace around her neck and tightened it with a pencil (in a tourniquet). She said she wanted to die because she was innocent of the charges for which she was imprisoned.

I waited until my cellmates were at canteen before tying the lace around my neck. I wanted to be with my son. I'm fed-up with being accused of something I didn't do. I didn't do it ..... she did.

The prisoner was on remand for the murder of her son. As indicated above, she proclaimed her innocence, instead claiming that somebody else killed him. She was found (losing consciousness) by her cellmate, who called for help. She had not injured herself in prison before.

VS71, an adult male, had attempted suicide by inflicting cuts to his wrist with a razor. He lost consciousness and was transferred to outside hospital. VS71 wanted to end his life for two main reasons: grief following the death of his son, and escalating concern over his imminent release from prison.

My son died 11 months ago. I'm still very upset about it ..... I want to be with him. Also, I'm worried about being released, about going back to Manchester and my previous life of drugs. I've felt suicidal for the past

10 months, but held back because of my family, but now I'm facing release I can't cope.

VS71 had had constant thoughts of suicide since his son died and had attempted suicide once before, immediately after his son's funeral.

ND46, an adult female, had set fire to herself. She said she wanted to die because of feelings of guilt and shame (over her offence), concern for her children and because she was bullied.

I told staff I was being bullied and they moved me [to the segregation unit]. *This was a good opportunity for me to kill myself, because I knew I'd be left on my own for longer. I felt ashamed* [at being in prison], *regretted what I'd done and was worried about my family and children* [who were in Jamaica]. *Being bullied was the final straw.....*

DD116, a female young offender, attempted suicide by tying a ligature around her neck and attaching it to her upturned bed. She was found, and the ligature cut, by an officer. It was her first time in prison and the first time she had experienced heroin withdrawal.

I was going cold-turkey for the first time..... I was fitting and hadn't slept for days. I just couldn't see things getting any better.... I was crying out for support.

CS6, a male young offender, was also withdrawing from drugs when he was found by a member of staff suspended from his cell window bars. He had lost consciousness. He said he wanted to die.

I was withdrawing from heroin and crack for the first time. I felt depressed, couldn't sleep and was in a lot of pain. I felt that I'd let my family down [he'd stolen from them to buy drugs]. *I pressed my cell-bell and asked for a nurse. Nobody came.*

CS6 was cut-down by an officer. He was transferred to the healthcare centre and given additional medication to help with withdrawal then returned to a normal prison wing

and placed in a double cell. During the interview he voiced concern that he had had (that day) the last of his medication and was worried that he would experience further withdrawal symptoms.

LH29, a female adult, had tied a ligature around her neck and was about to hang herself when a member of staff entered the room. She said that she wanted to die because of feelings of guilt about her child, which she thought were exacerbated by drug withdrawal:

> *He* [her child] *has been living with his grandparents for a year* [since her last prison term]. *It's his birthday soon. I've let him down. Without him I've got nothing. I felt depressed..... it was probably made worse by the withdrawal* [the prisoner was a known heroin and crack cocaine addict].

SM60, a male young offender, was found (by his cellmate) whilst suspended from a ligature. He gave a number of reasons for wanting to die, relating to drug withdrawal, homesickness and grief.

> *It was my first time in prison ..... I was withdrawing from heroin. I felt depressed. I missed my girlfriend and my mum and dad.*

SM60's father had died (by suicide) one year previously, after which he had taken an overdose of 30 paracetamol. At the time of the interview, one month after the above incident, SM62 said he was relieved that he was alive, not least because of the effect his death would have had on others.

> *I do feel better. I haven't got long to do* [in prison] *and I'm much more use to my mum and girlfriend than if I was dead.*

UD70, an adult male, had put a cord from his track-pants over a door and tied the end around his neck. He lifted his feet from the floor and was found by his cellmate before losing consciousness. He said he wanted to die because:

I was withdrawing from crack and heroin. I felt depressed, angry, confused and tired ..... I hadn't slept for 5 days and wanted to sleep at any cost.

