University of Surrey at Guildford

The Department of Psychology

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A PORTFOLIO OF STUDY, PRACTICE AND RESEARCH

Submitted for the Doctor of Psychology (PsychD)
in Clinical Psychology

CONVERSION PROGRAMME
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1. OVERALL AIMS AND OBJECTIVES

The overall aim of completing this Psych D in Clinical Psychology is to improve the service offered to patients detained in Broadmoor Special Hospital and to develop both my clinical and research skills. In addition to this my intention is to become more up-to-date with some of the literature relating to the clinical presentations of patients I work with. My overall aim is to incorporate into this programme areas that are directly related to the work I am currently involved in at Broadmoor. Finally, it is planned that this programme will contribute to the general functioning of the Psychology department at Broadmoor hospital and to the hospital as a whole.

2. ACADEMIC

Aims

The overall aim of the academic component is to develop my understanding of particular issues directly related to my clinical work at Broadmoor hospital. It is hoped that this will enhance the service offered to patients.

Objectives

Currently, I work on two wards, one for young women with a personality disorder and the other for men of varying ages including both those with a personality disordered and those with a mental illness. The three critical reviews will address issues related to both of these populations. Two will focus on personality disorder, one reviewing the assessments most commonly used with psychopathic
and personality disordered populations and the second will review issues relating to treatability. The third review will focus on the treatment of psychotic symptoms, specifically the use of cognitive therapy techniques.

Rationale

Within the special hospitals clinical psychologists are required to work with large numbers of patients with personality disorders and with psychotic symptoms. As patients detained in Broadmoor hospital are there specifically for treatment it is of particular importance to be familiar with a range of therapeutic interventions and to remain up-to-date with the relevant literature and research relating to the above disorders. The academic reviews will take the opportunity to review recent literature.

Plan

Three provisional titles have been selected for academic reviews:

1. Critically discuss the assessment of personality disorder and its relationship with psychopathic disorder;
2. Critically review the treatability of personality disorder and the issues relating to this;
3. Critically review the experience of Post Traumatic Stress Disorder as a correlate of psychopathic disorder

3. CLINICAL

Aims

The overall aim of this clinical piece of work is to develop a comprehensive service for women detained in Broadmoor special hospital under the legal classification of 'psychopathic disorder'. As discussed above although there are a number of assessment tools developed to measure psychopathy and personality disorder these are of a diagnostic nature and have limited value for identifying specific treatment aims. The SHSA advisory group have suggested that in order to offer appropriate treatment, to demonstrate change and evaluate interventions there needs to be a more complete and descriptive assessment.
It would therefore seem that the first logical step to achieve this aim is to develop a comprehensive assessment package that can be used by the multi-disciplinary clinical team to identify specific treatment needs of the individual. Treatment plans can then be developed and therapy groups can be planned where appropriate. In addition to this the information collected from individual assessments should be collated and used to broaden our understanding of the nature of personality disorder among the female special hospital population. From this it may be possible to develop a more comprehensive service.

Objective

Currently, I am clinical team psychologist for a ward that is developing into a service for young women with personality disorder detained under the 1983 Mental Health Act (MHA) legal classification 'psychopathic disorder'. The objective of this piece of clinical work is to complete a number of assessment measures on these women and use the information to identify their treatment needs and to identify common problems that may be addressed in a group forum. The assessment measures selected for this task will include some that have been used with personality disordered populations by other researchers and clinicians and some that have been selected to tap particular features that staff have commonly observed among this population. As this is the first stage of developing a comprehensive assessment package it is anticipated that some of the assessments utilised may prove to be of little value and will thus be excluded from future assessments. It will therefore be important to consider the information provided by each assessment and how it enhances our understanding of the population and how it might be utilised.

Rationale

There is considerable decent between researchers regarding the nature, aetiology, assessment and treatment of individuals with psychopathic disorder. This issue is of particular importance to special hospitals where the population of personality disordered patients is substantial with approximately 340 men and 100 women with this as a sole classification. The Special Hospital Service Authority (SHSA) have established a multi-disciplinary advisory group to consider the role of the special hospitals in the assessment and treatment of personality disorder. Specifically, those associated with
offending and challenging behaviours. They found a wide range of models for conceptualising psychopathic disorder but none of which were entirely satisfactory.

Assessments commonly used with this population are:

The Psychopath Checklist- Revised (PCL-R) developed by Hare (1990). Items included reflect both a history of social deviance and deficiencies in interpersonal problem solving. These are rated from the patients case history and a structured interview;

The Minnesota Multiphasic Personality inventory (MMPI). Scale 4 'psychopathic deviate' measures the level of psychopathy. this is a self report questionnaire; and

DSM-III-R measures personality traits and categorises these into particular personality disorders, of which there are thirteen. Many researchers suggest that 'antisocial personality disorder' is the most commonly equated with psychopathy (Coid, 1992; Blackburn, 1991).

These examples all offer diagnostic information about the patient with them either reaching criteria for psychopathy or personality disorder, or not reaching criteria. The SHSA advisory group conclude that diagnosis alone is a useful working tool but does not begin to identify possible treatment programmes. They suggest that assessments should describe the patient as clearly and completely as possible, identify management and treatment objectives, interventions and desired change.

This clinical piece of work intends to address some of these issues on a ward for personality disordered women in Broadmoor Special Hospital.

Plan

On behalf of the clinical team I wrote to the clinical psychologists at a number of Regional Secure Units requesting information about assessment procedures being used and developed for personality disordered women. The responses received indicated that there is currently very little work being conducted in this area. The most significant work seemed to be by Bridgite Dolan and her colleagues
who are developing an assessment procedure on women detained in Holloway prison and at the Henderson hospital.

It was decided by the clinical team that the assessments used by Dolan and her colleagues should be included as they seemed relevant and would allow the assessments to be evaluated across a wider population. In addition to this a number of other assessments were identified falling into four main areas: psychiatric classification; the assessment of personality traits; the assessment of cognitive styles; and the assessment of interaction styles. These included self-report questionnaires and questionnaires for nursing staff to complete based on the observation of the patients' behaviour.

The self-report questionnaires have been administered by the responsible medical officer (RMO) and myself. The questionnaires must now be scored and this will be completed by the RMO and myself.

When scored the assessments must be analysed for each individual and particular issues and problems highlighted. This data will then be used in discussion with the individuals' primary nurse to develop a treatment plan. Once this has been completed for each patient, the scores will be considered for the whole population so that common traits, interaction styles and symptoms can be identified. This can be used to enhance our understanding of the population and to identify possible issues that may be addressed through therapeutic groups.

4. RESEARCH

Aim

The aim of this piece of research is to expand our understanding of the factors associated with reoffending by patients discharged from Broadmoor hospital. Currently, those making decisions about a patient's suitability for discharge do not have a systematic assessment procedure available that includes factors that have been identified as being associated with subsequent reoffending. Broadmoor hospital have instituted a Discharge panel who's role is to consider cases who have been recommended for discharge. The panel have a number of factors identified that they must consider for each case but the precise nature these factors have in relation to reoffending is not yet clear.
Hopefully this project will generate information that will provide some guidance about the issues that decision makers need to focus on when considering a patient's suitability for discharge. This may then be incorporated into the guidelines of factors to be considered by the Discharge panel.

Objective

This research project aims to extend the research dissertation completed as part of my MSc in Clinical Psychology and to focus on the issue of reoffending. The MSc study compared the content of Tribunal reports written by the RMO, Social Worker and Independent Psychiatrist for patients discharged by tribunals compared to patients who were not discharged. The overall results indicated that the content of the reports was associated with tribunal outcome with discharged patients having significantly more positive reports including more pro discharge statements written about them. The current study intends to follow-up these patients identifying those who have re-offended and those who have not. The reoffending rates for this sample will be compared to a sample of patients who were also discharged but via their RMO and clinical team rather than by a tribunal. In addition to this reports written for tribunals will be analysed but with the objective of exploring whether they are predictive of reoffending.

Rationale

Currently, special hospital patients can be discharged either by their Responsible Medical Officer (RMO) or through a Mental Health Review Tribunal (MHRT). Recidivism and re-offending by this population is of great interest to all concerned with their care and to the general population as these are potentially dangerous individuals. There have been a number of studies that have explored re-offending among ex-patients and ex-prisoners (Smith and Monastersky, 1986; Pritchard 1979; and Hassin, 1986). These studies have generated information on the extent that factors such as demographic variables, offence histories, age of hospitalisation, drug and alcohol abuse histories and age at first conviction and age at discharge, can be used to predict reoffending.

There is limited research examining reoffending by special hospital patients who have been discharged. One of the most recent studies was completed by Hui (1991) and focused on sex offenders discharged from Broadmoor and Rampton hospitals and factors associated with reoffending.
They found that patients who were detained for longer periods of time were the least likely to re-offend and that those patients who were rated as socially inadequate and aggressive at admission were less likely to re-offend.

This is clearly an area of great concern to the SHSA and to Broadmoor hospital. Despite the importance of the issue of reoffending there is still limited research data around and a consequent lack of understanding about the factors associated with it. The current research project intends to focus on this area by expanding the research dissertation completed as part of my MSc in Clinical Psychology.

Plan

Information regarding the follow-up of patients who were discharged from Broadmoor hospital has been obtained for the period 1983-1989, from the Special Hospitals Research Unit. This includes those patients who were part of the original MSc project. The next stage is to put forward a research proposal to the Broadmoor Research Committee to gain approval to conduct the study. Once this has been achieved those patients included in the original study need to be matched with a sample of patients who were discharged via their RMO and clinical team. The reports written for the various discharge procedures for the two samples can then be analysed and compared to explore whether they have any relationship with subsequent reoffending or not reoffending. In addition to this the reoffending rates for the two samples will be compared to assess whether there is a difference in the success rates.

Signed

Participant

Director of department

Course director
REFERENCES


SECTION 2. ACADEMIC AUDIT

Critical Review One:
Psychopathic And Personality Disorder: Discrete Or Homogeneous Concepts? A Critical Review.

Critical Review Two:
Mad or Bad? The Treatability of Offenders with a Psychopathic Disorder or Personality Disorder. A Critical review.

Critical Review Three:
"Interpersonally, psychopaths are grandiose, egocentric, maladaptive, dominant, forceful and coldhearted. Affectively, they display shallow and labile emotions, are unable to form long-lasting bonds to people, principles, or goals, and are lacking in empathy, anxiety, and genuine guilt or remorse. Behaviourally, psychopaths are impulsive and sensation-seeking, and tend to violate social norms; the most obvious expressions of these predispositions involve criminality, substance abuse, and a failure to fulfil social obligations and responsibilities" (Hare, Hare and Forth, 1994, P.81).

The term 'psychopathic disorder' has aroused considerable controversy among mental health and legal professionals since the early nineteenth century. Psychopathic disorder has been one of two legal classifications, applied to patients sent to special hospitals for several decades, the other being 'mental illness'. Although there is some agreement regarding those who might receive this label a clear definition and explanation of its nature and origins has yet to emerge. Currently within the special hospital system there are approximately 340 men and 100 women whose sole classification is psychopathic disorder (Special hospital service authority, 1993). In addition, there are a further 150 men and 50 women (approximately) who have psychopathic disorder as part of their classification or who are considered to have serious problems relating to a personality disorder. Unlike those patients who are classified as mentally ill, the psychopathic disorder group frequently generate questions by the clinicians treating them such as 'what is psychopathic disorder?', 'is it measurable?' and 'is it treatable?'. More recently the term 'personality disorder' has emerged and confused the picture further, with similar debates to those about psychopathy and controversy as to whether psychopathic disorder and personality disorder are discrete or homogeneous concepts. This paper will review some of the contemporary theories regarding the relationship between psychopathy and personality disorder and whether they are in fact different disorders or different conceptualisations of the same disorder.
The notion of 'psychopathic disorder' appears to have emerged before that of 'personality disorder'. Its origins are in German psychiatry, referring to psychologically damaged persons (Blackburn 1993). As mentioned above, its main current use is as a legal category of mental disorder within the England and Wales Mental Health Act 1983 (MHA), which defines psychopathic disorder as a 'persistent disorder or disability of mind whether or not including significant impairment of intelligence which results in abnormally aggressive or seriously irresponsible conduct'. Coid (1993) presents a second use as a generic term to "encompass a wide range of poorly delineated psychopathology exhibited by individuals with severe personality disorder who may exhibit antisocial or other dysfunctional social behaviours" (1993, p. 113).

As mentioned above, conceptions of psychopathy are evident even in the 19th century, with a variety of labels and descriptions being applied, all of which identify problems relating to morality and criminal propensity. Pichot (1978) provided a historical perspective regarding the development of European ideas surrounding psychopathic disorder, which highlights the controversy regarding the existence and nature of psychopathy that has long surrounded the definition. It also highlights the lack of progress towards understanding and operationalizing this concept. The notion of psychopathic personalities was referred to as early as 1809 by Pinel (a French psychiatrist) who described patients who were free from disturbances of the senses and defects of understanding but had an 'instinct of fury'. This work continued into the mid 19th century in France with Mayna developing Pinel's work, identifying a number of additional psychological characteristics and theorised that there were a number of psychological traits characterising different types of abnormal personality. In Germany, Pichot described Kreaplin's theories about abnormal personalities as perhaps the most influential on contemporary thinking about these disorders. Kreaplin described a number of disorders of personality distinguishing between 'psychopathic personalities' encompassing antisocial behaviour, born criminals, restless persons, liars, bluffers, pseudo-querulents and 'original morbid states' including constitutionally disordered states of mood.

In Britain similar developments were taking place. Pritchard (1835) used the term 'moral insanity' to describe patients presenting behaviours that correspond to 'psychopathic behaviour'. These cases were characterised by delinquent behaviour. In this century a number of authors have further commented
on the concept of psychopathy. Karpman (1948) proposed two categories of psychopathic disorder, firstly, primary psychopaths whose antisocial behaviour reflected the uninhibited instinctual expression unmodified by conscience or guilt, and secondly, secondary psychopaths whose antisocial behaviour resulted from dynamic disturbance and whose symptoms were more properly classified as neurosis or psychosis. One of the more contemporary theorists who has influenced developments in Britain is the American Cleckley whose work in the 1970's, refers to a distinct criminal entity of psychopathic disorder defined by 16 criteria such as superficial charm, unreliability, lack of remorse, egocentric and interpersonally unresponsive.

Throughout these historical developments legalisation has reflected the changing definitions. Pichot outlined the developments in British legislation beginning with the 1913 Mental Deficiency Act which covered four classes of mental deficiency: 'idiots, imbeciles, feeble minded and moral imbeciles'. Moral Imbecile was defined as 'persons who from an early age display some permanent moral defect, coupled with strong vicious or criminal propensities on which punishment has had little or no deterrent effect'. The 1927 Mental Deficiency Act reclassified moral imbeciles as moral defectives. This classification included the requirement for care supervision and control for the protection of others. In 1959 the Mental Health Act included three main groups of patients, 'mental illness', 'psychopathic disorder', 'severe subnormality' and 'sub normal'. The term 'psychopathic disorder' was intended to be generic and defined as 'a persistent disorder or disability of mind which results in abnormally aggressive or seriously irresponsible conduct on the part of the patient' (1959 Mental Health Act). The 1983 Mental Health Act (MHA) included the proviso that persons could only be compulsorily detained under this category if it was "likely to alleviate or prevent a deterioration of the condition".

It is clear that historically there has been a recognition of a group of offenders who are not classically mentally ill but do seem to have psychological problems. Despite a number of theorists attempting to provide a definition that describes this group and the general recognition that abnormal aspects of personality are a key element, there is yet to emerge a unanimously agreed definition as to what constitutes a psychopath. The differing views have continued through to modern day psychiatry and psychology. Gunn and Robertson (1976) suggest there are only five agreed facts about the term
'psychopathic'. Firstly, the diagnosis is unreliable; secondly, authors disagree about its definition; thirdly, it is used in the vernacular as a term of derogation; fourthly, it has legal use in England and Wales; and finally, doctors use it to indicate untreatability. As more recent work is reviewed it becomes apparent that little progress seems to have been made over the past eighteen years.

Recent work has drawn parallels between individuals classified as psychopaths and those thought to have a personality disorder (Coid, 1992; Blackburn, 1993). Within the special hospital system most patients classified as psychopathic also receive a diagnosis of personality disorder. However as mentioned above early authors such as Mayna in the mid 19th century referred to abnormal personality traits. It therefore seems that arguments and theories in the area of psychopathy have been to some extent circular.

Cleckley's work in America during the 1970's has influenced some of the more recent work on psychopathic disorder. Cleckley (1975) proposed that psychopathic disorder was a distinct clinical entity and different from personality disorders as he believed that the majority of these were neurotic or psychotic disorders. He developed his definition of psychopathy from characteristics most frequently observed in clinical practice. These fell into sixteen categories including characteristics such as superficial charm, lack of guilt or remorse for their offences, egocentricity and impulsiveness, and the inability to form close relationships, all of which are marked by emotional and social emptiness.

Another American psychologist, Robert Hare has developed Cleckley's work during the 1980's and 1990's. From Cleckley's theories about psychopathic disorder, Hare has developed the Psychopathy Checklist and its revision (PCL-R, Hare, 1986). The PCL-R is a scale consisting of both personality traits and antisocial behaviours. It provides a score and a cut off point above which individuals are considered to be psychopathic. The items included are designed to assess a range of relevant personality traits and behaviours and reflect both a history of social deviance and deficiencies in interpersonal sensitivity. Subjects are, therefore, rated from their case histories and from a formal interview. The main factors included are an inability to develop warm and empathic relationships, an unstable lifestyle, an inability to accept responsibility for antisocial behaviour, an absence of
intellectual and psychiatric problems, and weak behavioural control. He suggests these items seem consistent with the construct of psychopathy as outlined by earlier authors. Hare agreed with Cleckley's view of psychopathic disorder as a discrete concept. While Hare and his colleagues acknowledge recent debates comparing psychopathy with personality disorder, they believe that psychopathy can be differentiated from other personality disorders on the basis of its characteristic pattern of interpersonal, affective and behavioural symptoms (Hare, Hare and Forth 1994).

Much of Hare's work has centred around attempts to establish psychopathic disorder as unique and different from personality disorders. He has also channelled much energy into developing a measurement tool to measure psychopathy. However he fails to address aetiology satisfactorily and is unable to provide a comprehensive description of the differences between psychopathic and personality disorder. In addition to this he does not provide a clear explanation regarding differing degrees of psychopathy or why there are differing presentations of the disorder or how it relates to criminality. Finally he has failed to recognise adequately that there are many women labelled as psychopathic and the majority of his work has been with male offenders.

Ron Blackburn has been exploring the relationship between psychopathic disorder and personality disorder among patients detained in English special hospitals throughout the past three decades. His views differ to Hare's as he does not see psychopathic disorder as a discrete concept but rather as a personality construct. Blackburn (1971) has developed a dimensional model of psychopathy, which includes the organisation of normally occurring traits in which pathological personality types are seen as extreme variations within the general population.

This dimensional model is based on cluster analysis of Minnesota Multiphasic Personality Inventory (MMPI) profiles of abnormal murderers and offenders detained under the MHA category of psychopathic disorder. From this work he identified four main patterns: 'primary, secondary, controlled and inhibited'. Following on from this he has developed the Special Hospital Assessment of Personality and Socialisation (SHAPS). This 10 scale questionnaire was based on the MMPI and was developed to differentiate between the four main patterns. From these patterns Blackburn identifies two types of psychopath: 'primary' and 'secondary' (Blackburn, 1971; 1975). He suggests
that most of the variability of these two types can be explained by two factors. The first being 'impulsivity vs. hostility', and the second 'sociability and confidence'. Both primary and secondary psychopaths achieve high scores on impulsivity and hostility but opposite extremes on sociability and confidence. Thus, the primary psychopath is described as displaying high levels of hostility, low levels of anxiety and few psychiatric problems, whereas the secondary psychopath displays high levels of hostility accompanied by high levels of anxiety, guilt and many psychiatric problems. It appears that Blackburn's views on psychopathy clearly differ from those of Hare. Blackburn (1993) proposes two groups showing psychopathic traits unlike Hare who argues for a single category of psychopath. Blackburn, also recognises a link with the personality disorders and proposes that psychopathic personality is a superordinate construct embracing several classes of personality disorder. These personality disorders are dimensional rather than categorical with individuals presenting varying extremes of different personality traits.

Blackburn (1990) explored how well his classification system corresponds to the ICD-10 classification of mental and behavioural disorders (World Health Organisation, 1992) and DSM-III-R (American Psychiatric Association, 1987) classifications. He has found that primary psychopaths are more likely to show traits of the DSM-III histrionic, narcissistic and aggressive categories and secondary psychopaths showed mainly schizoid, avoidant, dependent, passive-aggressive, borderline and paranoid characteristics. However it is still unclear how much correspondence there is between classifications and whether Blackburn's concept of psychopathy actually encompass current conceptions of personality disorder.