UD70 said that he had had his withdrawal medication stolen. Although he didn't give this as a reason for the attempt, his withdrawal symptoms were probably exacerbated by the lack of medication.

PK49, a male young offender, had tied a bandage around his neck in an attempt at self-strangulation. Although, in response to auditory hallucinations he initially attempted suicide, he said he later changed his mind and called for help.

[the night before the incident] *I'd spoken to the nurse about the voices, told her that the medication wasn't helping and asked for it to be changed. She was no help..... Because I told her I wouldn't be around the next day she moved me to a strip cell* [where the incident took place]. *I heard his voice* [the person who's sexually abused him] ..... *he told me to kill myself ..... so I tied the bandage around my neck and kept it there for two or three minutes before calling for help. I got scared. I was afraid of actually dying and losing out on everything in the future.*

After the incident PK49's medication was changed, after which he felt much better. PK49 felt that the whole situation could have been avoided his medication was changed sooner. He felt that he received no help to deal with his past. Outside of prison he used drugs to "dull the voices".

HW23, an adult male, had cut his arms and throat with a razor. He said that did this to "get back at officers for messing me around", but that his desire to injure himself "escalated" into a suicide attempt.

They messed me around over the transfer. I was told that I would be going to [Prison A]. *I didn't want to go there because of an outstanding allegation against an officer. I was then told I'd be going to* [Prison B] *instead and was waiting in reception. Then I was told that I would be going to* [Prison A] *after all, but not that day, so I was returned to my wing. I wanted to get back at staff for their mistreatment. I wanted others to see what they were doing to me, so I came out of my cell onto the landing. I looked up and down the landing. Nobody saw that I was*

bleeding..... nobody would have cared if I'd died so I thought I might as well go through with it. I cut my throat with a razor. I didn't plan to kill myself. I did it to get back at staff, but then it escalated and I went too far. I felt I had no choice but to attempt suicide.

HW23 collapsed on the floor unconscious was taken to outside hospital where he received stitches for his injuries, and returned to prison. At the time of the interview, some weeks after the incident, he still had not been transferred.

CA110, a female young offender, was found, by staff, suspended from the back of her cell door. She had used a bandage as a ligature. She had just spoken to a psychologist about previous sexual abuse. When she returned to the wing she spoke to an officer and broke down, but felt that she received no support.

She [the officer] *didn't comfort me..... she just walked away, then it was time for bang-up. I asked for a Listener, but nobody came.*

When asked why she felt she wanted to die, CA110 replied:

I can't handle my past, what's happened to me ..... speaking about it brought it all to the surface again.

When asked why she didn't tell anybody that she felt like harming herself she replied:

In my file it says I'm attention seeking ..... I didn't want anyone to think that.

When asked if she is more likely to attempt suicide in prison, CA110 replied that she wasn't, although she said she is more likely to hang herself as tablets (on which she usually overdoses) are not as easily available.

A SELECTION OF PARTICIPANTS' REASONS FOR INJURING THEMSELVES

AM3, a male young offender, had cut his arms with a plastic spoon. He described feelings of guilt, loneliness and a desire to make himself feel "better".

> *I felt guilty about my offence* [murder] *and am worried that I'll go to hell. When I'm in my cell, with nobody to talk to, my problems escalate. I just feel better after cutting-up.*

TR5, also a male young offender, inflicted superficial cuts to his arms to relieve feelings of anger and frustration, although he was did not specify why he felt like this.

> *I was feeling uptight, agitated and stressed. I always feel more relaxed after I've cut myself. Also, feeling pain makes me feel better. Talking to people about how I feel doesn't help. Exercise sometimes gets rid of the pent-up aggression. If I feel like this on the out I take drugs..... but I can't get any in here.*

FC124, a female adult, inflicted superficial injuries to her forearms with a razor blade. She explained that it was due to a number of factors mainly related to anger arising from previous physical and sexual abuse (on the part of her mother), concern for the welfare of her children and feelings of guilt about being away from them. FC124 had just learned that her mother had taken custody of her children whilst she was in prison. She was very worried about their welfare.

> *She* [her mother] *tortured me .... I'm really worried about them* [her children]. *I felt guilty at what I've put them through* [the fact that they were living with their grandmother] *and wanted to punish myself.... and I was having nightmares about the time I was raped.*

When asked how she felt after she'd cut herself, FC124 said:

> *The pressure builds up in my heart and in my mind..... I feel a relief of pressure when I've hurt myself. I feel better because I've punished myself and not others.*

FC124 was asked if she thought discussing her problems and feelings with staff or other prisoners would help.

> *I don't want to talk to anyone else. They* [others prisoners] *have enough problems of their own and officers will get fed up with me if I tell them my problems.*

XM97, an adult female, had inflicted superficial cuts to her arms with a razor. She said she did this for three main reasons: feelings of guilt about not being with her children, the award of a lengthy sentence and as an alternative to drugs.

> *I felt guilty about being in prison away from my children..... I miss them. I was upset over my* [*lengthy*] *sentence. I felt depressed, stressed and didn't have drugs to help me forget things.... which means I'm forced to think about things when I'm not ready to face up to them.*

MR40, another adult female, scrubbed and scratched her arms with a toothbrush. She did this to relieve feelings of anger, towards herself and others, mainly related to past abuse:

> *I felt angry with the police because they didn't turn up* [they had arranged to take statements regarding allegations of sexual abuse towards her stepfather]. *I felt angry with myself for not reporting the abuse earlier and for getting myself into prison ..... I felt anger towards him* [alleged perpetrator of abuse and felt angry at "the *system*"]. *I shouldn't be here* [participant said she was imprisoned for burgling her stepfather's garage, which she did to "get back at him for abusing me"].

MR40 gave a description of the functions self-injury serves for her:

> *I feel powerless and it* [self-injury] *is a way of getting some control ..... of helping me cope. It's become a habit, a way of controlling my anger, but it's a repetitive viscous circle. I feel anger, want to exert control over something, so I cut myself. Then I feel angry with myself and I remember the reasons for it* [sexual abuse].

YS100, another adult female, had inflicted superficial cuts to her arms with a razor. She was sexually abused as a child and often had flashbacks. She injured herself because:

> *I feel dirty* [because *of* the abuse] *and think it's better to get the dirt out. I think about it every day..... I feel cleaner afterwards.*

Similarly, an adult female, CC108 cut her arms with a razor to make herself feel cleaner and as a way of reducing "psychological pain". She said that she is more likely to use self-injury as a method of reducing negative feelings in prison, as an alternative to drugs.

> *I was having flashbacks* [of previous sexual abuse]. *I felt dirty and wanted to get all the badness and dirt out. Also, feeling physical pain blocks out the emotional pain I'm feeling. Outside I take drugs to get rid of the pain, but in prison it gets too much. I feel worse* [in prison] *because I can't get drugs, which block out the pain.*

CC108 felt that staff had a lack of understanding for the reasons that some people injure themselves and the functions it can serve:

> *They* [prison officers] *don't understand..... they say I'm attention seeking, but the just don't understand why I harm myself and why it helps.*

Similarly, an adult female, EJ121 had recently spoken about previous sexual abuse. She inflicted superficial cuts on her arms with broken glass, in order to reduce her feelings of anger. She felt angry, towards the person who had abused her and towards herself for being in prison and away from her son.