Blackburn's theories seems to overcome some of the problems highlighted with Hare's work. Firstly, Blackburn has drawn on dimensional theories of personality and used this to account for the variation in presentation often noted between those labelled as psychopathic. He has also focused research on the convergence between psychopathy and personality disorders examining the types of personality disorders found in those labelled as psychopathic. However, similarly to Hare, Blackburn has paid insufficient attention to psychopathy and personality disorders among women or to the relationship between psychopathy and criminality.
Another key figure in the debate regarding psychopathic disorder and personality disorder is Jeremy Coid, a British psychiatrist, who has been exploring the nature of psychopathy and its relationship with personality disorders in Britain since the 1980's. His views are much more in line with Blackburn's than Hare's. Coid (1993) argues that the psychopathology associated with psychopathic disorder does not easily fit various classifications of personality disorder, but that it is encompassed in the ICD-10 'dissocial personality disorder' and the DSM-III-R classification of 'antisocial personality disorder'.

There are many similarities between the DSM-III-R and the ICD-10. They both include criteria for a number of different personality disorders. Each disorder requires the presence of specific personality traits. These are inferred by asking questions about particular behaviours. DSM-III-R is widely used in both Britain and America. Most of the research discussed in this review refers to studies that have used the DSM-III or DSM-III-R, therefore this will be focused on rather than the ICD-10. The DSM III-R is a multiaxial categorical system which includes measures for the diagnosis of personality disorders. Axis I comprises the major clinical syndromes such as schizophrenia and mood disorders and Axis II developmental and personality disorders. As mentioned above the presence of particular traits is required for a diagnosis of a particular personality disorder to be made. These traits constitute a personality disorder when they are "inflexible and maladaptive" and result in social dysfunction or subjective distress. There are 11 categories altogether including 'antisocial' (ASPD), which Blackburn claims has the most affinity with earlier concepts of psychopathy. The main features of ASPD include patterns of irresponsible and antisocial behaviour beginning in childhood or early adolescence and continuing into adulthood. For a diagnosis to be made the person must be over age 18 and have had a history of conduct disorder before age 15.

Coid's work is interesting in that he recognises the importance in exploring and attempting to understand the relationship between psychopathy and personality disorders. However he too fails to address adequately the relationship between these disorders and criminality and as with Blackburn and Hare has not fully addressed psychopathic and personality disorders among women.
There are also a number of psychodynamic models which seek either to explain or to define psychopathy. Dolan and Coid (1993) suggest that most psychodynamic formulations view psychopathy as essentially resulting from underlying personality disturbances, with the psychodynamic concepts of borderline and narcissistic personality organisation being the most relevant to psychopathic disorder. Kernberg (1975) proposed three broad structural organisation neurotic, borderline and psychotic. These structural organisations stabilise the mental apparatus, mediating between aetiological factors and direct behavioural manifestations of illness. He argues that the psychodynamic concepts of borderline and narcissistic personality organisation are the most relevant to psychopathic disorder and that they are on a continuum with psychopaths placed in the most severe end of neurotic, borderline and psychotic forms of personality organisation. Again, these theories are incomplete and there is an absence of methodologically sound research.

Other theories of psychopathy include Eysenck's work on criminality which is based on a more dimensional approach. Eysenck and Gudjonsson (1989) describe criminality as a disposition to commit crimes and as a continuously varying trait which ranges from altruism through normal conduct to victimless, but antisocial, behaviour, to victimful behaviour and criminality. The actively antisocial psychopathic criminal exemplifies the undersocialised extreme. Eysenck proposes that human temperament relates to three independent dimensions, neuroticism - stability (N), psychoticism - superego (P) and extroversion - introversion (E). In general psychopaths will have high scores on all dimensions. Eysenck has developed the Eysenck Personality Questionnaire (EPQ-R) as a measurement tool for these dimensions.

It is clear from the above that contemporary theories regarding psychopathic disorder are no more in agreement than those of the nineteenth and early twentieth centuries. The more recent debates have drawn the reintroduced concepts of personality disorder into the arena, with theorists such as Hare viewing the personality disorders as distinct from psychopathy and Blackburn and Coid viewing them as related. Despite there being some agreement that psychopathy and personality disorder are related there is disagreement about the exact nature of this relationship. Blackburn viewing the personality disorders as dimensions of personality rather than individual categories and argues that they are embraced by the wider superordinate construct of psychopathy. Coid, whilst agreeing with Blackburn
that a dimensional perspective of the personality disorders is the most appropriate, argues that there are still many unanswered questions regarding issues such as co-morbidity of personality disorders and whether one is an early manifestation of another or actually part of another, and how these relate to psychopathy.

There are an increasing number of empirical studies exploring the relationship between psychopathy and the personality disorders, in particular ASPD. Many of these have focused on the presence of personality disorders among prison populations and patients detained in special hospitals under the 1983 MHA category of psychopathic disorder. Coid (1993) reviewed a number of studies in prisons that have shown a high prevalence of ASPD varying from 39-70% (Hare, 1983, Bland et al 1990 and Cote and Hodgins 1990). Blackburn (1990) has found that personality disorders are the most frequently identified psychiatric disorders among offenders and most commonly associated with problems of aggression, sex offending and substance abuse. He also found that studies of English special hospitals indicate that two thirds of patients classified as psychopathic disorder meet criteria for at least one personality disorder.

More recently, Coid (1992) has investigated the prevalence of DSM-III-R Axis II disorders in patients detained under the legal category of psychopathic disorder. Three samples were examined, males detained under the 1983 MHA legal category of psychopathic disorder detained in an English special hospital, females detained under the same legal category in three English special hospitals, and male prisoners who were highly dangerous and disruptive detained in special units in English prisons. There was considerable overlap between the two male samples, but generally the male psychopaths in hospital were considerably less disruptive. The results for the overall sample revealed Borderline personality disorder (BPD) to be the most common Axis II diagnosis (69%), followed by ASPD in just over half (53%) of the overall sample. In addition to this, co-morbidity was common with many meeting criteria for more than one personality disorder, or meeting criteria for other Axis II disorders. Among those meeting criteria for ASPD additional personality disorders such as paranoid, narcissistic, borderline, and or passive-aggressive were frequently present. Whereas among those with a diagnosis of BPD, affective disorders such as depression, dysthymia, mania, panic disorder and unspecified psychotic episodes, were more common. Coid also administered the Hare Psychopathy
Scale and found the scores to be markedly different for the three sub-samples. Male psychopaths detained in special hospitals scored much lower than the male prisoners with only 23% achieving a high score in comparison to 77% of prisoners. It seems that a substantial proportion of males detained under the legal category of psychopathic disorder in special hospitals are not psychopathic according to this classification. Coid (1992) argued that this can be explained by the omission of a considerable amount of psychopathology in the PCL. In addition to this among the male prison sample ASPD was found among 86% and those who reached criteria for ASPD did not necessarily achieve high score on the PCL. Coid argues that this indicates that different concepts were being measured. These results are reflected in many other studies with researchers demonstrating that many subjects have two or more coexisting personality disorders. Oldham, Skodal and Kellman (1992) found at least 50% of patients had two or more coexisting personality disorders. Dolan et al.'s (1993) study of 275 patients resident in a non-secure setting found the average number of personality diagnoses to be six with BPD and ASPD being the most common.

Coid (1993) argued that these additional personality disorders challenge Hare's (1990) claim that psychopathy is a uni-dimensional construct as co-morbidity appears inevitable when applying a categorical classificatory system to patients with psychopathic disorder as multiple diagnostic labelling is necessary to describe the full extent of psychopathology. Tyrer, Casey and Ferguson (1990) recommend that a research instrument should be used which records the one personality diagnosis which has the greater impact upon social functioning. Coid, (1992), however argued that this is an oversimplification when applied to psychopaths and that there are still many questions unanswered regarding co-morbidity. It seems that the more research completed the more complex the picture becomes with more questions being generated about the relationship between psychopathic disorder and personality disorder.

Blackburn (1993) concludes that it remains unclear whether psychopathic disorder is one of several narrow band categories of personality disorder as the ASPD category implies, or whether it is a broad band or higher order construct embracing several classes. He states that there is a positive correlation between Hare's PCL-R and ASPD and that the ASPD may be the equivalent to Cleckley's 'distinct clinical entity'. Even Hare's more recent work acknowledges the high correlation between his concept.
of psychopathy and a diagnosis of ASPD (Hare, Hare and Forth, 1994). As mentioned earlier Blackburn believes that the relationship between psychopathy and personality disorder may be more readily understood by reference to a dimensional rather than categorical system.

This dimensional perspective would appear to be an interesting and promising way forward in the conceptualisation of personality and psychopathic disorders. Such a perspective provides for the comorbidity found in the studies outlined above and draws links between psychopathy and personality disorders without defining them as discrete or homogenous. This conceptualisation is not new; earlier authors such as Marshall and Barbaree (1984) suggested that different criteria may be sorted into behavioural dimensions describing different kinds of social dysfunction, such as inappropriate assertiveness, dysfunctional social cognitions, or social anxiety. Leary (1957) first developed the concept of an interpersonal circle and this has been developed further by other authors including Widiger and Frances (1985) who argued that DSM-III perceived multiple personality disorders as discrete syndromes with clear boundaries. They suggest that multiple diagnosis are common because maladaptive personality traits are probably no more than extreme variants of normal traits that are not mutually exclusive. They go on to suggest that each personality disorder has a characteristic and dysfunctional interpersonal style that is the central feature of the disorder, and that it is well established within the field of psychology more generally that interpersonal variables tend to relate to each other in the form of a circular structure or 'circumplex'. They propose an interpersonal circle composed of segments representing different interpersonal styles. These segments are not discrete categories with precise boundaries, rather they are continua between normal and abnormal personality. Blackburn (1993) argued that psychopathy could be construed as one dimension of such an interpersonal circle, and that this explains how several categories of personality disorder, such as narcissistic, antisocial, borderline and paranoid may have similar positions on a dimension of psychopathy, whilst having different interpersonal styles. He claims that is in accord with the view of psychopathic personality as a superordinate structure.

To conclude it appears that progression towards a unanimous operational definition of psychopathic disorder has been minimal. Recent empirically based research is encouraging but still in its infancy. There are still many areas that have not been adequately addressed. Firstly, the development of
psychopathy has received little attention. There is some evidence that childhood conduct disorder and chronic delinquency predispose to adult ASPD (Loeber, 1982; Robins and Price, 1991). Similarly there is some evidence that attention-deficit and hyperactivity disorder (ADHD) that continues into adolescence can lead to adult ASPD (Klein and Mannuzza, 1991 and Hechtman, 1991). Hechtman (1991) has also identified a number of risk factors for children with ADHD developing ASPD including characteristics of the child, family factors and the larger social and physical environment. However, most of these studies only focus on ASPD. This seems an area that warrants further consideration by those attempting to understand psychopathic and personality disorder.

Secondly, there has been little attention paid to psychopathy and personality disorders among the non-offender population and there is still a lack of understanding of the relationship with criminality. Stephenson (1992) argues that the prevailing models of psychopathic disorder during this century have all assumed that criminal behaviour in general is a sign of personality disturbance, and that psychopathic disorder and personality disorder or disturbance have increasingly been seen as synonymous. Epidemiological studies have focused mainly on ASPD producing lifetime prevalence rates varying between 0.5% and 2.6% in the United States and 3.1% in Canada (Robins and Reiger, 1991; Wells, Bushnell and Hornblow, 1991). There are many people who seem to fit criteria for personality disorders and for psychopathic disorders who do not offend. It is possible that some characteristics may in fact be functional for some people. If one considers the world of business and highly successful career people it could be argued that some of these people possess traits for psychopathic or personality disorders.

Finally, there is a lack of research focusing on women. The research that has included women indicates different prevalence rates for the DSM-III-R personality disorders with BPD being higher among women and ASPD being higher among men (Coid, 1992). Differences such as this need to be explored further.

Despite the absence of clearly defined operational definitions and conceptualisations, there is a group of individuals detained under the 1983 MHA legal category of psychopathic disorder many of which receive diagnoses of one or more personality disorders. These individuals are generally
recognised as having similarities and there is often consensus that they are psychopathic or personality disordered. It seems that research spanning at least two centuries has been unable to untangle issues surrounding definition and operationalisation and it seems unlikely that agreement will be achieved over the next century. This however does not help this group of individuals who are often detained under the 1983 MHA for treatment. Perhaps to those detained and to those providing treatment the more pertinent question is can psychopathy and personality disorders be treated and if so which are the most effective forms of treatment?

BIBLIOGRAPHY


In 1800 James Hadfield was found not guilty by reason of insanity of high treason for his shooting at King George III. He was committed to Bethlehem Hospital and shortly after this the first Criminal Lunatics Act was passed. With this 'lunatics' committing criminal acts began to accumulate in Bethlehem and other hospitals. In 1860 the second Criminal Lunatics Act was passed which ordered better provisions for criminal lunatics and authorised the building of special asylums for them. Broadmoor Special Hospital was the first of these asylums opening in 1863. Patients found criminally insane would serve at 'Her Majesties Pleasure' as well as patients who were found to be mentally disordered whilst serving a prison sentence. The second of these Special Hospitals to open was Rampton Special Hospital in 1910, followed by Moss side in 1919 and Park Lane in 1974. In the 1980's Moss side and Park Lane amalgamated becoming Ashworth Special Hospital.

The concept of treating the mentally disordered was emerging as far back as the 14th and 15th centuries. Deutsch (1949) provides a historical perspective on the treatability of mental health disorders in general, describing how early treatment approaches in England and Spain were based on punitive religious concepts such as flogging and exorcisms. People presenting what we now call mental health problems were viewed as evil or possessed. Such methods of 'treatment' remained essentially unchanged until the 18th century when the revolutions in France and in America kindled increased respect for democracy, personnel freedom and dignity. Following these events the philosophy of treatment developed both in America and Europe.

With the opening of the special hospitals grew the philosophy that mentally disordered offenders should be treated rather than punished. As mentioned above the first Criminal Lunatics Act was passed in 1860 recognising that 'criminal lunatics' were in need of hospitalisation rather than imprisonment. Pichot (1978) provides a historical overview of the development of the concept of
psychopathic disorder and its representation in early Mental Health Acts. Pichot outlines how as early as 1819 in England the concept of 'moral insanity' appeared and how in 1835 Pritchard coined the terms 'moral insanity' and 'moral imbecility'. Pichot argued that the cases described by Pritchard as having these disorders were not homogenous and correspond to 'psychopathic' behaviour in the sense in which it is nowadays understood. Pritchard's 'moral insanity' was retained and recognised in the 1913 Mental Deficiency Act which covered four classes of subjects: 'idiots', 'imbeciles', 'feeble minded' and 'moral imbeciles'. The class of subjects labelled 'moral imbeciles' were defined as 'persons who, from an early age, display some permanent moral defect, coupled with strong vicious or criminal propensities on which punishment has had little or no deterrent effect'. The 1927 Mental Deficiency Act replaced 'moral imbecility' with 'moral deficiency' and the 1959 Mental health Act abandoned this term and introduced 'psychopathic disorder'. This category was defined as 'a persistent disorder or disability of mind (whether or not including subnormality of intelligence) which results in abnormally aggressive or seriously irresponsible conduct on the part of the patient and requires or is susceptible to medical treatment'. The current Mental Health Act (MHA 1983) includes four categories 'mental disorder', 'mental impairment', 'severe mental impairment', and 'psychopathic disorder'. In addition the clause that 'treatment is likely to alleviate or prevent deterioration of this condition', has been added.

This clause has fostered the ongoing debate about the treatability of mentally disordered offenders, specifically those classified as having a 'psychopathic disorder'. This review will focus on the treatability of offenders with this classification.

The 1983 Mental Health Act (MHA) stipulates that offenders who are legally classified as having a 'psychopathic disorder' may be detained in hospital for treatment. Currently in the three special hospitals in England and Wales there are approximately 440 patients detained under this classification. In addition there are a growing number of medium security facilities that also provide treatment for mentally disordered offenders including those with psychopathic disorder, along with several prisons offering treatment programmes and a number of community programmes where psychopathically disordered offenders may be treated.
Rogers and Webster (1989) define treatability as "the clinical determination of which patients under what treatment modalities and environmental conditions will respond most favourably" (p. 20). They argued that treatment is a global and fluid construct open to multiple interpretations in its application to the criminal justice system and that this is particularly evident when courts are considering appropriate disposal of offenders. They propose that clinicians should articulate for each offender under consideration 'treatment goals, clinical methods, treatment compliance, and treatment response' suggesting that currently this does not happen.

In addition, it appears that the treatability is conceived of differently by different professionals with clinicians being primarily concerned with psychological improvement and legal professionals in the reduction of further offending. Cavanaugh, Wasylin and Rogers (1985) argued that there are multiple goals in providing clinical services to mentally disordered offenders including the remission of symptoms, improvement and maintenance of psychological functioning, the reduction of recidivism and prevention of violent behaviour. They suggest that courts are primarily interested in community safety and secondly in the overall psychological functioning.

Quinsey and Maguire (1983) highlighted some of the problems relating to treatability in a study of two hundred forensic evaluations with patients detained in maximum security hospitals. They found that although clinicians had regular opportunities to discuss the patients in case conferences, participated in their ongoing treatment and was aware of treatment alternatives, the level of inter-clinician reliability regarding treatability and treatment needs, were consistently low (r = 0.43). The only area of agreement was in the use of psychoactive medication to treat psychosis. Similarly, Jackson (1985) employed a series of forensic case studies to examine mental health professionals, judges and untrained individuals perceptions of forensic treatment needs. She found considerable variability both within and between professions in their assessment of treatability and that treatment needs were influenced by the seriousness of the offence with those committing serious offences being seen as requiring more treatment.

With the expansion in the provision of treatment for offenders there have been many questions raised regarding the efficacy of treatment. Many of these questions have been primarily directed towards the
treatability of psychopathic disorder and in recent years there has been a growing debate about the appropriateness of treating rather than punishing offenders with this classification. Some of the difficulties faced when considering this group of offenders are outlined in the critical review 'Psychopathic and personality disorder: Discrete or homogenous concepts ?'. These difficulties primarily concern the lack of consensus about the nature and diagnosis of psychopathic disorder along with disagreement as to whether or not it is treatable. Coid (1992) argues that treatment programmes for psychopaths are particularly difficult to devise when there is no universal consensus of what it actually is that the clinician is attempting to treat. He also argues that debates over the appropriateness of giving hospital orders for treatment rather than prison sentences to this group of offenders are premature given the limited understanding of the psychopathology of these individuals.

Coid (1992) also points out that although a legal classification of psychopathic disorder may be applied it is rarely used as a clinical diagnosis. The majority of patients detained in Special Hospitals under the legal category of psychopathic disorder have a diagnosis of personality disorder. Thus when considering issues relating to treatability of psychopathic it seems appropriate to also include offenders diagnosed as having a personality disorder. Coid's (1992) study of 243 offenders including men and women demonstrates the high prevalence of personality disorder among this population. Using the Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R) classification, Coid found antisocial personality disorder (ASPD) and borderline personality disorder to be the most prevalent, with most subjects meeting criteria for more than one Axis II personality disorder category. Problems of treatability were related to the severity of their personality disorder, which in turn was reflected in their multiple Axis-II diagnosis required to encompass the sheer range of their psychopathology. Similarly, Blackburn (1990) has found personality disorders to be the most frequently identified disorders among offenders, commonly associated with aggression, sex offending and substance abuse. In his research conducted across the three special hospitals in England he found that although the majority of patients are classified as mentally ill, two thirds also meet criteria for at least one personality disorder.

Studies have indicated that although detained for treatment, psychopathic offenders often receive little if any treatment. For example Grounds (1987) argues that very little treatment is actually given to the
majority of psychopathic disordered offenders detained in Special Hospitals. In a study of patients detained at Broadmoor hospital, Dell and Robertson (1986) suggested that whilst the majority of patients classified as 'mentally ill' receive psychotropic medication, very few of the patients classified as 'psychopathic disorder' received medication. In addition they found that only one third of the psychopathic disordered patients were in psychological treatment and that whilst the average length of stay was eight years the average length of time for participating in specific treatments was only two years. It thus appears that not all patients classified as having a psychopathic disorder who are detained for treatment actually receive treatment.

In addition to this there is a dearth of studies exploring the outcome of different forms of treatment engaged in by offenders classified as having a psychopathic disorder, that are not methodologically flawed. Those that do exist have included psychodynamic therapies (Jew, Clannon, and Mattocks, 1972; Kozol, Boucher, and Garofalo, 1972; Taylor, 1967), behaviour modification (Moyes, Tennent and Bedford, 1985; Cavior and Schmidt, 1978; Rice, Quinsey and Houghton, 1990), cognitive behaviour therapy (Marshall and Barbaree, 1984; Goldstein, 1986; Glick and Goldstein, 1987), cognitive therapy (Scott, Byers and Turkington, 1993; Carson, 1979), and therapeutic communities (Robertson and Gunn, 1987; Copas, O'Brien, Roberts and Whiteley, 1984). These will be briefly outlined along with examples of the most recent outcome studies and some of the methodological flaws in them.

**Psychodynamic therapies**

Psychodynamic therapies have been used for many years with offender populations. There are a number of different forms of these analytical therapies each based on different theoretical frameworks utilising different therapeutic techniques. There are however, some commonalities with most theorists seeing the childhood development as crucial, with the child passing through a number of stages during which specific conflicts relating to the interactions with maternal and paternal figures must be resolved before the child can successfully pass through to the next stage. There are also commonalities in the provision of treatment Blackburn (1993) suggests the crucial elements of psychodynamic treatment to be the probing of the past, transference, interpretation and working
through conflicts to achieve insight or self knowledge. It can be used both individually or in a group forum.

Historically there have been few outcome studies of this form of therapy. This may be partly due to the fact that treatment is normally long-term, over years rather than months, and partly because historically this form of therapy was not developed from a scientist practitioner perspective. In addition to this, formal evaluation with standardised and validated measures tend not to form part of the treatment approach. Outcome studies of offender populations are even more sparse. One such study was conducted by Jew et al (1972). They included patients in a prison hospital who had received on average eighteen months of insight oriented therapy exploring their antisocial behaviour. These patients were matched with prisoners who had received no therapy and followed up for four years. They found that significantly more of the treated group did not return to prison after the first year but that the differences diminished thereafter. In a review of such studies, Stone (1987) found that the only one well controlled long-term outcome study of psychoanalysis with personality disordered individuals and this had discouraging results.

This is echoed by Dolan and Coid's (1993) recent review of over 80 outcome studies including some using analytical forms of therapy for the treatment of psychopathic and personality disorders. They identify only twelve outcome studies focusing on psychotherapy as the treatment modality. They, however appear to use the term psychotherapy to refer to analytical forms of therapy rather than the provision of psychological therapies in general, and within these twelve studies only three explicitly reported that the treatment was of an analytical nature. In addition to this they found few studies evaluating psychotherapy independent from other treatment modalities.

As mentioned above, there are few outcome studies of the effects of psychoanalysis in general, and even fewer for offender populations labelled as psychopathic disorder or antisocial personality disorder (ASPD), (Jew et al., 1972; Kozol et al., 1972; Taylor 1967) and those that exist have a number of crucial flaws. Firstly, few if any studies outline the particular type of theoretical framework on which the analysis is based and the nature of the therapy offered. This is a very significant omission as the classical forms of analytical psychotherapy are rare within penal systems.
and a clear description of therapy offered is important for any one either wishing to adopt these
treatment techniques or wanting to replicate a study. Secondly, descriptions of the clients are
inadequate with many only identifying the gender of participants. The description of the therapeutic
process and of the subjects was poor with only one identifying the type of personality disorder which
was ASPD. The types of or seriousness of the offences committed was also not identified. In
addition to this previous treatments, or the areas that the therapy aimed to target, were not provided.

These are some of the main flaws of the outcome studies of analytical forms of treatment. Such flaws
make it difficult to draw any valid conclusions from these results. It therefore seems that it is far to
eyarly too comment on the effectiveness of any form of psychoanalysis for psychopathic or personality
disorder. Further research describing more fully the type of treatment offered and the characteristics
of the client, as well as those areas that therapy aims to change is required.

Therapeutic Communities

Therapeutic Communities first emerged during World War II. McCord and McCord's work with
juvenile delinquents during the 1950's was important in the development and establishment of
therapeutic communities as reputable settings for the treatment of offender populations. They viewed
them as settings in which male delinquents were unconditionally accepted, providing an enriched and
stimulating environment in which they could establish new relationships and interests. The aim was
to bring about changes in the boys personalities. Currently, the Henderson Hospital and H.M.P.
Grendon Underwood for men are perhaps the two most widely recognised therapeutic communities in
England and Wales.

As with psychoanalytical therapies there are many different types of therapeutic communities based
on different theoretical models. Blackburn (1993) describes the basic features that most communities
share the first being an informal atmosphere; secondly, having regular community meetings; thirdly,
sharing the work of running the community; fourthly, a recognition of residents as auxiliary therapists
and, finally, being a living environment which encourages open expression of feelings and exploration
of relationships facilitating self control.
Therapeutic communities have been perhaps the most extensively evaluated treatment modalities for offenders with personality and psychopathic disorders. Dolan and Coid's (1993) review of outcome studies included thirty-one evaluating therapeutic communities eight of these at the Henderson Hospital and five at Grendon Underwood Prison. One such study at H.M.P. Grendon Underwood was by Robertson and Gunn (1987) who completed a ten year follow up of released prisoners. They found no reduction in recidivism with ninety two per cent having a further conviction compared to eighty five per cent of a comparison group of prisoners and who did not receive treatment. However the type of therapy engaged in during imprisonment is not reported reoffending not psychological improvement was used as a measure of treatment success. Copas et al (1984) completed a three to five year follow up study of male and female psychopaths admitted to the Henderson hospital. The number of further hospitalisations or criminal offences was used as an indication of success with thirty six per cent success compared to nineteen per cent of a group not admitted. They also found that success rates significantly increased with length of stay.

The results from studies such as these are equivocal although there is indication of some success of treatment in reducing recidivism. However, it is not yet clear how successful therapeutic communities are or what type of offender who is likely to benefit from them. The methodological flaws outlined for the outcome studies of analytical forms of treatment apply equally to these studies. Only four studies included women in the sample (Copas et al 1984; Norris 1983; Dolan, Morton and Wilson 1992; Mehlum, Friis and Iron 1991), and only three using any form of assessment to measure and identify the type of disorder present (Cooke, 1989; Ogloff, Wong and Greenwood, 1990; Rice et al., 1992) Again it seems premature to draw any conclusions regarding the effectiveness of therapeutic communities for the treatment of psychopathic or personality disorder.

Recently therapeutic communities based on a model derived from the principles of cognitive therapy, have begun to emerge. Wright and Davis (1993) promote this model arguing that a cognitive therapy model can serve as a clear and understandable organisation for a variety of disciplines, therapies and activities. In 1980 one of the first in-patient cognitive therapy programmes was established at the Norton Psychiatric Clinic of the University of Louisville. Since then there have been a number of in-patient units with a cognitive orientation but these have been primarily short-term and not for
offenders. Hopefully new developments such as these will incorporate evaluation as part of the function of the communities.

**Applied Behaviour Analysis**

Applied behaviour analysis has been another commonly used treatment modality for offender populations and has been more extensively researched. Blackburn (1993) describes this type of therapy as centring on the rearrangement of environmental contingencies relevant to particular responses the most frequently used are token economies. Blackburn also states that while a number of studies have demonstrated short-term effects on behaviours targeted (mainly institutional behaviour), few patients have been evaluated after discharge.

Moyes et al. (1985) evaluated a token economy in an English private hospital for young behaviourally disturbed males and females with a criminal history. They were matched to a similar group who were offered but did not accept a place. A one year follow up revealed that the in-patient group were found to have had fewer police contacts. However a two year follow up found no difference between the treated and untreated group. Cavior and Schmidt (1978) found that token economies for offenders assigned to different treatments failed to produce significant reduction in recidivism or any differentiated effects for psychopaths. Rice et al. (1990) conducted a long-term follow-up of patients who had been through a token economy in a maximum security hospital. They failed to find any relation between positive performance in the programme and subsequent reductions in criminal behaviour.

These results indicate that behavioural interventions maybe of limited value. They may result in short-term improvement in the behaviour targeted but do not produce generalised behavioural change that affect long-term offending behaviour. However, rather than adults the majority of outcome studies in this area have focused on adolescents. As discussed in my critical review 'Psychopathic and personality disorder: Homogenous or discrete concepts', it is not yet clear what relationship if any juvenile delinquency and conduct disorder has with adult psychopathy or personality disorder. There appears to be the possibility of a higher prevalence of ASPD among adults who were delinquents as adolescents or who had conduct disorder, but until this relationship is more firmly established the
results from treatment outcome studies of adolescents should not be used as the basis for arguments about the treatability of adult disorders.

Cognitive - Behavioural therapy

Blackburn (1993) describes this form of treatment as based on verbal instructions to guide behaviour which is modelled by the therapist and rehearsed by the client. It is assumed that maladaptive behaviours and feelings are often the consequence of dysfunctional thought patterns and the aims are to supplant these with more adaptive thinking, via debate and performance assignments.

Marshall and Barbaree (1984) conceptualised personality disorder as resulting from unskilful social behaviour repertoires which fail to engender rewarding or nonaversive outcomes from others. These can be sorted into behavioural dimensions describing different kinds of social dysfunction such as inappropriate assertiveness, dysfunctional social cognitions or social anxiety. Skills training is therefore thought of as an essential part of therapy, with social skills, assertion and anger management being common forms of therapy offered. A number of evaluations have been completed on these types of therapy with mixed findings.

Firstly, Goldstein (1986) reviewed 30 studies of the treatment of delinquent or aggressive adolescents and concluded that there was consistent evidence for skills acquisition at the end of the programmes. However, three years later only 15 - 20% of these skills were still present and had generalised outside the programme. Secondly, Stermac (1986) found that short term (six sessions) anger management training with personality disordered patients (mainly those with ASPD) led to short term improvements in the area of anger and aggression control as measured by the Novaco Provocation Inventory. Thirdly, Glick and Goldstein (1987) developed a multi-modal programme which included aggression replacement training, structured learning training, social skills, social problem solving, anger control and moral education. They found such a programme led to improved skills, greater self control and improved institutional behaviour.

Although many of these studies demonstrate improvement in the behaviour targeted at the end of the therapeutic intervention, it remains unclear to what extent such improvements generalise or whether
they are maintained over a prolonged period of time. In addition, there is a lack of research demonstrating the relationship, if any, between interpersonal behaviours and offending behaviour. Finally, these studies focus primarily on the use of cognitive-behaviour therapy aimed at skills acquisition which is only one aspect of the way in which this form of therapy is commonly used.

**Cognitive therapy**

Traditionally cognitive therapy when used with psychopathic or personality disordered offenders, has been used in conjunction with behavioural techniques. The most common forms being skills training as described above. However recent developments in the use of cognitive therapy for personality disorders are of interest. These developments have a clear theoretical basis regarding the nature of personality disorders and recognise that there are a number of personality disorders as identified by the DSM-III-R which are distinguishable. These are worthy of more extensive consideration as they have implications for the debate regarding treatability of offenders with psychopathy and, or a personality disorder.

The use of cognitive therapy with patients who have long term and severe mental health problems has been a relatively recent development therefore there have not yet been any controlled trials and its efficacy has yet to be established. Scott et al. (1993) are optimistic and suggest that initial studies have provided encouraging results. They also highlight how chronicity is commonly equated with poor prognosis and argue that cognitive therapy offers a new potentially useful treatment for difficult personality disordered patients. The general techniques of cognitive therapy involve the elicitation of automatic thoughts, testing their accuracy, developing rational alternatives, identifying and modifying maladaptive schemas. Carson (1979) expanded on this, conceptualising personality disorders as dysfunctional interpersonal styles supported by biased schemata which function as self-fulfilling prophecies through their effects on others. Therapy therefore needs to focus on disconfirming interpersonal expectations.

Beck and Freeman (1990) have been the main pioneers in developing the use of cognitive therapy with personality disordered clients and propose that personality traits are overt expressions of deep schemata which dictate a generalised behavioural strategy. They argue that each personality disorder
is characterised by a distinct cognitive profile reflecting a composite of beliefs, attitudes, affects and strategies organised around a general theme of the nature of the self and others. They report the success of cognitive therapy with ASPD out patients but provide no empirical data.

The outcome studies outlined have produced equivocal results. They also demonstrate some of the difficulties associated in studying this area. Blackburn (1992) argues that although treatability is viewed pessimistically there are problems with the inconsistent use of the term 'psychopath' which refers to personality disorders in general and therefore is not referring to a homogenous group. Having reviewed a number of treatment outcome studies Blackburn (1993) concludes that the theoretical link between treatment outcome is usually obscure. He sights Suedfeld and Landon (1978) who state that few new findings have emerged in the treatment literature and the number of methodologically adequate studies which differentiate a specific category of psychopathic personality remains so small that only two conclusions can be drawn. Firstly, it has yet to be established that "nothing works" to change psychopaths and secondly that offenders with personality disorder do appear to change with treatment but that no particular approach has consistently been found to be beneficial.

In their recent book Dolan and Coid (1993) echo Blackburn's conclusions and highlight minimal progress since Cleckley's comments in 1941 where he discussed the lack of evidence for efficacious treatment for psychopaths and the need for further research. They review over eighty studies into the treatability of psychopathic disorder and ASPD and conclude that the research findings are based on a small number of studies that are limited by poor methodology. The samples are vaguely defined with only fifteen of eighty using specific psychiatric criteria or providing descriptions of psychological features. In addition to this they found that treatment selection criteria was not fully explained making replication impossible. They found a variety of treatment methods utilised including dynamic, behavioural and cognitive-behavioural, but the duration of these was short term in all cases. They also highlight how many of the studies particularly those relating to special hospital populations, use future criminal or antisocial behaviour and not psychiatric or psychological state as a measure of success. Dolan and Coid therefore conclude that the notion of psychopaths being untreatable may in part result from professional inadequate assessment in the first place followed by an inability to
develop, describe and adequately demonstrate the efficacy of treatment strategies. "It cannot be said that the psychopath is untreatable until we are satisfied that all possible treatment interventions have been tried, adequately evaluated and then shown to fail" (p. 267).

Conclusion

In summary there are a number of issues regarding treatability of offenders classified as psychopathic or personality disordered, that need to be addressed before any conclusions can be drawn about the appropriateness of treatment rather than punishment. Firstly, there is no consensus in the nature or diagnosis of psychopathic disorder. Secondly, there is no consensus about what treatment is aiming to change or the exact nature of the link between psychopathic disorder and criminality. The 1983 MHA states that the criminality is a consequence of the psychopathic disorder with the assumption that improvement in the disorder will result in a reduction in criminal behaviour. This is reflected in the legal professions prime concern being the reduction of future offending and violence. This compares to clinicians whose prime concern is likely to be in the improvement of psychological state. Thirdly, not all offenders detained for treatment receive treatment and there are a limited number of outcome studies of those who have received treatment.Fourthly, the outcome studies that have been completed are full of methodological flaws. These flaws include the use of primarily male samples; the limited use of measurement and assessment of the personality disorder or disorders present in the offender and the lack of clarity regarding the type of disorder, and what constitutes success, a reduction in future recidivism or psychological improvement. In addition to this the majority of treatments evaluated were offered over a short period of time. The behaviour and cognitive therapies tended to be short-term interventions over periods of weeks rather than months. The therapeutic communities and psychodynamic therapies were longer term but still arguably not long term enough. If one accepts that these patients have severe and complex disorders and difficulties that have developed during childhood and progressed into adulthood, then it seems reasonable to hypothesis that for treatment to be effective it will need to be long-term and multi faceted.

As mentioned the majority of studies include only men. Of the eighty outcome studies reviewed by Dolan and Coid (1993) only twenty one reported including women in the sample. Although there are
approximately three times more men detained who are considered to be personality or psychopathic disordered it is important to explore treatability for both sexes. It may be that there are gender differences in the response to particular forms of treatment and this must be explored to prevent blanket conclusions being drawn about treatability of men and women which is based primarily on research conducted on men.

The lack of clarity about the nature of disorders among participants included in outcome research raises several problems including to what extent the results can be generalised and making it difficult to replicate studies. Only seven of the eighty outcome studies reviewed by Dolan and Coid (1993) used a formal measure to identify the type of disorder present and these were mainly measures of psychopathic disorder such as Hare's Psychopathy Checklist and the Minnesota Multiphasic Personality Inventory. If one agrees with Blackburn's(1993) argument that psychopathic disorder is a generic term used to encompass a wide range of psychopathologies then it should not be assumed that a sample of participants labelled as psychopathic form a homogeneous group. Without information about the specific nature of the psychopathologies of the sample, many questions are left unanswered, such as which types of disorders do respond to treatment and which types of treatment are the most effective for which types of disorders?. This is a difficult area already with a lack of consensus between researchers and clinicians about definition of psychopathic and the personality disorders. Therefore a clear description of the disorders present among subjects is essential.

In addition to this reconviction is the most commonly used measurement of success with forty six of the eighty outcome studies reviewed by Dolan and Coid (1993) using reconviction as the only measure of success with no further convictions being seen as the most positive outcome. Few studies include measures of psychological improvement and there is often no information regarding psychological change as a result of treatment despite this being the prime aim of therapeutic interventions among non offender populations with mental health disorders. Under the 1983 MHA offenders with a disorder may be detained for their own health and safety or for the safety of others. There seems to be an implicit assumption that the aim of treatment is to reduce offending behaviour and that treatment is effective if there is a reduction in reoffending. However it is not yet clear how and if mental health disorders relate to criminality or if improvement in psychological functioning
results in a reduction of offending behaviour. More specifically it is not clear how criminality relates to psychopathic or personality disorder. It is possible that aspects of personality and psychopathic disorder are treatable but these may or may not be related to offending behaviour. This relationship needs to be better understood and studies need to include measures of change in the degree of psychopathy or personality disorder before conclusions regarding the effectiveness of treatability in reducing offending behaviour can be drawn.

It seems clear that conclusions regarding treatability of psychopathic and personality disordered offenders are premature. This review has identified a number of methodological flaws in the research completed to date which must be overcome for any clarity on this issue. It seems that Blackburn's conclusions that it has yet to be established that 'nothing works to change psychopaths' is the only thing we can at present be certain of.

Bibliography


Post-Traumatic Stress Disorder as a Correlate of Psychopathic and Personality Disorder

Post-Traumatic Stress Disorder (PTSD) has its origins in the psychological problems such as anxiety symptoms, depression and apathy, frequently reported among veterans from the first and second World Wars. Since then it has become a wildly recognised phenomenon among war veterans exposed to combat and has in recent years begun to be recognised in relation to other traumas and psychiatric disorders.

Ormer (1992) provides a historical perspective of the development of the concept of PTSD. In the later part of the 19th and early part of the 20th century there was a recognition of 'shell shock' which refers to trauma caused by being very close to exploding shells. This comprising of a diverse range of reactions such as exhaustion and anxiety. These reactions were explained as resulting from a 'faulty personality disposition' and traditionally perceived as resulting from the physical hardship endured during war, such as disease, exhaustion and malnutrition. Ormer also describes how in France at the start of World War I, 'hysteria' was a common formulation made by French psychiatrists for soldiers presenting with psychological difficulties. As the war progressed French clinicians described a syndrome of reactions called 'la confusion mantale de guire', meaning emotional shock. Similarly, in Germany, 'hysteria' was a common formulation. The causes were explained by psychological conflicts precipitated by battlefield conditions, with such individuals being seen as weak willed.

Ahrenfeldt (1958) reviewed the medical corps perceptions of the British Armed Forces responses and reactions to such traumatised personnel during the two World Wars. He describes how as early as 1917 the concept of 'shell shock' in relation to physical injury was being superseded by the recognition of a mental disorder in need of treatment. Despite this recognition, Stoering (1942) points out how these psychological casualties were viewed as malingerers and exposed to severe personal repression intended to instil regret.

Ormer (1992) argues that the changes in psychological functioning of war veterans has been
increasingly recognised since the mid 1950's. A number of studies have explored this phenomenon in war veterans and prisoners of war (POW). Askevold (1976) referred to 'war sailors syndrome' among sailors from Norway's exiled merchant marines during World War II. He reported symptoms such as fatigue, lack of initiative, irritability, somatic pains, impotence, physiological reactivity, personal and social isolation, nightmares, restlessness and sleep disturbance, impaired memory and concentration difficulties. Similar findings have been reported among POW survivors. Crocq, Hein, Duval and Macher, (1991) completed a postal survey in Russia of 817 members of the Association of Survivors from Tambow and other Russian POW camps. They found 71% reported experiencing enough symptoms to meet DSM-III-R criteria for PTSD. The duration of imprisonment and the severity of experiences such as malnutrition, being wounded, torture and being threatened with death were all powerful predictors of current PTSD.

Op den Velde (1988) described some common symptoms found among war veterans. He reported that there can be a long latency period during which a range of subtle and accumulating changes in mental functioning can occur including an inability to experience emotion, feelings of alienation, isolation, profound distrust and excessive activity. In addition to this Op den Velde, Falger, de Groen, van Duijn, Hovens, Meijer, Soons, and Shouten, (1990) argue that there are 3 distinct developmental patterns of PTSD over lifespan: acute PTSD persisting to a chronic state; delayed onset following a symptom free period; and a fluctuating course with symptoms that manifest up to 5 years after war and fluctuate with symptom free periods.