> *I'd just spoken to someone at Saneline about it* [sexual abuse] *and was getting flashbacks. I felt angry towards him* [the abuser], *upset and wound-up. I was also angry with myself for being back in prison. I was punishing myself for him* [her son] *being taken away.*

When asked why she takes these feelings of anger out on herself, EJ121 said:

> *I'd rather hurt myself than hurt somebody else or smash up.*

BM101, an adult female who burnt herself approximately 60 times with a lighted cigarette, discussed how self-injury helped counteract emotional pain. Her grandfather (to whom she was very close) had recently died:

> *The emotional pain became too much to handle and I wanted to overtake it with physical pain. If I hadn't* [inflicted pain on herself] *it would have come out in another way.... I would have hurt someone else.*

RS52, a male young offender, said that, in order to induce a feeling of calm and because of a lack of "other outlets", he cut the reverse side of both his elbows through his veins. He was transferred to hospital having lost enough blood to necessitate a blood transfusion. Although he said he "wasn't sure" if he wanted to die, he was classified as self-injurious (rather than suicidal) given his references to the feeling that "the sight of blood calms me down". During a telephone call, RS52's girlfriend had ended their relationship. The incident happened when he returned to his cell after the telephone call:

> *I told* [the prisoner in the cell opposite] *how bad I was feeling. He offered me a blade. I didn't have any because I was on a 2052* [the form that underpins suicide prevention procedures]. *I said "no" but after five minutes asked him for it. Seeing blood calms me down. When I go weak* [due to loss of blood] *I can't go off my head.*

RS52 discussed the escalating severity of his injuries.

> *I used to slash myself, but now I need to see more blood..... I cut deeper.*

He also said that he is more likely to harm himself in prison because his is not as easily able to acquire drugs which he described an "another outlet".

BS4, an adult male, had 'feigned' hanging. He had tied a jumper around his neck and attached it to the cell window bars. His feet were touching the ground. He did this to orchestrate a change in location.

I was bored and pissed off at being in my cell for so long. Association had been cancelled and I knew that, if I harmed myself, I'd be transferred to the hospital. I told the lad in the next cell what I was going to do.

JF24, another adult male, cut his forearms in order to orchestrate a change in location. When questioned about the reasons for this he replied:

I didn't want to share a cell with a fucking paki. I asked three times to be moved and was told "no". Then I cut myself because I knew they [prison staff] would have to move me. I told them it would be their fault if he got infected [the prisoner was HIV and Hepatitis positive]. *I wanted to go to the healthcare centre because it's cleaner, it's more cushy, you get more association and it's easier to get drugs.*

SB54, a male young offender, inflicted superficial cuts to his forearm with a razor. He did this he wanted to be moved to avoid those who were bullying him. He saw this as the only effective way of getting help.

I was getting hassle from others on the unit. I'm always getting picked on - getting my stuff nicked and getting hit – and when I hit back I' m the one that gets punished. I told an officer but he did nothing..... so I cut myself. Talking doesn't get you anywhere ..... if you do something they'll help you. The only way they [staff] *do anything is if you self-harm.*

WS84, an adult male who had recently been transferred to the prison where the incident took place, had swallowed a razor blade. He said he did this so that staff would help him. His father was terminally ill and was unable to travel the longer distance to visit him. The prisoner had four months left to serve and was worried that his father would be dead by the time of his release.

I was thinking about my dad and felt depressed. I wanted to feel pain like he was and I wanted to make staff listen to me.

After the incident, WS84 was placed in a strip cell. Although he said staff had "belittled" him, he felt better because he'd been promised a transfer back to his original prison, although he was keen to point out:

> *I know it sounds like blackmail, but it's not.*

DG18, a male young offender, had inflicted numerous minor cuts to his face, arms and stomach in response to auditory hallucinations:

> *Everything went quiet and then I heard voices in the room talking to me .... telling me to cut up. So I smashed my sink* [that was attached to the wall in his cell] *and cut myself. If I hear the voices I use anything I can to cut myself. After cutting the voices and bad thoughts go away. I get relief from all the stress of the voices.*

DG18 said that the feelings he got after cutting himself was similar to the relief he got from taking drugs, which he did on the outside when he heard voices.