Rundell, Ursano, Holloway, and Silberman (1989) provided a recent review of all controlled studies examining the relationship between psychiatric disorders and war veterans. The majority of recent studies on war related trauma has been with American war veterans who fought in Vietnam. Rundell et al (1989) found an association between the severity of PTSD and the degree of trauma. They also found similar symptoms among Vietnamese war veterans to previous studies of war veterans, with the most frequently reported symptoms being the experience of traumatic nightmares, reliving of events, detachment, numbness of responses to the external world, guilt, sleep disturbance and exaggerated startle responses. These symptoms, they suggest fall into three clusters: intrusive thoughts; re-experiencing of symptoms; and avoidance and denial.
Since the second World War there has been a gradual increase in the recognition of PTSD symptoms in relation to trauma that is not war related. McCaffrey, Hickley and Marrizo (1989) identified a wide variety of traumatic events reported to produce symptoms of PTSD including motor vehicle accidents, sexual assault, and death of a significant other. They also claim that as with combat related trauma the symptoms of PTSD appear to have no specific time constraints, some develop immediately after exposure to the traumatic event and others after prolonged incubation.

Omer (1992) outlines how PTSD was first introduced in the 1980 edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM, American Psychiatric Association, 1980) and argues that this represented a major conceptual shift compared to previous notions of 'gross stress reactions' and 'transient situational disturbance' that were featured in the first DSM manual (1952). The 1980 manual specified 12 symptoms that comprise the syndrome, these described acute, chronic or delayed manifestation and allowed for the presence of pre-morbid and other current pathology. A number of revisions were made in 1987 including a description of generic characteristics of traumatic stressors requiring them to pose a serious threat to life or physical well being. Also the symptoms were organised around 3 core elements: intrusive re-experiencing; avoidance; and physiological arousal.

This addition to DSM-III-R of the requirement of a specific traumatic event has posed a problem for diagnosticians. There is evidence that PTSD can manifest in response to events that are not singular but rather occurring over a period of time. Scott and Stradling (1994) report treating a number of cases where all but the stressor criteria of DSM-III-R were met. They also present a number of studies demonstrating that not everyone exposed to a major traumatic episode develop PTSD symptoms. They argue that on the basis of this research that a single dramatic trauma is not a sufficient criteria for the development of PTSD symptomatology. They conclude that acute stressors and enduring circumstances may lead to intrusion, avoidance and disorder of arousal whether a single overwhelming experience of great intensity but short duration, or through prolonged duress bought about by a series of unremitting though individually less intense circumstances. They propose the inclusion of 'prolonged stress disorder. The fourth version of the DSM plans to take such arguments
into account, with the addition of criteria for stress disorders resulting from prolonged exposure to
distressing events.

More recently, there has been a growing interest in the degree of violent behaviour engaged in
following the onset of PTSD symptoms. This interest originated in the area of war veterans,
particularly Vietnamese veterans. Rundell et al's (1989) review discussed the relationship between
PTSD among Vietnamese war veterans and subsequent violence. They reported that studies
controlling for pre-service arrest history and problem behaviour during childhood, find a significant
relationship between veterans who have experienced combat and those who have not with regard to
attitudes to violence. However, the propensity to act in a violent way was not demonstrated.
Similarly, Strange and Brown (1970) found that among hospitalised psychiatric patients, those who
were war veterans with experience of combat were significantly more likely than other military
veterans without combat experience, to verbalise aggressive threats. However, physically aggressive
conflicts were not more common.

This interest in increased violence following trauma has now expanded to other areas and recent
research by Hodge (1992) proposes a link between psychopathic disorder, violent behaviour, and
PTSD, arguing that psychopathic disorder has its origins in PTSD consequent on childhood sexual
and physical abuse. This review will explore research to date on PTSD, psychopathic and personality
disorder, and violence in relation to Hodge's model.

Hodge (1992) provides the following model for the link between PTSD, psychopathy and violence.
Firstly, he argues that it is well established that psychopaths are more violent than other offenders.
Secondly, he argues that there is a high prevalence of violent behaviour following the onset of PTSD.
This he suggests, is demonstrated by Collins and Bailey (1990) who explored the relationship with
PTSD and violence in a non-war veteran sample. They included 1140 males recently imprisoned in
the United States. They found using the DSM-III-R, 23% met criteria for PTSD. This sub-sample
were found to be 4.6 times more likely to be incarcerated for homicide, rape or assault and were 6.7
times more likely to have a history of arrest for these types of offences and to have a an arrest for
violence in the year preceding their current incarceration. They also found a significant relationship
between the number of PTSD symptoms and the above factors. In addition they explored this apparent relationship between PTSD and violent behaviour and found that 85% of their sample reported their first PTSD symptom occurring in the same year as, or the year preceding arrest. They conclude that this finding is "consistent with previous findings that PTSD symptoms preceded or occurred at the same time as violent behaviour for most individuals and, thus supports the hypothesis that PTSD may be causally important to the occurrence of violence" (p.216).

Thirdly, Hodge (1992) argues that childhood abuse is a common feature in the histories of those labelled as psychopathic. There is some research to support this (Harris, Rice and Cormier, 1991), but the majority of research in this area focuses on personality disorders. These offer evidence for a relationship between childhood abuse and PTSD. Goodwin (1988) reviewed the symptoms reported to result from physical and sexual abuse in childhood. He reported symptoms such as anxiety, compulsions, sleep disturbance and depression, and a high incidence of aggression. Goodwin suggests that some of these symptoms can be best understood as developmentally mediated manifestations of PTSD. Similarly, McCormack, Burgess, and Hartman (1988) draw a direct link with childhood abuse and the presence of PTSD symptoms.

Fourthly, Hodge (1992) argues that addictive processes might play a part in all types of criminal behaviour, with the common element being that crime is committed to achieve an experience rather than motives such as personal gain or revenge. He cites Peele (1985) who argues that the core element determining addictive behaviour is not an addictive substance, but rather a subjective experience that the individual wished to repeat. This, Peele states, is an 'addiction to experience' which helps explain some addiction phenomenon. Hodge (1992) claims that violence can be associated with an 'adrenaline high', which may become addictive. He argues that with many addictions, the greater the exposure the stronger the compulsion. He draws the link between the war veterans with PTSD described by Solursh (1989) and psychopaths, stating that these war veterans sought out violent experiences and demonstrated other features associated with psychopathic disorder such as impulsivity, social withdrawal, substance abuse and poor interpersonal relationships.
Solursh (1989) found flashbacks and nightmares experienced by a sample of combat related PTSD sufferers. He found 94% described flashbacks and nightmares as exciting, powerful, and a 'high', even if considerable fear was also experienced. In addition, 59% gave histories of seeking physical fights for excitement after leaving the military service; 81% reported involvement in hunting and killing, re-enacting combat in the outdoors and keeping loaded guns very near. 97% were explosive or impulsive; 72% reported substance abuse, mainly alcohol; 86.5% feared and avoided groups; and 36% made serious suicide attempts. The veterans described their re-experiencing combat memories or flashbacks as a 'rush', as an 'addiction to adrenaline', and as providing a similar experience to that of cocaine.

There are a number of problems with this model. Firstly, not all of the symptoms of PTSD overlap with traits that characterise psychopathic disorder. The most incongruent of these seem to be the presence of survivor guilt in war veterans and its absence in psychopaths. Hodge (1992) is arguing that childhood trauma is linked to psychopathic disorder not adult trauma. If one adopts a developmental perspective the trauma leading to PTSD is taking place before or during stages where the child is egocentric and has not fully developed the ability to empathise with emotions experienced by others. Wright (1971) argues that guilt is a product of socialisation and suggests that the emotion of guilt is acquired fairly late in the emotional development of a normal child. The war veterans diagnosed with PTSD experienced their trauma during adulthood, when developmental milestones have been completed. This difference in the experience of survivor guilt may be explained by the timing of the trauma, with childhood trauma effecting the development of emotions and the ability to empathise with others and experience guilt. Also, most childhood abuse is experienced in isolation of others unlike combat and disasters where friends, family or colleagues may die. It is therefore not surprising that survivor guilt is absent.

A further problem with Hodge's (1992) model is that he refers to higher rates of violence among psychopaths, but does not make any references to differences between the genders. There is considerable evidence to suggest that the prevalence of violence is high among men with psychopathic disorder but no such evidence is available on women. Lumsden, Wong, Fenton, and Fenwick (in press) analysed data using a Violence Rating Scale, completed by female patients at
Broadmoor hospital. They found the women were considerably less violent both in terms of their index offence and previous violent behaviour, compared to the men. However, the general prevalence of violence among women is much lower than among men and this study fails to consider the rates of violence by men and women detained in Broadmoor in relation to the general statistics for violent behaviour. It is possible that the rates of violence recorded for women classified as psychopathic disorder is just as relatively elevated as those for the men, in comparison to the general population.

In addition, there is a considerable amount of research indicating that women, particularly those diagnosed as personality disordered, are more likely to engage in self directed violence (Wilkins and Coid, 1991; Simpson, 1976; Turner and Toffler, 1986). Measures of violence such as the Violence Rating Scale, tend only to include externally directed violence, against others.

Despite these problems Hodge's (1992) model offers a stimulating alternative to existing perspectives on the nature of psychopathy and personality disorders. The model must however be considered in relation to the research into the area of psychopathic and personality disorder and violence, and childhood correlates of these disorders, and aggressive behaviour.

**Psychopathic and personality disorder and violence**

A number of studies have demonstrated an association between being diagnosed as psychopathic disorder or personality disorder, particularly borderline personality disorder (BPD) and antisocial personality disorder (ASPD), and high levels of violent behaviour. Firstly, Hare and McPhearson, (1984) have demonstrated a high prevalence of violence among psychopathic disordered offenders. They found that of a sample of 104 criminal psychopaths assessed using the Psychopathy Checklist (PCL), were significantly more likely to have engaged in physical violence and other forms of aggressive behaviour including verbal abuse, threats, and intimidation. Secondly, Snyder, Pitts and Pokorny (1986) have demonstrated an association between BPD and violence. In a study of 4800 psychiatric inpatients, they found a significant association between BPD trait scores and the recent use of violence both within and outside the hospital. Thirdly, Robins, Tipp and Przyback (1991) analysed data collected for the Epidemiological Catchment Area Project, in the United States. They found that of the 628 persons who met criteria for ASPD, 85% had a history of violent behaviour.
These findings are not surprising if one considers the criteria that must be met for a diagnosis of these disorders to be made. As highlighted by a number of authors (Hodge, 1992; Widiger and Trull, 1994) the MHA 1983 definition of psychopathic disorder includes 'a persistent disorder or disability of mind which results in abnormally aggressive or irresponsible conduct'. Secondly, one of the DSM-III-R criteria for BPD is 'inappropriate intense anger or lack of control of anger'. Similarly, one of the DSM-III-R criteria for a diagnosis of ASPD is "a history of repeated physical fights and assaults". The research findings described above are expected and not surprising. Of more importance than the elevated levels of violence among this population is explaining the nature and aetiology of the disorders and the violence that is associated with them.

Childhood correlates of psychopathic and personality disorder

With regard to Hodge's second argument that there would be a high prevalence of violent behaviour following the onset of PTSD, there are a number of studies that indicate an association between childhood trauma, PTSD, and elevated levels of aggression. Harris, Rice and Cormier (1991) followed 169 male offenders released from a forensic psychiatric unit. The PCL-R was used to diagnose psychopathic disorder. They found that 77% of the psychopathic subgroup reoffended, committing a violent offence, compared to 21% of the subgroup not diagnosed as psychopathic disorder. They also found that violent re offending was associated with a history of antisocial and aggressive behaviour in childhood. However, possible causes of this childhood violence were not explored. Research focusing on BPD attempts to address this issue and may provide some explanation for Harris et al's (1991) findings.

Ogata, Silk, Goodrich, Lohr, Westen and Hill (1990) found a higher rate of reported sexual abuse in female patients with BPD compared to a sample of patients with depression. They found 65% of the abused patients with BPD reported multiple abuses either in the number of perpetrators or in the type of abuse, sexual and physical. Abusive experiences were also found to be related to aggressive behaviour. They argued that multiple abuse and perpetrators who are not family members are likely to reflect a chaotic and disturbed family setting and that this is an important factor in addition to abuse in the onset of PTSD. They go on to argue that the experience of abuse may effect the child's ability
to modulate or express affect and that individuals who have experienced extremely traumatic events fail to develop the capacity to deal effectively with emotional arousal, either responding with a disproportionate amount or severe constriction. This may account for the lack of affect observed among adult psychopaths.

In addition to the above Ogata et al (1990) found evidence for an association between sexual abuse and dissociative phenomenon. They suggest that dissociation is a defence mechanism during abuse but in adulthood may be generalised to any situation where intense affect is aroused. Dissociation is often seen in women with BPD. In a recent study of personality disordered men and women with PTSD, Lockmuller (unpublished) found that the symptom 'flashbacks' was significantly higher among the women. This is interesting as anecdotal evidence demonstrated that those women with flashback experiences are often observed in dissociative states. This indicates that flashbacks in adulthood of childhood trauma may present as what is commonly described as dissociation.

Kruttschnitt and Dornfeld (1993) found the more violence children were exposed to the more likely they were to begin offending in early life and to continue offending at an accelerated rate. They cite a number of studies drawing links between abused and neglected children and children exposed to family violence with an array of early behaviour problems including aggression with peers; poor social and academic skills; depressive behaviour; and low self esteem (Reidy, 1980; Pepler and Moore, 1989; Holden and Ritchie, 1991). Similar finding have been demonstrated among personality disordered women who self harm. Wilson and Coid (1991) found that their early family environment was characterised by disruption, deprivation, and sexual and physical abuse.

Widiger and Trull (1994) argue that such studies have consistently demonstrated as association with childhood abuse and adult BPD, to the extent that violent abuse provides a risk factor for adult violent behaviour. However, not all patients with BPD report abusive histories. This does not necessarily mean that abuse has not taken place, many individuals have great difficulty disclosing abuse particularly that of a sexual nature. It is therefore likely that prevalence figures are an under estimation. In addition, it is not yet clear how much of a role developing in a chaotic family setting, where emotional and physical needs are not met, has. Research on POW and concentration camp
survivors with PTSD, indicates that malnutrition among other factors has an impact on the severity of symptoms. These findings offer some support to Hodge's (1992) postulation that childhood abuse is a common feature in the histories of those labelled as psychopathic and personality disordered and that there will be a high prevalence of violent behaviour following the onset of PTSD. However, the majority of these studies have focused on BPD and there is little evidence to support this relationship for psychopathy or the other personality disorders. In addition to this, the research to date does not explain such a link, or examine the pre-morbid levels of aggressive behaviour in the samples studied. Finally, there is an assumption made that the trauma is the abusive experiences, but there is no attempt to demonstrate this.

Hodge's (1992) fourth claim is that an addiction process might explain the high rates of violence and criminal activity among this group. This is an under researched area although there is some supportive evidence from sex offender research (McCulloch, Snowden, Wood, and Mills, 1983). Traditionally, one of the most comprehensive models explaining the origins and maintenance of aggression in children through to adulthood, is that of the Social Learning school of thought. They argue that children who are exposed to violence and aggressive behaviour by significant adults, during childhood will model this behaviour. Behavioural mechanisms of generalisation and reinforcement will then serve to maintain and develop this aggressive behaviour (Bandura, 1973).

The addiction model is limited to the explanation of the maintenance of criminal and violent behaviour but not the aetiology of these behaviours. There are some models that have attempted to address how PTSD in childhood is related to dysfunctional behaviour in adulthood. Firstly, Finkelhor (1987) claims that PTSD does not have a clearly developed and formulated theory. As a model it is mostly a syndrome defined by a group of symptoms rather than an explanation of how symptoms develop. He goes on to state that the "problem with sexual abuse victims is not their failure to integrate the sexual abuse experience but what might be called 'over integration' of the experience, that is they take the behaviour learned in the abusive situation and apply it indiscriminately to other situations where it is not appropriate" (p. 353).
Secondly, Jehu (1991) proposes two models that explain how post-traumatic stress reactions are acquired and maintained. Firstly, he refers to Mowrer's (1960) learning model. Mowrer proposes that the child commonly reacts with fear and disgust to the experience of abuse. This reaction becomes classically conditioned to any features present during the abuse and these can then become triggers or similar reactions in the future. In addition stimulus generalisation can occur resulting in stress reactions to a wide range of stimuli. The victims then acquire ways of avoiding these triggers, which reduces the frequency of these unpleasant reactions. This results in 'avoidance learning'. Jehu (1991) suggests that although this avoidance may be functional during childhood, in adulthood it can be maladaptive in non abusive situations. The second model is Beck's cognitive model (Beck and Emery, 1985). This emphasises the process of cognitive mediation and the meaning that the child places on the abusive experience. They may blame themselves and consider themselves defective because it happened. Such meaning is likely to result in dysfunctional beliefs developing which adversely effect the way in which the person interprets their experiences and their own and other's behaviour.

Treatment

Hodge (1992) argues that his addiction model to violence has implication for treatment. He proposes adopting methods developed for addictions to alcohol and drugs such as Marlatt and Gordon's (1985) 'Relapse Prevention' model. Anecdotal evidence indicates that clinicians are adopting this approach although currently there is little evidence for its effectiveness.

Herman and van der Kolk (1987) argued that the treatment of adult patients who have experienced trauma during childhood, should focus on the trauma and re-integrate such experiences into the total personality. Burges Watson (1989) however, argued that early recognition and validation of the subjective experience of past trauma is extremely helpful, but the timing of exploration of the trauma, if at all, must be left to the patient.

Jehu (1991) offers a more detailed prescription arguing there needs to be three concurrent processes. Firstly, there needs to be exposure to triggers of stress reactions within the safety of therapy. This might involve helping the client to recall traumatic memories, using imaginal desensitisation or
flooding whilst using muscle relaxation. Secondly, less dysfunctional coping strategies need to be taught, such as deep muscle relaxation and distraction techniques. This needs to involve procedures to help ground and increase awareness of reality during flashbacks or dissociation. Thirdly, the dysfunctional beliefs need to be identified, challenged and more accurate alternatives developed. The effectiveness of interventions such as these has yet to be explored with psychopathic and personality disordered adults.

Conclusion
As with other perspectives on psychopathic and personality disorder, there is a lack of a comprehensive model explaining precisely how these disorders develop and are maintained. This is clearly an area of interest to both clinicians and researchers of such disorders. Although Hodge's (1992) model offers an interesting new perspective of Psychopathy, it only achieves a superficial formulation of its aetiology. However, it does provide a new area for research which may prove fruitful. It also provides some welcome new approaches to treatment.

BIBLIOGRAPHY


SECTION 3. CLINICAL

THE ASSESSMENT OF PERSONALITY DISORDERED WOMEN ON LEEDS WARD BROADMOOR HOSPITAL: A CLINICAL DEVELOPMENT
INTRODUCTION

Patients entering the special hospital system receive a legal classification providing a general description of their mental health problem. There are four possible legal classifications under the English Mental Health Act (MHA) 1983 the two main being either 'mental illness' or 'psychopathic disorder'. Mental impairment and severe mental impairment constitute the other two. In addition to this legal classification a psychiatric diagnosis of the disorder will be made on admission and reviewed throughout the patient's stay. This clinical development is based on a ward which cares primarily for personality disordered women. Personality disorders are normally classified under the psychopathic disorder category unless accompanied by a mental illness in which case a dual classification of mental illness and psychopathic disorder may be given.

The term psychopathic disorder has aroused considerable controversy regarding both its existence, definition and operationalisation. Jeremy Coid, a forensic psychiatrist with a special interest in personality disordered offenders, is sceptical about the existence and the usefulness of the term 'psychopathic disorder'. He suggests two main uses for the term. Firstly, it is a legal category of mental disorder within the 1983 MHA and secondly, it is a generic term to "encompass a wide range of poorly delineated psychopathology exhibited by individuals with severe personality disorder who exhibit antisocial or other dysfunctional social behaviours" (Coid, 1993, p. 113). Coid is not alone in his scepticism regarding the term. Other researchers such as Blackburn (1992) and Walker and McCabe (1973) also question the value of this concept with the latter describing it as having no explanatory, descriptive, prognostic or therapeutic function and suggesting that in practice it is used as a pseudo-diagnosis label attached to a group offenders with abnormalities.
Blackburn (1992) views the term 'psychopathic disorder' as purely an administrative category under the 1983 MHA and argues that it is not a validated psychiatric category and provides no basis for treatment planning. He suggests that psychiatrists make sense of this legal category by translating it into clinical concepts of personality disorder. In doing this Blackburn accepts the admission of psychopaths for treatment may be justified as their socially deviant behaviour can be seen as a function of an identifiable personality disorder. He conceptualises the personality disorders as "inflexible interpersonal styles supported by expectations of others which are self fulfilling prophecies..." (p. 66, 1992). He argues that they can be present in both psychopathic disorder and mental illness legal categories.

The debate regarding operationalisation of psychopathic disorder and its relationship, if any with personality disorder is ongoing. Blackburn (1990) argues that psychopathic disorder is commonly equated with personality disorders, with the Diagnostic and Statistical Manual (DSM-III-R) category of 'antisocial personality disorder' being the closest. Coid (1993) argues from a similar perspective stating that the psychopathology associated with psychopathic disorder has never fitted easily into the various classifications of personality disorder but is most commonly equated with 'dissocial personality disorder' in the Classification of Mental and Behavioural Disorders (ICD-10) and 'antisocial personality disorder' in DSM-III-R. These two diagnostic tools are quite similar with both identifying a number of personality traits that must be present for each of the personality disorders they outline. The DSM-III-R has been widely used in a number of research studies and will be the main focus for this clinical development.

The DSM-III-R focuses on the presence of specific personality traits emphasising these as enduring patterns of perceiving, relating to and thinking about the environment and oneself. These traits constitute a personality disorder when they are 'inflexible and maladaptive' and result in social dysfunction or subjective distress. Characteristics describing 'antisocial personality disorder' include conduct disorder before, and irresponsible and antisocial behaviour since age fifteen, impulsive and reckless behaviour and a lack of consistent attachments and a lack of remorse. A critical review of contemporary theories regarding the difficulties surrounding the operationalisation of psychopathic disorder and its relationship to the personality disorders is provided earlier in this portfolio.
When an offender receives a hospital order under the MHA (1983), the thrust of his or hers detention is treatment rather than punishment. Before appropriate treatment can be offered a diagnosis of the mental health disorder along with an assessment of the patients problem areas is required. Given the controversy regarding the term 'psychopathic disorder' and its relationship to personality disorder this appears a difficult if not impossible task. Blackburn (1993) is one of many authors who have commented on the difficulties arising for mental health services from this diversity of opinions regarding the definition of a psychopath and highlighting its relationship to treatment. He promotes the need for a clear classification system which distinguishes classes of criminal acts and types of criminal. He uses the term classification to refer to the grouping of entities through clinical assessment and diagnosis. He outlines three main purposes: Firstly, for management issues within the penal system to ensure different types of criminals are disposed of in appropriate ways; secondly, to facilitate treatment and thirdly, to enhance theoretical understanding.

ASSESSMENT BACKGROUND
A number of studies have highlighted the difficulties mental health services have in treating the psychopathic population. In their study at Broadmoor, Dell and Robertson (1988) found that in general psychiatrists had difficulty specifying treatment needed and that treatment was rarely specified on admission. These results were echoed in a study by Collins (1991) at another special hospital. Blackburn (1992) believes that to assess treatability we need to be able to "specify the nature of the disorder to be treated, the targets of therapeutic change and the nature of the interventions which may achieve those targets " (p. 67). Clearly, to achieve such detailed information a thorough and comprehensive assessment protocol is required. This is an area that has attracted considerable debate and diversity of opinion. Recently, the issue of treatability has arisen generating questions relating to the appropriateness of a hospital order for those defined as psychopathic. Given that a substantial number of the Broadmoor population (22.1%) are legally classified as psychopathic disorder (16.7% men and 5.4% women) and a further 8.9% (6.4% men and 2.5% women) have a dual classification debates such as this are particularly relevant. If these offenders are to be detained in hospital for treatment then a comprehensive assessment protocol that clearly outlines target areas for treatment must be developed.
Although issues relating to both the definition of psychopathy and its treatability have been around since the 19th century, the addition to the 1983 MHA, of the clause requiring psychopaths detained in hospital to be treatable, has revitalised this debate. The Special Hospitals Service Authority (SHSA) have responded by setting up a multi-disciplinary advisory group to explore these issues. The working groups terms of reference being specifically to consider the role of the special hospitals in the assessment and treatment of the personality disorders associated with offending and challenging behaviour. They reported that there are people who fit the 1983 MHA criteria for psychopathic disorder, but doubted that they constitute a clinically homogenous group.

They suggested that the legal criteria is too broad and the clinical criteria disputed thus leaving the legal classification open to abuse. In addition a wide range of models for conceptualising psychopathic disorder were identified none of which were entirely satisfactory. They concluded that the best way forward would be through systematic comprehensive multi-disciplinary assessment. Diagnosis alone was felt to be a useful working tool but did not begin to identify possible treatment programmes and that a thorough assessment should describe the patient as clearly and completely as possible, identify management and treatment objectives, interventions and desired change. They suggested that without an overt definition of the problem to be addressed it is difficult to offer appropriate treatment or to demonstrate change and evaluate interventions.

The advisory group report (1993) went on to summarise that the principle goals of the assessment of a patient with personality disorder should be:

1. 'To identify and describe the enduring cognitive, emotional and actional strengths and weaknesses of the patient'.
2. 'To identify those aspects of the patient's environment, and especially his social environment, including his family, which have reinforced the patient's strengths and challenged the weaknesses'.
3. 'To determine appropriate treatment'.
4. 'To predict likely course with treatment and likely course without it'.
5. 'To demonstrate change, or lack of it and plot the real progress against predicted course'.

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6. 'To identify those factors in therapy and in the environment which diminish pathology in the patient and those (not necessarily different) which promote health and enhance adaptive functioning, particularly where those factors are likely to be replicable outside special hospital. To note any damaging effects of therapy'.

Debates regarding treatability seem premature when such diversity exists about the concept and nature of the disorder to be treated. The development of an assessment protocol that clearly identifies a variety of aspects of the individual and lends itself to the development of specific and measurable treatment goals is clearly attractive. This clinical development is based on recent literature and discussions on the classification and treatability of psychopathic and personality disorder. Currently, I am based on a ward for young personality disordered women. As part of my role as team psychologist for the ward it was agreed that I, along with the Responsible Medical Officer (RMO) and the rest of the multi-disciplinary team would attempt to develop a workable assessment protocol for these women.

WOMEN IN SPECIAL HOSPITAL

The referral rate of women to Special hospitals, per annum is fairly constant with approximately 90 each year. In October 1994 there were a total of 26 women legally classified as psychopathic disorder detained at Broadmoor hospital and a further 12 with a dual classification. The average age of women was 38.08 years with the average length of stay being 8.21 years.

The SHSA services for women patients report by Charles Kaye (1994) describes some of the differences between the male and female population in the special hospitals: Firstly, compared to the offender population there is a higher proportion of women in special hospitals; secondly, women are more liable to be sent for psychiatric treatment after conviction for crimes that men would ordinarily be imprisoned; and thirdly, women in the specials have much lower rates of reoffending than their male counterparts. In addition to this he describes some of the characteristics of these women:

Firstly, over 50% have suffered from long-term or episodic physical, sexual or psychological abuse or neglect;
secondly, the prevalence of eating disorders is high;

thirdly, there are higher incidents of suicidal thoughts, attempts, depression and incidents of self harm;

fourthly, feelings of worthlessness, low self-esteem, isolation, guilt and anger are prevalent;

fifthly, treatment has predominantly been dependent on medication to reduce primary symptoms; and

finally there is a possibility of misdiagnosis in a significant number of cases with the largest group of women predominantly suffering from borderline personality disorder.

CURRENT ASSESSMENTS FOR LEEDS WARD

As mentioned earlier Leeds ward is primarily a ward for personality disordered women although there are a small number of mentally ill patients who reside there. At any one time it has the capacity to house 23 patients. At the time this assessment package was first used the population consisted of thirteen women with the legal classification of 'psychopathic disorder', four with the legal classification of 'mental illness' but also had a personality disorder diagnosed and six with the sole classification of 'mental illness'. A variety of index offences had been committed by this sample (the index offence is the offence that precipitated being admitted to Broadmoor). The most common index offence was arson and the second most common was murder or manslaughter.

Of the women classified as 'psychopathic disorder' or 'mental illness' with a personality disorder, age at first conviction ranged from 10-22 years with five before age 15 and nine after age. Age for first contact with mental health services ranged from 5-26 years with seven before age 15. Sixteen had been hospitalised prior to Broadmoor with age at first hospitalisation ranging from 13-20 years with four hospitalisations before age 15. Twelve had served time in prison ranging from 1-4 previous sentences and fourteen had previous convictions, 5 before age 15. With regard to family background 5 were married. Eleven had been raised in, or spent time in children's homes, or raised by foster or
adopted parents. Ten reported experiencing sexual abuse and four physical abuse. Fourteen reported drug abuse prior to Broadmoor and fifteen alcohol abuse. Finally, fifteen currently engage in self harm.

Currently, at admission all patients are assessed by a clinical psychologist. This includes a neuropsychological assessments and the gathering of information about the patients past and possible triggers to their index offence. The multi-disciplinary clinical team agreed that when patients move on to Leeds ward there is a need for additional information that might help develop a more sophisticated understanding of the nature of personality disorder and difficulties among the women residing on Leeds ward. It was felt that a multi dimensional assessment procedure would be an appropriate way forward. The aim of this would be to obtain descriptive and diagnostic information and to highlight particular problems and issues that treatment could address.

Personality disordered women who offend have received little attention in the literature. Bridgitte Dolan and her colleagues are in the process of developing an assessment package specifically for female offenders. This work is being conducted at the Henderson Hospital, which is a therapeutic community specialising in personality disorder and at Holloway prison for women. The assessments used by Dolan and her colleagues include the Personality Diagnostic Questionnaire-Revised, the Borderline Syndrome Index, the Irritability, Depression, Anxiety Scale and the Eating Attitude Test. It was agreed that this package should be included given the sparcity of relevant literature. In addition to this a number of other assessments were selected both in an attempt to formalise a number of behaviours and traits commonly seen in this population and in relation to the characteristics identified in Charles Kaye's (1994) report. The assessments utilised for this purpose fall into four main areas: 'psychiatric classification'; 'personality traits'; 'cognitive style'; and 'interaction style'.

ASSESSMENT PROCEDURE

1. PSYCHIATRIC CLASSIFICATION

Assessments were selected that provide a diagnoses of the type of personality disorder. In addition to this, Charles Kaye's report highlighted the issue of misdiagnosis with the possibility that a significant
number of women are in fact suffering from borderline personality disorder. As this possibility seems supported by clinical observations an additional measure for this was included. A measure for eating disorders was also included again to reflect Charles Kaye's report and because a number of women display symptomatology indicative of eating problems.

PERSONALITY DIAGNOSTIC QUESTIONNAIRE-REVISED (PDQ-R) (Hyler, Reider, Spitzer and Williams 1987)

This is a 162-item self-report questionnaire assessing abnormal personality using diagnostic criteria for the 11 types of personality disorder described in DSM-III-R (American Psychiatric Association, 1987). The PDQ-R can also be grouped within the three personality disorder clusters as described in the DSM-III-R. Cluster A includes paranoid, schizoid and schizotypal, cluster B, narcissistic, histrionic, borderline and antisocial and cluster C, avoidant, dependent, obsessive-compulsive, passive-aggressive. Marshall and Barbaree (1984) suggest that the common factors between the cluster A personality disorders are egocentricity and oddness. For cluster B self centredness is the unifying feature and cluster C is characterised by anxiety and fearfulness.

Included in this measure are criteria for DSM-III-R 'antisocial personality disorder' (ASPD). This is of particular interest firstly, because of the recent literature drawing parallels with the concept of psychopathy. Widiger and Trull (1994) summarise the research literature exploring the relationship between ASPD and Psychopathy and violence and conclude that the presence of these personality disorders increases the likelihood that a person will at sometime engage in a violent act.

It is also of interest because there are a number of studies looking at ASPD in women offenders. Reiger, Myers, Kramer, Robins, Blayer, Hough, Eaton and Locke (1984) found that men were four times more likely than women to be diagnosed as ASPD. Brownstone and Swaminath (1989) reported an association between a history of violent crime and personality disorders in a sample of 91 females in a psychiatric forensic unit. Approximately equal numbers were given diagnoses of antisocial and histrionic personality disorder. The females with ASPD were characterised as being more unstable and impulsive than the prototypic men with the same diagnoses.
The BSI is a 52-item self report questionnaire developed by Conte et al (1980) to provide an assessment of the borderline syndrome that would increase information available to clinicians. Included are criteria for characteristics that researchers have cited as important. The most discriminating being those concerned with impaired object relations, impulsivity, emptiness and depression, depersonalisation and lack of self-identity. Conte et al (1980) found that the index significantly discriminated borderline patients from schizophrenic inpatients, depressed outpatients and normals.

Anecdotal evidence and clinical impressions are suggestive of a high prevalence of borderline personality disorder (BPD) among the women detained in Broadmoor hospital and particularly Leeds ward. Coid (1992) completed a study of male psychopaths detained in an English special hospital, female psychopaths detained in three English special hospitals and male prisoners in special units for the highly dangerous disruptive. He found that the prevalence of BPD and ASPD was high with 91% of the women meeting criteria for BPD. He also found that ASPD was frequently accompanied by BPD. For these reasons an additional measure to the PDQ-R was selected.

There are two main definitions of this disorder available, one highlighting the presence of psychotic symptoms as if on the border of developing schizophrenia. The second, being based on psychoanalytic theory highlighting the lack of integration of the superego and a lack of identity integration. Gunderson and Singer (1975) completed a review of the literature relating to this concept. They identified several characteristics that most investigators believed to be characteristic of this population. The six features identified are:

1. the presence of intense affect, usually of a hostile or depressive nature;
2. a history of impulsive, often destructive behaviour;
3. a superficial social adaptiveness;
4. brief psychotic experiences;
5. bizarre responses on unstructured psychological tests; and
6. superficial or intense manipulative interpersonal relationships.
In addition to these characteristics Grinkler, Werble and Drye (1968) identified 'lack of a coherent self identity as important. The diagnostic criteria for BPD according to DSM III-R includes 'inappropriate, intense anger or lack of control of anger, e. g. frequent displays of temper, constant anger, recurrent physical fights' (APA, 1987, p. 347).

Widiger and Trull (1994) have observed that a significant proportion of BDP patients have a history of childhood sexual or physical abuse and that this is correlated with abusive behaviour as an adult. They found that in a study of 29 patients who reported early sexual abuse, BPD was the most frequently diagnosed personality disorder. This is particularly interesting to our population as many of the women have made allegations of sexual abuse which was often accompanied by physical abuse. Shearer, Peters, Quaytman and Ogden (1990) assessed the frequency and correlates of childhood sexual and physical abuse in a sample of female BDP inpatients. Forty per cent reported a history of sexual abuse, 28% of incest and 25% of physical abuse with injury. Eighteen per cent were categorised as the most severe abuse of prolonged duration or with multiple perpetrators. Widiger and Trull (1994) reviewed several studies of this nature on victims of abuse and on patients with BDP and consistently found an association of childhood abuse with adult BDP. This is to such an extent that they hypothesis that violent abuse during childhood is a risk factor for adult violent behaviour and that a diagnosis of BDP may also act as a risk factor for violent behaviour. However they report that clinical anecdotes of BPD patients describe impulsive, violent behaviour but that this is most commonly of a self-destructive and suicidal nature and directed towards the self.

THE EATING ATTITUDE TEST (EAT-26) (Gamer, Olmstead, Bohr and Garfinkel, 1982)
The EAT-26 is a 26-item questionnaire which assess disordered eating behaviour and attitudes towards weight and shape. Gamer et al (1982) developed the original 40-item EAT (Gamer and Garfinkel, 1979) which was a measure for anorexia nervosa, to include factors related to bulimia, weight and body image. Three Factors are included in the scale, Factor I, relates to anorexia with items reflecting body size overestimation and dissatisfaction. Factor II, relates to bulimia and food preoccupation and Factor III, to 'oral control comprising of items reflecting self-control about food. The EAT-26 has been found to reliably differentiate between clients with eating disorders and the general population (Gross, Rosen, Lettenbergh and Willmuth, 1986).
This measure was included as part of the Dolan assessment package. It was also thought relevant because of clinical impressions that a number of the women appear to have difficulties surrounding their intake and use of food. It was also identified as an area of concern in Charles Kaye's report.

2. PERSONALITY TRAITS

These assessments were aimed at identifying particular traits for each individual. They were selected to cover a variety of personality aspects and to tap clinical presentations frequently observed on the ward.

EYSENCK PERSONALITY QUESTIONNAIRE-REVISED (EPQ-R) (Eysenck and Eysenck, 1975)

Eysenck's work on personality has attempted to describe the major patterns of behaviour and the main dimensions of personality. In 1947 he proposed the existence of two major dimensions these have been called 'Extraversion-Introversion' and 'Neuroticism', emotionality or instability. He later added a third dimension "psychoticism" stating that the three are entirely different dimensions. Eysenck argues that these dimensions have a genetic basis and that psychiatric abnormalities are essentially continuous with normality.

The revised EPQ is a 90 item self-report questionnaire which measures these three dimensions. In addition to this a 'Lie' scale is included which measures a tendency to "fake good". The typical 'Extravert' is described as sociable, craving excitement, impulsive, easy-going and volatile, whereas the 'Introvert' is quiet, introspective, plans ahead, dislikes excitement, is reliable, pessimistic and keeps his feelings under control. The typical high scorer on 'Neuroticism' is anxious, a worrier, moody, frequently depressed, overly emotional resulting in irrational reactions and prone to psychosomatic disorders. When combined with extraversion such an individual is likely to be restless, excitable and frequently aggressive. A high scorer on 'Psychoticism' is typically solitary,
lacking in feeling and empathy, hostile, disregards danger and tends not to fit in (Eysenck and Eysenck 1975)

A number of researchers have found similarities between Eysenck's concepts of personality dimensions and the personality disorders outlined in the DSM-III-R. (Pilkonis, 1988; Wiggins and Pincus, 1989; Widiger and Trull, 1992). They have suggested that the autonomy and introversion constructs closely resemble the diagnosis of avoidant and schizoid personality disorder whilst the constructs of neuroticism and negative affectivity resemble the borderline personality diagnosis.

This measure was included partly because it is a well researched measurement tool and because it has some affinity with the DSM-III-R. In addition to this the lie scale provides a measure for the extent that the individual attempts to present themselves in a good light.

SENSATION SEEKING SCALES (SSS) (Zuckerman, 1979)

The SSS was developed as a measure of individual differences in optimal levels of stimulation and arousal. It has been related to various traits, cognitive and perceptual styles and different types of experience. This self-report questionnaire has 40 items representing four subscales: Thrill and Adventure Seeking; Experience Seeking; Disinhibition; and Boredom Susceptibility. Thrill and Adventure Seeking consists of items expressing desires to engage in sports or activities involving physical danger or risk. Experience Seeking contains items describing the desire to seek new experiences through the mind and senses by a non conforming life style with unconventional friends and through travel. Disinhibition contains items describing the need to disinhibit behaviour. Boredom susceptibility contains items indicative of an aversion for repetitive experience of any kind, routine, work or dull or predictable people. Items also indicate a restless reaction when things are unchanging.

The postulation of a link between optimal levels of arousal and psychopathy has been around for some time. The basis of the connection is outlined in Zuckerman's book 'Sensation Seeking' (1979), and seems to derive from Quay (1965), who hypothesised that psychopaths are pathological sensation seekers. Zuckerman (1979) suggests that ordinary social stimulation and work activities provide a
low intensity of arousal resulting in the need to stir up excitement. When this is combined with a lack of empathy for others it can result in unbelievable cruelty occurring not out of anger, retribution, or gain, but for sadistic pleasure.

A number of studies have used the SSS to explore the relationship between psychopathy and sensation seeking. Zuckerman (1979) suggests that the 'Disinhibition' scale is the most likely to be associated with psychopathy. In a study of male undergraduates this scale was correlated with the 'psychopathic deviate' measure on the Minnesota Multiphasic Personality Inventory. Similarly, Blackburn (1978) found the 'disinhibition' scale to be the most discriminating between primary and secondary psychopaths and between non psychopathic prisoners. Primary psychopaths achieved the highest scores on all scales, particularly 'disinhibition' and 'thrill and adventure seeking'. Finally, Thome (1971), compared groups of male and female felons with a group of psychiatric patients. Significant differences in the scores for female felons compared to psychiatric patients were found, with female felons scores being the highest.

This measure was included as an attempt to identify patients who do seek sensation. This might then be explored in relation to their offending behaviour and alternative more acceptable ways of achieving arousal could be explored.

GUDJONSSON SUGGESTIBILITY SCALE (GSS-2) (Gudjonsson 1987)

This measure has been developed by Gudjonsson as a tool for measuring interrogative suggestibility. This is defined by Gudjonsson (1986) as "the extent to which, within a closed interaction, people come to accept messages communicated during formal questioning, as the result of which their subsequent behavioural response is affected" (p. 84).

The scale measures suggestibility and compliance. Gudjonsson argues that these two concepts are quite distinct with suggestibility implying a "personal acceptance of the proposition offered" and compliance referring to a "tendency of the individual to go along with propositions, requests or instructions for some immediate or instrumental gain."(Gudjonsson, 1992, p.137). He also argues that there are two major components to compliance, the first being an eagerness to please and the need of
the person to protect his or her self esteem and secondly, an avoidance of conflict and confrontation particularly with those perceived as in authority. A third concept included in the scale is that of Acquiescence. This is similar to suggestibility with the difference being that when respondents are unsure of a response they answer in the affirmative.

Gudjonsson and Clark's (1986) theoretical model construes suggestibility as arising out of the way the individual interacts with others within the social and physical environment. The basic premise being that interrogative suggestibility is dependent upon the coping strategies that people generate when faced with uncertainty, (that is not knowing the right answer), expectations (that is feeling they are expected to know the answer) and interpersonal trust (that is believing the interviewer to be genuine). They claim that although stable over time due to cognitive factors, such as memory and intelligence and personality factors, such as self-esteem, method of coping with stress, anxiety proneness and dependence upon social approval, suggestibility is potentially situation bound. They suggest four main components. Firstly, suggestibility involves a questioning procedure within a closed social interaction, secondly, the questions mainly concern past experiences and events, recollections and remembered states of knowledge, thirdly, there is a strong component of uncertainty and fourthly, it commonly involves a highly stressful situation with important consequences for the individual. In addition to this they argue that negative feedback is influential and that this can be explicit or implicit such as the repeating of the same question several times indicating that the interviewer is not accepting the previous answer.

The Suggestibility scale involves immediate and delayed recall of a short story. This provides an indication of memory capacity and deterioration. Twenty questions are asked about the story including fifteen which are leading. Following this the respondent is informed that a number of their responses were inaccurate and that they will be asked the questions again and that they should try to be more accurate. This provides a score indicating the number of responses changed after negative feedback and a total suggestibility score.

This measure was included for two main reasons. Firstly, a number of women on Leeds ward present with varying degrees of poor memory recall, making it difficult to assess the accuracy of information.
provided about their past and in particular the development of their difficulties. Secondly, a number of women describe symptoms that have a psychotic flavour but with varying descriptions and explanations about the symptoms at different times. This makes it difficult to determine whether the symptoms are truly psychotic, or if the patient is adopting symptoms presented by other patients or if the patient is attempting to please medical staff during interview when leading questions may be asked. One hypothesis for this ambiguity maybe that they are suggestible both to others symptoms, adopting and presenting them to staff, or that they are suggestible to leading questions during interview. It was thought this suggestibility measure may help to shed light on the reliability of patients accounts of these unusual phenomenon.

**DISSOCIATIVE EXPERIENCES SCALE (DES) (Bernstein and Putnam, 1986)**

The DES has been developed as a tool to reliably measure dissociation in normal and clinical populations. It is a 28-item self-report questionnaire. Bernstein and Putnam (1986) describe dissociation as being "...a lack of normal integration of thoughts, feelings and experiences into the stream of consciousness and memory." They suggest that it occurs to some degree in normal individuals but is more prevalent in people with a major mental illness.

Dissociative symptoms are increasingly being recognised as part of the psychopathology of a number of psychiatric disorders. The DSM-III recognised five dissociative disorders: 'psychogenic amnesia'; 'psychogenic fugue states'; 'depersonalisation syndrome'; and 'atypical dissociative disorder' (APA, 1980). In addition to this other researchers have noted dissociative experiences as part of the psychopathology of disorders such as post-traumatic stress disorder (Blank, 1985) and eating disorders (Pettinati, Home, and Staats (1985).

Bernstein and Putnam, (1986) found that subjects with post-traumatic stress disorder achieved high scores on the DES. This is consistent with descriptions of dissociative symptomology such as that described by Blank (1985). The multiple personality disorder subjects obtained the highest scores and these were considerably higher than the other groups. Again this is consistent with other researchers
characterisations of multiple personality disorder as the most severe of the dissociative disorders (Putnam, 1985; Speigel, 1984).

This measure was included again to explore some of the symptoms presented that have a psychotic flavour, such as feeling the presence of, hearing the voice of, or smelling a particular person or people who are not present. These type of symptoms are commonly seen on the ward as mentioned above and they have a psychotic flavour. As a large proportion of women have made allegations of sexual and or physical abuse experienced during childhood, it may be that they are dissociating and having flashbacks of the trauma. It was hoped this measure might help to untangle the difficulties in distinguishing truly psychotic symptoms from other types of experiences. This is a particularly important issue when considering the use of psychotropic medication.

STATE-TRAIT ANXIETY INVENTORY (Speilberger 1983)

Speilberger (1983) describes anxiety as an unpleasant emotional state or condition which also describes relatively stable individual differences that are personality traits. The concepts of state and trait anxiety were originally introduced by Cattell (1966) and have been elaborated on by Speilberger (1983) who suggests that an emotional state exists at a given moment at a particular level of intensity whereas trait anxiety refers to relatively stable individual differences in anxiety proneness.

Speilberger (1983) goes on to suggest that "anxiety states are characterised by subjective feelings of tension, apprehension, nervousness and worry and by activation or arousal of the automatic nervous system" (p.1) and that these are often transitory and can recur when evoked by appropriate stimuli and persist in the presence of these stimuli. Speilberger describes trait anxiety as differing in that it is a relatively stable way of perceiving and reacting to the world. These individual differences in anxiety proneness refer to differences in perceptions of situations as dangerous or threatening and responses which elevate the intensity of state anxiety. This trait anxiety may also reflect individual differences in the frequency and intensity that anxiety has been experienced in the past and the probability that it will be experienced in the future. Speilberger also claims that individuals with high
trait anxiety are more likely to respond with a greater intensity of state anxiety in situations that involve interpersonal relationships and threaten self esteem.

The State-Trait Anxiety Inventory (STAI) includes two self report scales, one measuring state anxiety and the other trait anxiety. The state anxiety scales includes twenty items measuring how the respondent feels at that moment. The trait anxiety scale also consists of twenty items but these measure how the respondent generally feels.

This measure was included as clinical impressions indicate that many of the patients experience excessive anxiety over a variety of situations. It was thought that this measure would help to quantify this and help identify those patients who are more generally prone to anxiety from those who experience transitory anxiety to specific triggers.

3. COGNITIVE STYLES

The assessments included in this section were an attempt to measure aspects of the individuals cognitive functioning and the way in which they perceive and make sense of themselves and others. Recent literature indicates that cognitive-behavioural therapies may have much to offer personality disordered patients if thorough assessments can be completed and specific treatment goals identified. It was therefore felt important to measure some aspects of cognitive functioning that are frequently identified as causing problems.

BECK DEPRESSION INVENTORY (Beck and Steer, 1987)

Widiger (1993) suggests that personality disorder and depression can relate in four ways. Firstly, there can be a predisposition to the development of depression, secondly, its occurrence can result in the personality being fundamentally altered, thirdly, both personality and depression can effect each other's manifestation and fourthly, personality and depression can represent overlapping manifestations of the same underlying aetiology. Widiger goes on to suggest that the "distinction between personality and depression is in some respects a distinction between traits and states" (p.78),
but he does not claim that they are mutually exclusive, or distinct constructs. He argues that some cases of depression can be classified as either states or traits with depression being a disorder involving a trait vulnerability that at times is expressed in states of depressed mood. He concludes that the distinction between personality and depression is not an absolute distinction of traits versus states and that many personality traits involve disorders of mood. Finally, he claims that personality traits that result in mood disorders are in fact maladaptive personality traits and if they cause significant functional impairment or subjective distress that they constitute personality disorders."

The Beck Depression Inventory (Beck and Steer, 1987) is a 21-item self report instrument designed to assess the severity of depression in adolescents and adults. Items included were selected to assess the severity of depression and not to reflect any particular theory of depression. It is widely used both in clinical psychology and psychiatry to measure the intensity of depression in psychiatric patients.

This measure was included as all of the women on the ward have at some point displayed symptoms of depression that not uncommonly become so severe that a pharmacological intervention has been prescribed. In addition depression is a common problem and frequently diagnosed in a variety of psychiatric patients and there would be a large omission if any assessment procedure were did not include a measure of depression. The BDI is a recognised measurement tool for depression and is commonly used in the hospital as well as on Leeds ward.

CULTURE-FREE SELF ESTEEM INVENTORY (SEI) (Battle, 1986)

The Culture-Free SEI for adults is a 40-item self report measure with four subscales: General self esteem; Social self esteem; Personal self esteem; and a Lie scale that indicates defensiveness. General self esteem measures who the individual feels about their day-to-day functioning. Social self esteem measures how the individual feels about their interpersonal relations and Personal self esteem measures how the individual feels about themselves. The SEI has been used for research and clinical practices and has been found to successfully identify individuals who may require psychological intervention. It is also an effective measure of affective mood states and is related to a number of other psychological disorders. Battle, (1980) found that depressed individuals frequently posses a low
self-esteem. He also found that it correlates favourably with other measures of personality including Beck's Depression Inventory.

Self-esteem is not only implicated in depression but can affect a person's general functioning. Rusbult, Morrow, and Johnson (1987) found self-esteem to effect problem-solving behaviour within close relationships. In addition to this, as mentioned above, self-esteem is negatively related to levels of suggestibility and compliance.

Clinical impressions indicate that low self-esteem is a chronic problem across the whole hospital. As outlined, low self-esteem can affect a variety of aspects on the individual's functioning. It was therefore felt that some measure of self-esteem was crucial. The Culture-free Inventory, again, is a respected and widely used tool across the hospital and has regularly been used with Leeds ward patients.

THE GUDJONSSON BLAME ATTRIBUTION INVENTORY (GBAI) (Gudjonsson and Singh, 1988)

Gudjonsson (1988) describes attribution as the process by which individuals attempt to construct causal explanations for their behaviour and the behaviour of others. Snyder (1976) suggests two types of attribution that are relevant to offender populations. The first being 'internal attribution' which occurs when the individual explains the cause of a behaviour as being part of their personal qualities. The second is 'external attribution' which occurs when the cause of a behaviour is placed upon social and environmental pressures. Gudjonsson (1984) adds a third type of attribution to this list 'mental element attribution' which refers to the individual's perception of whether they had free choice to act or lost control due to mental causes.

Gudjonsson (1984) developed an inventory to measure how offenders attribute blame for their criminal acts. This was revised by Gudjonsson and Singh (1988). The inventory is a 42 item self-report questionnaire and consists of three factors: 'external attribution' which measures the extent to
which the offender blames the crime on external factors such as social circumstances, victims or society; 'mental element attribution' which measures the extent to which the offender places responsibility for the crime on mental illness or poor self-control; and 'guilt feeling attribution' which measures the extent to which the offender has feelings of remorse and regret for the offence.

This measure was included as it provides an indication of the patients insight into their offending behaviour. It also seemed a useful baseline measure for insight about mental health problems and their role in offending behaviour.

4. INTERACTION STYLES

Finally, the assessments utilised for this area were aimed at identifying areas of interpersonal relations that present difficulties to the individual. These were selected on both clinical observations and on recent theories arguing that personality disorder is characterised by maladaptive interpersonal functioning (Blackburn, 1993; Marshall and Barbaree, 1984)

THE NOVACO ANGER SCALE (Novaco, 1994)

McDougall, Clark and Fisher (1994) note that recently there has been an increased interest in the assessment of violent offenders. This, they suggest is a result of the development of treatment initiatives including the control of anger and aggression, throughout the prison service and the need for a greater understanding of the motivation for aggression. Howells (1988) has attempted to differentiate between emotional states of anger, hostility and aggression. He describes anger as a subjective state of emotional arousal, hostility as a negative attitude or evaluation of people or events and aggression as an overt behaviour. McDougall et al (1994) state that aggression is not always the result of anger and cite Blackburn's (1985) distinction between incentive motivated and annoyance motivated aggression. Incentive motivated aggression is goal directed and does not necessarily involve the emotion of anger, whereas annoyance motivated aggression serves to reduce an emotional state. This reflects Bandura's (1973) social learning theory where aggression has been modelled as a coping strategy for environmental demands and achieving rewards for this aggression.
Novaco is one of the main pioneers in the exploration of the cognitive processes involved in the experience of anger. His concept of anger is that it is a "subjective emotional state, entailing the presence of physiological arousal and cognitions of antagonism, and is a causal determinant of aggression" (1994, p. 32). He states that the 'subjective affect' element of anger involves an 'automatic cognitive' process whereby one labels the emotional state as 'angry'. With this cognitive labelling comes an impulse to 'behave' in an antagonistic way. This impulse is regulated by inhibitory mechanisms which may be overridden by disinhibitory influences.

With regard to the relationship of anger with aggression Novaco (1994) argues that anger is a "significant activator of and has a mutually influenced relationship with aggression, but it is neither necessary nor sufficient for aggression to occur" (p. 33). He goes on to state that "when the infliction of injury or damage is expected to produce personal gain or when the aggressive act is a well-learned behaviour, aggression may occur without anger" (p. 33). With regard to aggression following the feeling of anger, he agrees with Bandura (1983) that this is a function of a number of social learning factors such as reinforcement contingencies, expected outcomes, modelling influences, disinhibitory factors and self-control capabilities.

Novaco (1994) has devised an anger scale to assess these cognitive, arousal and behavioural domains. Each of these domains is construed as having component dimensions relevant to anger as a clinical problem and each domain is assessed separately. The scale is divided into two parts, part A containing clinically oriented scales with the three domains and part B being a measure of the intensity of anger.

This assessment was included as anger and aggressive behaviour is a significant aspect of the pathology of the patients on Leeds ward. The majority of patients within the hospital have violent histories and many have committed index offences where violence has been a significant factor. As patients are detained for treatment and one aim of this is to reduce future violence then arguably this area should form an important part of the treatment and assessment process.
IRRITABILITY, DEPRESSION, ANXIETY SCALE (IDA). (Snaith and Taylor 1978)

Snaith, Constantopoulos, Jardine and McGuffin developed this questionnaire for use in a clinical context following growing interest in the relationship of irritability to psychiatric disorders. Prior to this there had been two widely used assessment scales measuring labile mood states of aggression and hostility. Snaith et al based their questionnaire on the concept of irritability being "that of a temporary psychological state characterised by impatience, intolerance and poorly controlled anger" (p. 164). They included Caine, Foulds and Hope's (1967) theory that hostility can be directed inwardly or outwardly and that these are distinguishable. They also included measures of anxiety and depression in an attempt to elucidate further the relationship between these moods.

This is 18-item questionnaire has four subscales two for irritability, 'inwardly' and 'outwardly' directed and one for depression and one for anxiety. Each scale has a classification for a normal and psychiatric population with scores falling below required criteria, above criteria or within a borderline zone.

As mentioned above anger and aggression are particularly significant aspects of these patients functioning. Many of the women on Leeds ward periodically engage in self harm which may be construed as internally directed anger. This assessment provides a measure for inwardly and outwardly directed hostility.

THE SIMPLE VERSION OF THE RATHUS ASSERTIVENESS SCHEDULE (McCormick, 1983)

Assertion training is a well recognised form of behaviour therapy for shaping assertive behaviour. Wolpe (1958) was one of the earliest psychologist to use such techniques and recognise the need for pre and post treatment measures. Wolpe and Lazarus, (1966) report using questions to assess pre-treatment assertiveness. Rathus (1973) developed the original version of the Rathus Assertiveness Schedule (RAS) which comprised a 30-item self report questionnaire. Research using the RAS has shown it to be a reliable measure of assertiveness and social aggressiveness among psychiatric patients including personality disordered women (Rathus and Nevid, 1977). They found personality disordered women were the highest scorers with neurotic women being the lowest scorers.
The original RAS was later revised to make it more readable by clients with low educational achievement. The Simple version of the Rathus Assertiveness Schedule (McCormick, 1983) is a thirty item self-report questionnaire that provides a score indicating the extent and direction of the respondents assertive behaviour.

This measure was included as many of the women have difficulties in demonstrating appropriately assertive behaviour. This is closely linked with issues relating to the expression of anger as clinical impressions indicate the many of the women resort to either inwardly or outwardly directed aggression as a result of their inability to behave assertively. In addition the Rathus is commonly used across the hospital.

SOCIAL SKILLS - OBSERVED AND SELF-RATING (Developed in house)

David Crawford (1978) refers to social skills as being based on an assumption that successful social behaviour is a skill. He suggests that this is a highly complex skill but can be taught just as any other skill and can improve the communication of feelings, emotions, needs and desires to others.

Gough (1948) was among the first to refer to social skill deficits among psychopaths. He suggested that the psychopath has a role-taking deficiency, failing to acquire the capacity to take the view point of those he or she is interacting with. He suggests that the consequence of this is the inability to predict others' behaviour and to anticipate negative social reactions to particular behaviours. Widom (1976) offered some support for this hypothesis with the finding that violent primary psychopaths misperceive the perceptions of others. Schalling (1978) in a review found evidence that role-taking deficiencies are related to psychopathy and to offending behaviour.

These measures were used again because clinical impressions indicate that all patients have deficits in this area. These two measures are widely used across the hospital and have been developed in house by clinical psychologist Marie Quayle and her colleagues.
RESULTS

It was agreed with the clinical team that only those women legally classified as psychopathic disorder or who had a diagnosis of personality disorder would be included at this stage. This totalled seventeen women. However, only twelve were able to participate either because of their mental state at the time of assessing or because they chose not to be included. In addition to this of the twelve women who were assessed, some chose not to complete all of the assessments.

1. PSYCHIATRIC CLASSIFICATION

PERSONALITY DIAGNOSTIC QUESTIONNAIRE-REVISED (PDQ-R) (Hyler, Reider, Spitzer and Williams 1987)

The PDQ-R was completed by twelve women. All of these women met criteria for at least three personality disorders with the range being from three to ten and the median for comorbidity being eight. The whole range of disorders was present among the sample with ASPD being the most prevalent and present in eighty three per cent of the women. This was followed by Borderline, Paranoid and Histrionic personality disorder which were present in seventy five per cent of the women. These fall mainly into the cluster B disorders with self centredness considered as the unifying feature. Self defeating and avoidant personality disorders were the third most common and present in sixty seven per cent of the women.

BORDERLINE SYNDROME INDEX (BSI) (Conte, Plutchik and Jerret, 1980)

The BSI was completed by twelve women. Nine (seventy five per cent) women obtained scores indicative of BPD being present. Seven (seventy eight per cent) of these women also met criteria for Borderline personality disorder on the PDQ-R.

THE EATING ATTITUDE TEST (EAT-26) (Garner, Olmstead, Bohr and Garfinkel, 1982)

The EAT was completed by twelve women. Of these only two (seventeen per cent) met criteria for having an eating disorder and this included only one of the three women currently being treated for an eating disorder on the ward.
The assessments used in this section indicate that all of the women assessed have at least one personality disorder with the average being eight. This indicates severe pathology among these women. The most common personality disorder seems to be ASPD which is not surprising as women who come to Broadmoor do so either because of their offending behaviour or because they are not manageable elsewhere. There was fairly high agreement between the PDQ-R measure of BPD and the BSI. It may however be useful to include the BSI in future assessments as it did identify two additional women with BPD and this particular disorder seems to be highly prevalent among the Leeds ward population. These results are in line with Coid's (1992) research exploring the prevalence of DSM-III-R Axis II disorders in patients detained under the 1983 MHA legal category of psychopathic disorder. He found BPD to be prevalent in ninety one per cent of a sample of women detained in three English special hospitals.

The EAT produced results that indicate that eating disorders are prevalent among a relatively small proportion of women resident on Leeds ward. In addition to this it did not identify all of the women who are currently being treated for an eating disorder, which in all cases is anorexia. This assessment is one that may prove not to be particularly useful for assessing the Leeds ward population.

2. PERSONALITY TRAITS

EYSENCK PERSONALITY QUESTIONNAIRE-REVISED (EPQ-R) (Eysenck and Eysenck, 1975)
The EPQ was completed by nine women. Five (sixty seven per cent) achieved high scores for the Extroversion scale and four (forty four per cent) had high scores for the Neuroticism scale. for the Psychoticism scale three (twenty two per cent) woman obtained a high score. Five (forty two per cent) had two high scores but the patterns were varied.

SENSATION SEEKING SCALES (SSS) (Zuckerman, 1979)
The SSS was completed on twelve women. A total of seven (fifty eight per cent) achieved a high score on at least one scale. 'Experience Seeking' was the most commonly elevated scale followed by 'Disinhibition' which was raised among fifty per cent of the women. Four women (thirty three per cent ) had high scores for both 'Experience Seeking' and 'Disinhibition'.
GUDJONSSON SUGGESTIBILITY SCALE (GSS-2) (Gudjonsson, 1992)
The GSS-2 was completed by twelve women. A total of six women (fifty per cent) had scores indicative of being suggestible when answering questions in the 'immediate recall' condition. One of the twelve women did not complete the 'delayed recall' condition. Of the eleven that did complete this condition four (thirty six per cent) had results indicative of being suggestible. With regard to 'Confabulation' eight (sixty six per cent) of the women achieved results indicating that they confabulated during their recall of a short story. Finally for the 'Compliance' scale eleven (ninety two per cent) of the women had high score indicating that they are compliant.

DISSOCIATIVE EXPERIENCES SCALE (DES) (Bernstein and Putnam 1986)
The DES was completed by twelve women. A total of ten (eighty three per cent) met criteria for regularly experiencing dissociation. Five (fifty per cent) of these women also had scores indicative of having a BPD. Only three (twenty one per cent) had scores indicating that they are suggestible.

STATE-TRAIT ANXIETY INVENTORY (Speilberger 1983)
The State-Trait Anxiety Inventory was completed by twelve women. Eleven (ninety two per cent) achieved high scores for the 'Trait' scale indicating that anxiety is a general trait. Six (fifty per cent) scored highly on the 'State' scale indicating that they are currently experiencing anxiety.

The assessments used in this section provide both descriptive information and identify areas that therapy might target. Firstly, the EPQ provides descriptions regarding the types of personality traits the women assessed have and indicates that extroversion is high among the Leeds ward population. In addition to this the SSS indicates that over half of the women are sensation seekers having elevated optimum levels of stimulation and arousal. Experience seeking seems to be the most common way to achieve this and reflects the non conforming and unconventional lifestyles that most women in Broadmoor have led. Disinhibition was also common and this too reflects the disinhibited behaviour frequently seen in this population. It is also supportive of Zuckerman's (1979) postulation that disinhibition is associated with psychopathy. Descriptive information such as this helps to develop a better understanding of the women on Leeds ward and the SSS seems a particularly useful assessment.
as it is not only descriptive but identifies an area where alternative strategies for reaching optimum levels of arousal might be addressed during therapy.

The GSS-2 was included to see if it was helpful in understanding and making sense of the psychotic type symptoms commonly seen in this population. Confabulation was found in over half of the women assessed which raises questions about the reliability of information provided during interview. In addition to this over half of the women assessed were suggestible during interview. It is therefore possible that some of these unusual symptoms are the result of suggestibility, where patients either adopt others symptoms or adopt some of the symptoms often asked about by psychiatrists during interview. This is an area that requires further exploration.

The DES indicates that dissociation is high among the women assessed. It is therefore possible that those women who describe experiencing psychotic phenomenon are in fact dissociating. Descriptions of BPD often include symptoms similar to those experienced by psychotic and schizophrenic patients. An alternative explanation for these psychotic like symptoms often described by Leeds ward patients, is that these patients have BPD and this is one of the experiences associated with this disorder. Interestingly only half of these women met criteria for BPD. This assessment seems particularly helpful as it provides information that can be used to help understand the nature of patients symptomotology which in turn will impact on the type of treatment offered.

Finally, nearly all of the women achieved high scores for the trait scale on the State-Trait inventory. This indicates that this population are predisposed to perceive more situations as dangerous and threatening and anxiety provoking. Half of the women had high state anxiety score indicating that at the time of the assessments they were in a state of anxiety. This information is important as it helps understand how individuals might approach, perceive and react to situations and is an area that can be explored and addressed in therapy.
3. COGNITIVE STYLES

BECK DEPRESSION INVENTORY
The BDI was completed by twelve women. Six (fifty per cent) achieved scores indicating some degree of depression. Three of these (twenty five per cent) achieved scores within the 'mildly depressed' range one (eight per cent) achieved a score within the 'moderately depressed' range and similarly one (eight per cent) achieved a score within the 'severely depressed' range.

CULTURE-FREE SELF ESTEEM INVENTORY (SEI) (Battle, 1986)
The SEI was completed by twelve women. Eight (sixty seven per cent) achieved a total score indicating a low self esteem. However, all twelve (one hundred per cent) women achieved low scores for 'personal self esteem'. Ten (eighty three per cent) women had low scores for their 'social' self esteem and eight (sixty seven per cent) women had low score for their 'general self esteem'.

THE GUDJONSSON BLAME ATTRIBUTION INVENTORY (GBAI) (Gudjonsson, 1988)
The GBAI was completed by twelve women. Three (twenty five per cent) women achieved high scores for the 'external element' scale indicating that they tend to blame their offending behaviour on external factors. Two (seventeen per cent) women achieved high scores for the measure of 'Guilt' indicating that only two women feel guilty for their offending behaviour. No high scores were achieved for the 'Mental element' section indicating that none of the women blame their offending on their mental state at the time of the offence.

This section included assessments that aim to measure the way in which the women explain and perceive themselves and others. The BDI indicated that half of the women were depressed at the time of being assessed. This is an important aspect of functioning as research indicates that it is associated with personality disorders (Widiger 1993) and can impact other aspects of functioning such as self esteem (Battle 1980). This is a measure that is already commonly used on the ward particularly as a means of monitoring the degree of depression and any changes in this. The SEI indicated that all the women have a low self esteem in at least one section of this assessment and that all women have a low personal self esteem. Social self esteem was also low for a high proportion of women. This result was not surprising as most women present as having a poor self image and low self esteem. Finally,
the GBAI produced results indicating that few of the women feel guilty for Their offences. It seems unlikely that this is because they do not accept responsibility for their offences as few blamed their offending behaviour on their mental state or on society in general. These assessments all seem particularly useful as the areas they measure seem to be issues for the majority of women being assessed and identify areas that therapy needs to target.

4. INTERACTION STYLES

THE NOVACO ANGER SCALE (Novaco, 1993)
The NAS was completed by eight women. Two (twenty five per cent) women achieved high total score for the overall scale. High scores were however achieved across all sections and for all subscales with the exception of 'physical confrontation' in the 'Behavioural' section. The highest scores were within the sections focusing on 'behaviour' and the section that identifies the intensity of the anger and situation where anger is most likely to be experienced. Within the behavioural section 'indirect expression' was the greatest area of difficulty with six (seventy five per cent) women achieving high scores. This was followed by the 'behavioural' and 'impulsive' subscales with five (sixty three per cent) women achieving high scores. With regard to the situations most likely to trigger anger 'unfairness' was the most anger provoking situation with six (seventy five per cent) of the women achieving high scores, followed by 'annoying traits' with five (sixty three per cent) women achieving high scores.

IRRITABILITY, DEPRESSION, ANXIETY SCALE (IDA) (Snaith et al., 1978)
The IDA was completed by twelve women. Seven (fifty eight per cent) met criteria for depression. Five of these also completed the BDI and of these four (eighty per cent) obtained a score indicative of depression on both scales. With regard to anxiety five (forty two per cent) met criteria for the presence of anxiety. All of these achieved high scores for the State-Trait Anxiety Inventory. For both the 'Inward Irritability' scale and the 'Outward Irritability' scale five (forty two per cent) met criteria indicating that they either express their anger inwardly or outwardly. However, only two (sixteen per cent) of these women met criteria for both forms of expressing anger.
RATHUS ASSERTIVENESS SCHEDULE (RAS) (Rathus 1973)
The RAS was completed by twelve women. A total of five (forty two per cent) women achieved a score indicating they are overly assertive and may present as aggressive and four (thirty three per cent) women had scores indicating they are under assertive. This totals nine (seventy per cent) of women being inappropriately assertive.

SOCIAL SKILLS - SELF-RATING (Developed in house)
The Social skills self rating scale was completed by eleven women. Difficulties were reported by eight (seventy three per cent) women at the level 'difficult but manage' and seven (Sixty four per cent) at the 'difficult and avoid' level.

SOCIAL SKILLS - OBSERVED (Developed in house)
The social skills rating scale was completed on twelve women. Eight (sixty six per cent) women were observed as having some difficulty in the area of social skills. These were in the areas of 'verbal behaviour' and 'staff relationships'. Three (twenty five per cent) of these women were observed to have difficulties in both of these areas. Of the eight observed as having difficulties in the area of social skills five (forty two per cent) reported that they felt they found the area of social skills difficult.

The assessments in this section aimed to measure interpersonal skills and behaviour. They are particularly useful in identifying treatment needs and can be used as pre and post intervention measures. The NAS was of particular interest as many women have histories of aggressive behaviour. The overall scores were within the normal range for the majority of women, however high scores were achieved on a number of sub scale. This assessment seems particularly useful as it identifies specific areas where anger and aggression is problematic. The IDA seems a useful assessment as it provides an additional measure for anger, depression and anxiety. There seems to be high agreement between this measure of depression and the BDI although it does not appear as sensitive measure of anxiety than the State-Trait anxiety schedule. In addition the IDA provides a measure for the direction of irritability, inwardly or outwardly. The percentage of women directing anger internally was the same for outwardly which is surprising as the levels of self injury are high on the ward.
However, at the time of testing few patients were engaging in self harm. It would be interesting to see if these results change when the level of self injury changes.

The Rathus Assertiveness schedule indicated that inappropriate assertiveness is high among the women who were assessed. This reflects behaviour observed on the ward. With regard to social skills both the observed assessments and the self rating assessments indicate that many of the women have difficulties in this area.

These assessments provide measures of the interpersonal skills individuals have and particular areas of difficulty. Information from these assessments can be directly used to identify treatment goals and can be used as pre and post intervention measure. This information is particularly valuable when planning therapy groups for the ward. Difficulties with interpersonal skills are commonly addressed by group therapy and it would seem that a variety of groups are required on the ward to help enhance and develop the range of interpersonal skills measured by these assessments.

**CONCLUSION**

The results indicate severe pathology in all areas of assessment among the women who participated. Some assessments are clearly valuable such as the NAS and the PDQ-R and will be used in the future. However, the value of other assessments such as the GSS-2 is not yet clear. The next stage of this clinical development will involve using the results for treatment planning. This will include individual treatment plans, identifying the types of therapy groups needed and developing a therapeutic regime on the ward. Specific assessments will be used as post intervention measures such as the SEI to measure changes in self esteem and the BDI to measure the degree of depression. Where appropriate the assessments will be used as post group measures, for example the NAS would be given at the end of an anger management group and the Rathus at the end of an assertion group.

It is intended that patients will be assessed regularly so that change can be monitored. It is premature to draw conclusion about which assessments are the most useful but this is an issue that will continually be reviewed so that the most informative and economical assessment procedure may be developed.
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THE POWER OF PREDICTION: FACTORS ASSOCIATED WITH RECONVICTION AND READMISSION AMONG PATIENTS DISCHARGED FROM BROADMOOR HOSPITAL
ABSTRACT

This study examined the content of reports contained in the medical records of a randomly selected sample of 77 patients discharged from Broadmoor Special Hospital. A retrospective design was used to compare the reports of patients who were reconvicted after discharge with those of patients who remained in the community without a further conviction and to compare the reports of patients who were readmitted to a special hospital after discharge with those who were not. In addition the reports of patients who were not readmitted or reconvicted (successful) were compared with the reports of those who were readmitted or reconvicted (failed).

A number of variables included in these reports, were explored for their power to predict discharged patients who were successful. The variables for inclusion were selected in four ways. Firstly, variables identified by previous research to be predictive of mentally abnormal offenders success after release were included. Secondly, variables based on theoretical models of dangerousness and violence were included and thirdly, variables that measure the type of therapy received whilst in Broadmoor. The fourth set of variables were selected from research identifying variables focused on by Mental Health Review Tribunal's when considering suitability for discharge and variables were selected from the checklist of points generated by the Home Office when considering the suitability for discharge of restricted patients.

Overall the findings offer some support for four of the five hypotheses that were examined. Firstly, some of the variables included were able to differentiate between subjects who were successful and subjects who failed after discharge. Secondly, some of the variables were related to the particular type of outcome, reconviction compared to readmission. Thirdly, there was a higher rate of subjects classified as mental illness compared to psychopathic disorder readmitted to hospital and a higher rate of reconviction among subjects classified as psychopathic disorder compared to mental illness. Finally, the logistic regression used to examine the interaction between variables failed to produce a prediction model that could successfully predict success. In addition, a number of variables not identified in previous research were found to be related to outcome.
THE POWER OF PREDICTION: FACTORS ASSOCIATED WITH RECONVICTION AND READMISSION AMONG PATIENTS DISCHARGED FROM BROADMOOR HOSPITAL

Introduction

Broadmoor was the first of the Special Hospitals to open and has continued to be the most notorious of the three Special hospitals in England and Wales. Opening in 1863 its function was to provide treatment for 'criminal lunatics' under the 1860 Criminal Lunatics Act, the second of its kind. Currently, patients can be detained in Broadmoor or the other Special Hospitals under the 1983 Mental Health Act (MHA) for England and Wales. The majority of patients detained are offenders convicted of an offence and deemed mentally disordered and given a hospital order rather than a prison sentence by the courts. To do this the courts must be satisfied that treatment is 'likely to alleviate or prevent a deterioration of his condition'. Alternatively, offenders who become mentally disordered whilst serving a prison service may be transferred to hospital for treatment. There are four categories of mental disorder under the 1983 MHA: 'mental disorder', 'mental impairment', 'severe mental impairment', and 'psychopathic disorder'. In addition when a patient enters the special hospital system she or he is given a legal classification of mental disorder. The two main classifications are 'mental illness' which primarily includes patients diagnosed as schizophrenic, other psychotic disorders and affective disorders, and 'psychopathic disorder' which primarily includes patients with a personality disorder. If an offender receiving a hospital order is deemed dangerous then a restriction order may be added. The Act requires that it be 'necessary for the protection of the public from serious harm'. A restriction order means that the treating psychiatrist does not have the power to discharge the patient and each case must be considered by the Home Office.

During the 1970's there were several serious offences committed by individuals who had been detained for treatment in a Special Hospital and had been recently discharged. These incidents received extensive press coverage questioning how patients who still had violent propensities were being discharged and how such mistakes could be made. Perhaps that most notorious of these was the case of Graham Young known as the 'poisoner'. He was discharged from Broadmoor hospital and
proceeded to poison a number of his work colleagues. Black (1982) suggests it is this case that is most readily associated with the acknowledgement that the discharge procedure used by Special Hospitals needed to become the focus of research triggering the Government to set up the Aarvold committee (Aarvold, Hill and Newton, 1973), to examine the discharge and aftercare procedures and identify factors that might predict future dangerousness.

Decisions regarding 'dangerousness' must be made both at admission and at discharge but it those made at discharge that are of interest to this dissertation. Black and Spinks, (1982) state that dangerousness is often equated with violence but there is no legal definition or scientific measure either medical or psychological. The Butler Committee (1975) defined dangerousness as "a propensity to serious physical injury or lasting psychological harm". Scott (1977) defines it as "an unpredictable and un treatable tendency to inflict or risk irreversible injury or destruction". Although there is no one agreed definition as to what constitutes dangerousness, it is clear that the propensity to act in a violent way is central.

Decisions regarding suitability for discharge are particularly important as the wrong decision can have very serious consequences. If a patient is viewed as still dangerous, when they are not, then his or her loss of liberty continues, whereas if the patient is not considered dangerous when they are, members of the public are at risk.

The Discharge Process

As mentioned above the discharge process became a focal point after the establishment of the Aarvold committee in the 1970's. Currently, there are three main routes for discharge from a special hospital. Firstly, patients who do not have a hospital order may be discharged by their Responsible Medical Officer (RMO), the treating psychiatrist who is legally responsible for the patients care. However as mentioned above those patients who have a restriction order imposed must be referred to the Home Office who have the power to make discharge decisions, this being the second discharge mechanism. The third mechanism is through the Mental Health Review Tribunals (MHRT's).
MHRTs were introduced as part of the 1959 MHA to safeguard patients against unjustified detention. Patients can regularly apply for their continued detention to be reviewed by a MHRT. Tribunals have the power to conditionally discharge or absolutely discharge patients and with the 1983 MHA they gained the power to discharge restricted patients. Peay (1989) has identified a number of factors that appear to influence discharge decisions made by Tribunals. For patients classified as psychopathic disorder, they tended to focus on the RMO's opinion, the length of time in hospital in relation to the severity of the index offence, the seriousness of the index offence, behaviour in Broadmoor, and the concept of future control. For patients classified as mental illness, they focused on the level of insight, their expression of remorse, the absence of psychosis or delusions, and the RMO's opinion. In addition Roberts (in press) found that information in reports provided for Tribunals was associated with the discharge decision. Information about the patients behaviour in Broadmoor and about family involvement was related with discharge decisions for all patients and information about the improvement of the illness, insight and co-operation were related for patients classified as mental illness whereas for psychopathic disorder patients, information about their previous aggressive behaviour was associated.

With regard to restricted patients the Home Office have recently generated guidelines for clinicians within the special hospital when considering the suitability of restricted patients for discharge. The checklist of points can be seen in Appendix 1. The areas it covers include; the presence of information that increases understanding of the index offence; evidence of preoccupation with a particular type of offence or victim; ability to predict triggers and circumstances that may lead to future offending; the effect and attitude to medication; the presence of acceptable coping strategies; the presence of insight, the expression of physical aggression; and the views of the patients clinical team. Currently, there is little evidence to indicate whether these areas have any relation to future offending or dangerousness, therefore it will be important to explore their predictive value.

**Outcome Measures**

Most studies that have followed treated and discharged offenders have used reconviction or readmission as an indication of treatment failure. The MHA 1983 states that treatment must be likely to alleviate or prevent deterioration of the condition. It therefore seems reasonable that one aim of the
hospital order is to enable the offender to return and function in the community without further need of hospitalisation. In addition given that the majority of patients detained in special hospitals are offenders and the aim of penal institutions is 'to help them lead law-abiding lives in custody and after release' (HMSO, 1991), it seems reasonable that a second aim should be to reduce the likelihood of future offending. Reconviction refers to being found guilty of and convicted for an offence, proceeding the index offence (the offence that resulted in the hospital order). Readmission normally refers to a further admission to the hospital from which the patient was discharged.

There are problems with both of these measure that have implications for the accuracy of statistics gathered regarding success or failure of discharged patients. Dolan and Coid (1993) highlight a number of these problems. Firstly, they argue that for an offender to be convicted he or she must first have the motivation or the need to offend; secondly, they must have the opportunity to offend; thirdly, they must be identified by the police; fourthly, they must be apprehended; fifthly, they must be charged; and finally, they must be found guilty. Dolan and Coid argue that at any of these six stages there are a number of other factors both personal and external that can intervene and can not be measured or controlled for.

Another problem with using reconviction as a measure of success is the lack of understanding about the relationship between psychological disturbance and criminal behaviour. It seems that finding appropriate outcome measure is particularly difficult for patients detained under the legal category of psychopathic disorder and it is for these patients where factors other than mental state frequently come into play. Robertson (1989) argues that the criteria used to judge treatment success for mentally ill patients is the same for offenders and non offenders and is related to the psychiatric illness, usually the presence of psychosis. However for those detained under the legal classification of psychopathic disorder the validity of the medical concept is not yet clear and the illness remains confined to criminal rather than clinical criteria.

Rehospitalisation has been used as an alternative measure of success. Dolan and Coid (1993) highlight some of the problems with this measure stating that rehospitalisation may occur after a further criminal or antisocial behaviour, although it may not have led to a conviction and may
therefore in many cases be a measure antisocial or criminal behaviour not psychiatric or psychological state. They also argue that there are similar problems to those identified with reconviction rates as the patient must come to the attention of the authorities and then the authorities must decide to readmit rather than an alternative course of action. In addition Tucker (1987) argues that rehospitalisation is not necessarily a sign of treatment failure in fact it could be the opposite. A patient may have sought treatment rather than follow some other course of action, such as suicide or violence as they have in the past before hospitalisation.

Reconviction and rehospitalisation rates
There are few reconviction rates available for mentally disordered offenders. Gathercole, Craft and McDougall (1968) followed 72 patients discharged from Moss Side in 1961. They found that 22% were readmitted and 30% had been convicted. Black and Spinks (1982) explored subsequent convictions of 128 male patients discharged from Broadmoor hospital. They found that 40% reappeared in court during a 5 year follow-up and 23 received a prison sentence. Tennent and Way (1984) completed one of the longest follow-up studies of men admitted to special hospital between 1961 and 1965, with a discharge before 1978. They followed patients for a period of 12-17 years and found a reconviction rate of 61% with a reconviction rate of 20% for violent crimes.

Length of follow-up
Dolan and Coid (1993) define follow-up as referring to the length of the follow-up period after the end of treatment. The majority of studies do not have particularly long follow-up periods, with the majority falling between 2 and 5 years. There is general consensus that the longer the follow-up period, the more accurate data is likely to be. Robertson and Gunn (1987) found the rates for reoffending among released prisoners from H. M. Prison Grendon Underwood, were considerably higher after a 10 year follow-up compared to 2 years, 92% compared to 70%.

Psychopathy, Mental Illness And Violence
Differences in the way patients classified as psychopathic disorder compared to mental illness have been highlighted by a number of authors, with factors relating to illness effecting the length of stay and discharge decisions for mentally ill patients and for psychopathic disorder patients, factors
relating to the severity of the index offence (Peay, 1989; Robertson, Dell and Parker, 1987; and Roberts, in press). This dissertation is interested in the different information drawn on when making decisions about suitability for discharge and its relationship with outcome.

**Mental illness as a predictor of Violence**

Assumptions are often made that people with a mental illness are dangerous. In a nation-wide telephone survey in the United states, Link, Cullen, Frank and Wozniak (1992) found that 36% of the public believed mentally ill people were more likely to commit crimes than people who are not mentally ill and 45% believed it was natural to be afraid of the mentally ill.

A number of researchers have explored assumptions such as these examining the degree of violence displayed by the mentally ill. Swanson, Holzer, Ganju and Jono (1990) in an analysis of material from an epidemiological study completed in the United States, found mental illness was twice as prevalent in a subgroup identified as violent. Violence was rare and the absolute risk of violence among the mentally ill group was only 7% over a given year even though the relative risk was three times higher than the sample with no mental illness.

One of the few studies like this completed in Britain was by Wessely (1992), using the Camberwell register, which includes a representative English community sample. Wessely, similarly found an increased recording of personal violence and criminal damage following the onset of mental illness among both men and women with schizophrenia.

Swanson, et al (1990) also examined the prevalence of alcohol abuse and its relationship with violence. Interestingly, the association with violence was far greater than for mental illness. They found 41.6% of the violent subgroup were alcohol or drug dependent compared to 4.9% of the non-violent subgroup. If a mental disorder was also present this figure increased to 63.9%. The results indicate two conclusions firstly, it would seem that having a mental disorder is associated with increased violent behaviour, but the level is still very low. Secondly, it seems that the greatest risk of violence is among those who abuse alcohol or drugs and that this with a mental illness increases the risk of violence. It therefore seems that mental illness alone is unlikely to be a good predictor of
future violence. However, a history of alcohol or substance abuse may prove to be predictive of future violent offences.

Dohrenwend, Shrout, and Mendelsohn (1980) suggest a relationship between positive symptoms of mental illness and violence. They explain the link as being primarily related to the experience of psychosis which can often cause people to feel threatened, resulting in an increased likelihood of fights, weapon use and other forms of violence. With regard to delusions, Monahan and Steadman (1994) have suggested that delusions are the most widely experienced of the positive symptoms in schizophrenics, with 90% of patients experiencing them at some point in their illness career. Hofner and Bokner (1982) compared a group of inpatients with psychotic illness, who had committed homicide, with a group who had not. They found a significant difference in the prevalence of delusions, with 89% of the homicide group being delusional at the time of the killing, compared to 76% of the non violent group. They also found that 70% of those committing homicide had been in a delusional relationship with the victim. This indicates that the presence of delusions or psychosis may be have some predictive power when considering future reoffending.

As mentioned earlier, MHRT's considering suitability for discharge of mentally ill patients, frequently focus on the patients co-operation with medication recommendations (Peay, 1989; and Roberts, in press). There is some work that has explored the relationship between compliance to medication recommendations and failure when discharged. Cohen, Ewen, Williams, Silver and Spolak (1986) found that 36% of released offenders in the United States, who take medication regularly were readmitted within five years compared to 92% of those who did not comply with medication recommendations. Therefore compliance with medication recommendations may prove to provide a further predictor when considering discharge.

Psychopathic disorder as a predictor of Violence
Perhaps there are even more assumptions made about the link between psychopathic disorder and violence than with mental illness. Widiger and Trull (1994) highlight how this is reflected to some degree in the 1983 MHA definition which requires abnormally aggressive or seriously irresponsible conduct to be present. In addition, anger and violence form part of the criteria necessary for a
diagnosis of most of the personality disorders. This is particularly apparent for antisocial personality disorder (ASPD) and borderline personality disorder (BPD) which are thought to be the most common of the personality disorders found among those legally classified as psychopathic disordered (Blackburn, 1990; and Coid, 1992).

It is perhaps not surprising that assumptions about a link between psychopathic disorder and violence exist when aggression and aggressive behaviour form part of the criteria for a diagnosis to be made. Harris, Rice and Cormier (1991) followed 169 male patients, most of whom had a history of violent behaviour, after discharge from a forensic unit 40% had a subsequent reconviction for violent crime. Using the Psychopathy Checklist (Hare, PCL) 52 men were diagnosed as psychopathic, of these 40 committed further violent crimes compared to 24 of the 114 men who did not meet criteria for psychopathic disorder. Violent crimes were also found in 67% of men with a DSM-III personality disorder, particularly ASPD.

It therefore seems that there may be a link between psychopathic disorder and some of the personality disorders and violent behaviour.

**Childhood Correlates Of Violence**

The majority of studies examining possible predictors of dangerousness or violence fail to take into account theories of dangerousness and Steadman, Monahan, Appelbaum and Grisso (1994) argue this is a weakness of outcome research to date. There are no explicit theories of dangerousness although there are theories for some of the activities considered dangerous. Violence is perhaps the most relevant and there are a number of theories that may enlighten researchers attempting to understand violence among mentally disordered offenders.

Bandura carried out a series of experimental studies into the possible role of modelling in the development of childhood aggression. In a review of these studies examining the level of violence in children after viewing physical aggression by a role model, Bandura (1973) concluded that learning is a major contributor to the occurrence of violent behaviour.
Bandura's findings are supported by a number of applied studies. McCord (1979) found links between parental aggression in a prospective study of a group of boys in a delinquency prevention programme. This was also linked with criminal convictions when the boys were followed into adulthood up to the age of 40. Klassen and O'Connor (1988) found that being injured before age 15, was predictive of violence among a sample of schizophrenics and non schizophrenics. In addition researchers focusing on patients with a diagnosis of BPD have consistently demonstrated that a history of physical or sexual abuse in childhood is associated with violent behaviour in adulthood (Herman, Perry and van der Kolk, 1989; and Shearer, Peters, Quatyman and Ogdon, 1990).

There is also some indication that rehearsal and reinforcement are equally important. Loeber and Dishion (1983) completed a review of early predictors of male delinquency. They found early behaviour problems and aggression, later youth aggression and antisocial behaviours were all consistent predictors of subsequent delinquency. This reflected the findings of Justice et al (1974) who identified fighting, temper tantrums, school problems and truancy as predictors of adult violence. Cocozza and Steadman (1974) found the presence of a juvenile record was predictive of adult violence in male mental patients as was the number of prior arrests or convictions, with 4 or more increasing the risk of crime.

In addition, Bandura (1973) claimed that the extent to which an aggressive response is acquired through modelling depends in part on the extent to which rehearsal is employed and reinforcement given. Patterson, DeBurgshe and Ramsay (1989) argue that with a disrupted family environment management and punishment of antisocial behaviours is likely to be intermittent, providing a reinforcement schedule resistant to extinction. As well as this the naturally occurring consequences of aggression and antisocial behaviour will be rewarding.

It therefore seems that a history of sexual or physical abuse during childhood, a history of aggression and problem behaviour, both in childhood and adulthood, particularly in the context of a disrupted family environment, seem to be linked to adult violent behaviour and may be predictive of future violence.
Social Skills And Anger Management

There is a body of research that indicates that some form of interpersonal skills training might reduce the degree of subsequent violence. Gough (1948) was one of the first to link deficits in interpersonal interactions with offenders, specifically psychopaths. He suggested that psychopaths have a role-taking deficit and fail to acquire the capacity to predict others' behaviour and to anticipate negative social reactions to transgressions.

Howells (1986) has developed these principles further relating them to skills training. He describes how the social skills model emphasis internal deficits within the person and that some offenders may have deficits in this area that may be related to offending behaviour.

Several studies have examined the relationship between social skills deficits and the use of violence. Krakowski, Jaeger and Volavka (1988) completed a study of male patients receiving treatment in a psychiatric facility for violent men. They focused on the associations among violence, level of psychiatric symptomatology and social functioning on a longitudinal basis. The results indicated that violence showed the greatest association with social dysfunction, more so than with psychiatric symptomatology. They also found that improvement in social functioning was consistently paralleled by a decrease in violence throughout the patients stay on the unit. Kirchner, Kennedy and Draguns (1979) investigated whether offenders differed from non-offenders in assertiveness and aggressiveness in situations of interpersonal conflict and in expressing positive feelings in non conflict situations. They found the main difference was in the behavioural ratings of aggressiveness with higher scores for the offender group.

Given this link between skills deficits and violent behaviour one might anticipate that those offenders who have received social skills or anger management training might function more appropriately and this might be a predictor of success after discharge.

Outcome Studies

There have been a number of studies exploring factors associated with reoffending. Pritchard (1979) reviewed 71 studies of 177 independent samples of offenders and data presented on the relationship
between the predictor variables and recidivism. He found the most stable predictors to be: committing an offence of auto theft; having previous convictions; having an unstable work history; being age 18 or less at first arrest; having a history of opiate use; and having a history of alcohol abuse. Pritchard points out that although these seem to be stable predictors no indication of the degree of their predictive power is provided. In addition, Klassen and O'Connor (1988) have added to this list finding a diagnosis of substance abuse, prior arrests for violent crime and a young age are significantly associated with arrests for violent crime after release into the community.

Broadmoor Outcome Studies
There are few outcome studies focusing on patients discharged from special hospital. This may be partly because their function is detention and treatment and once discharged there is rarely any formal contact with patients. Also, outcome research of psychiatric and psychological treatments are not common place throughout the health service. However, some research has been completed.

The earliest reported study was completed by Black and Spinks (1982). They followed 128 men over a 5 year period. They examined twenty four variables for their power to predict success, reconviction or readmission of these men after discharge. Case notes were used to collect data on a variety of variables relating to admission, discharge, the offence, and psychiatric and offending history. In addition the results from a battery of psychological tests completed prior to discharge were used (the Wescheler Adult Intelligence Scale (WAIS), the Ravens Progressive Matrices, Mill hill Vocabulary scale, the Minnesota Multiphasic Personality Inventory, Porteus Maze) along with the psychological report prognosis.

Black And Spinks (1982) found that of this sample 10.4% subsequently committed dangerous assaults, 39.2% appeared in court, 28% were readmitted and 51.2% remained in the community. A number of factors were found to be related to outcome. Those subjects who were successful had no offending history, their index offence was homicide, the victim was a member of their family or well known, they were older, detained for longer, diagnosed as affective disorder, had less emotional disturbance, more social conformity and control. Those who were not successful had prior convictions, property or index offences not involving homicide, the victim was a stranger or casual
acquaintance, they were younger, had a shorter stay and were classified as psychopathic disorder. When the failure sample was divided by readmission compared to reconviction, it was revealed that the group of patients readmitted tended to be psychotic with hostile attitudes, whereas the group who had subsequent convictions were more impulsive, extroverted and classified as psychopathic disorder.

Tennent and Way (1984) completed a 12-17 year follow-up of men discharged from Broadmoor, Rampton and Moss Side before 1978. The men were divided according to violent reoffending, non-violent reoffending and no reoffending. Overall the main differences found were between those who committed further offences in general regardless of type of offence and those who did not reoffend. Their findings indicate a number of possible predictors for reoffending some of which were identified by Black and Spinks (1982). They found the reoffenders tended to have a restriction order, have more previous convictions with a younger age at first conviction, more experience of institutions, were described as having more unsettled backgrounds, and were more often classified as psychopathic disorder. In addition it was found that the majority of further offences were committed within two years of discharge, 54%, with only 13% occurring after a period of six years or more. Of these offences 21% were of a violent nature.

Dell and Robertson (1988) completed a 5-10 year follow-up study of 121 men discharged from Broadmoor between 1972 and 1977. Of the men classified as psychopathic disorder 39% were subsequently convicted, however this included no homicide or serious violence. Similarly to the other studies they found that more of the reconvicted men had a prior conviction and experience of prison with an offence of larceny having the strongest association. In addition, age at first conviction was associated, with the reconvicted group having a younger age at first arrest. When they compared patients classified as psychopathic disorder compared to mental illness, they found a lower rate of reconviction among the mental illness group.

One of the most recent studies was completed by Hui (1991) who completed a 10 year follow-up of sex offenders discharged from Broadmoor and Rampton hospitals exploring factors associated with reoffending. They found that sexual reoffending was related to a lower age at discharge and a shorter stay in hospital. They also found an inverse relationship between sexual reoffending and rated
aggressiveness and social inadequacy. They raise the possibility that this relationship may be the result of treatment received, particularly social skills and anger management groups which are common place in both hospitals. This supports Howells' (1986) theories relating to social inadequacy and the need for social skills and anger management.

The findings from these outcome studies demonstrate considerable overlap in the factors identified as being associated with reoffending. In summary the factors associated with patients who reoffend include:

i. prior convictions;
ii. a young age at first offence;
iii. committing an index offence that does not involve homicide;
iv. the victim being a stranger or casual acquaintance;
v. a young age at discharge;
vi. a shorter length of stay;
vii. being classified as psychopathic disorder;
viii. being described as impulsive;
ix. having previous experience of institutions;
x. having a background described as unsettled;
xi. having a poor employment history; and
xii. having a history of alcohol or opiate abuse.

Statistical versus clinical models of assessing dangerousness

More recently, outcome research has employed multivariate statistical models for predicting outcome of offenders. Quinsey and Maguire (1986) describe some of the problems of human judgements particularly when the judgements are of a probabilistic nature. They claim that studies of probability learning consistently demonstrate that people make predictions based on frequencies of various individual events and do not take into account opportunities an event has to occur. They go on to cite Kahnman and Tversky's (1973) work on human decision making who argued that because people employ simplifying heuristics such as rules of thumb rather than probabilities, they ignore the profound effects that differing base rates of occurrence hold on probabilistic judgements. They go on
to state how different predictors maybe correlated and that people are unable to adjust their predictions according to the interrelationships between predictive variables. The effect of this, they suggest, is that people think they have more information than they actually have and will make extreme judgements based on this and will be more confident about their accuracy.

Multivariate analysis is performed to identify the combination of predictor variables that best discriminate reoffending groups. The most common methods used are Stepwise Regression or Logistic Regression. Quinsey and Maguire (1986) used a stepwise regression analysis to predict dangerousness of 85 men who had been discharged from Oak Ridge maximum security psychiatric institution in the United states. They collected historical, offence related and in-hospital data and used the most significant three variables from each class for the final regression analysis. They were able to identify a number of variables related to those who reoffended. They tended to be young men, who had committed property crimes or serious offences against the person had a number of previous offences and were more likely to be personality disordered. The clinicians model failed to predict the actual post discharge dangerousness whereas the statistical model did, however when used on a new the statistical model was not predictive.

Klassen and O'Connor (1988) also used a stepwise regression analysis to predict those patients who would commit further offences and those who would commit further violent offences. They reached 85% accuracy. However, this was a prospective study including men who were detained for short periods of time, averaging 11 days and followed for a period of 6 months.

Hassin (1986) has also compared clinical and statistical models for predicting recidivism among parole boards releasing prisoners in the United States. They used discriminant analysis and demonstrated that the rate of error was higher by the parole boards compared to the statistical model indicating that a statistical model has greater power at predicting future recidivism among released prisoners. In addition they were able to identify a number of predictor variables the most powerful including: a young age at first arrest; a young age at release; being unmarried; being sentenced to multiple imprisonment's; having family relationships described as unstable; having multiple prior
convictions; having not completed military service; having a low level of education; being of Asian or African origin; and having previous probation sentences or having spent time in a juvenile institution.

These studies present equivocal findings for the power of stepwise regression and discriminant analysis to produce combinations of variables that predict future offending. Benda (1987) promotes the use of the Logit analysis, for prediction as it does not assume a normal distribution and can include categorical as well as nominal data. He describes how the Logit procedure is an additive model that allows the examination of multiple contingency tables for all possible significant effects and can assess the significance of each possible effect and suggest which main effects and interactions may be ignored. It compares the actual outcome rates for each variable or combination of variables with the percentage predicted by the model and provides a statistic for the goodness of fit. Benda (1987) compared the predictive power of this method to a simple univariate model on a sample of male juveniles released from a state training school in the United States. The results demonstrated that both models yielded the same predictive power for further delinquent or offending behaviour.

Payne, McCabe and Walker (1974) have also used logit analysis to predict reoffending among a group of male and female mentally abnormal offenders discharged from health service facilities including special hospitals. A number of variables were found to be powerful predictors. The strongest included: having a previous conviction, having an index offence involving dishonesty, being classified as psychopathic disorder or subnormal. A diagnosis of schizophrenia was associated with being readmitted to hospital. Unlike Benda, they found the logistic model was better at identifying low risk rather than high risk groups. However, when validated on a second sample, its degree of predictive power was lower.

The use of statistical models for predicting outcome is still in its infancy, with equivocal findings regarding their predictive power. However, research using these methods have identified a number of variables that appear related to outcome, many of which have been identified by other researchers. Additional variables include:

i. having a history of serious offending;

ii. coming from a family described as unstable; and
This study aims to explore the current rates of reconviction and readmission among patients discharged from Broadmoor hospital. In addition it intends to use the variables identified by previous research to attempt to predict those patients discharged from Broadmoor hospital after the 1983 MHA who are either successful or fail. Success will be defined as those patients who remain out of special hospital and are not convicted for further offences. Failure will be defined as those patients who are either readmitted to a special hospital, or who are convicted for a further offence. Additional variables will be generated for inclusion based on theories regarding violent behaviour, areas identified by the Home Office when considering suitability for discharge of restricted patients and factors identified as being discussed by MHRT's when considering suitability for discharge. The variables to be included in this study fall into five sections:

I. Demographics

For those who fail it is predicted that:

admission age will be lower, discharge age will be lower, patients will be restricted, they will have a legal classification of psychopathic disorder, WAIS IQ will be lower, and there will be mixed views regarding suitability for discharge.

In addition the method of discharge (MHRT or RMO) and disposal facility (Regional Secure Unit (RSU), NHS hospital, hostel, family or community) will be examined to explore if they are related to outcome.

II. History

For those who fail it is predicted that:

the family background will be described as unstable, the family background will be described as violent, there will have been contact with psychiatric services in childhood and in adulthood, the patient will have been under 18 at the time of their first arrest, they will have 4 or more convictions, they will have a history of drug and or alcohol abuse, there will be a history of violent behaviour in
childhood and in adulthood, there will be a history of problem behaviour as a child, they will have reported physical and or sexual abuse, and they will have a poor work record.

III. Offence
For those who fail it is predicted that:
The offence will be premeditated, drugs and or alcohol will have used at the time of the offence, the patient will have been psychotic at the time of the offence, there will be more than one victim, who will have been a stranger or acquaintance, and the victim will have been a child.

IV. Behaviour in Broadmoor during the last 12 months
For those who fail it is predicted that:
they will have displayed verbal and or physical aggression, this will have occurred on more than one occasion, they will have a poor attitude to work, they will have experienced difficulties at work, family difficulties will be reported, if delusions were active at the time of the index offence, they will still be present, they will be psychotic, they will refuse medication recommendations within hospital and they will not see the need for medication after discharge and will be reluctant to take it after discharge, and there will be mixed views by professionals about these variables.

V. Therapy and Progress
For those who fail it is predicted that:
they will not recognise the need for therapy, they will not have engaged in therapy, they will not have attended a social skills or anger management group, progress will not be reported, deterioration will be reported, they will be described as impulsive and not insightful, or remorseful, alternative coping strategies will not be reported, they will still have contact with their victim, future triggers for reoffending will have been identified and there will be mixed views by professionals regarding these variables. In addition, where the patient has engaged in therapy the type of therapy (group or individual) will be examined to explore if this has any relationship with discharge.
In addition to these predictions there will be 5 hypotheses:

I. The variables outlined above will differentiate subjects who are successful after discharge from subjects who fail after discharge;

II. There will be a higher rate of subjects classified as mental illness compared to psychopathic disorder readmitted to hospital;

III. There will be a higher rate of subjects classified as psychopathic disorder compared to mental illness reconvicted;

IV. Different variables will be related to outcome for psychopathic disorder compared to mental illness subjects;

V. A multivariate statistical model will be able to use the predictor variables to predict subjects who failed and subjects who were successful.

In addition to this the success and failure rates of subjects discharged by their RMO and clinical team compared to those discharged by a MHRT will be examined. Also, the impact of therapy received whilst in hospital, particularly those addressing deficits in interpersonal skills, will be explored in relation to outcome.
METHOD

Design
A retrospective design was chosen to analyse the content of admission and discharge reports contained in the patients medical records. This involved searching each subject's medical records for the relevant reports. The reports included in the study were those written on admission by the probation officer, psychiatrist, social worker and psychologist, and those written prior to discharge, including psychiatrist and social work reports provided for the most recent MHRT and psychiatrist reports provided for the Home Office where restricted patients were being recommended for discharge by their RMO, and reports provided by the RMO for potential receiving facilities. In addition any reports written by therapists that the patient had worked with, were included. These reports were selected because they are likely to be present for all patients and provide a considerable mount of information relating to the points included on the checklist.

A between subjects design was employed to compare the Independent Variable, outcome, with the Dependent Variables, the variables included in the checklist. The Independent Variable included four possible outcomes: subjects who remained in the community; subjects who failed by being reconvicted; subjects who failed by being readmitted to special hospital and subjects who failed in general, including both groups two and three. The Dependent Variable included a total of 55 variables divided across 5 categories: demographics; history; index offence; behaviour in Broadmoor during last 12 months; and therapy and progress.

Subjects
The sample included 80 subjects randomly selected from the group of 194 patients who were discharged from the hospital between January 1983 and December 1988. Two of the subjects' medical records could not be placed and a third subject's records were incomplete, therefore these subjects were excluded. This left a sample of 77 subjects included in the study.
Of these subjects, 39 had been discharged through a MHRT, and 38 had been transferred by their RMO and clinical team. Forty nine subjects had the legal classification of 'mental illness' and 28 of 'psychopathic disorder'. Sixty one subjects were male and 16 were female. Their ages ranged from 23 to 72 years. Finally, 46 successfully remained in the community, whilst 31 failed, 18 of these were readmitted to a special hospital, six were reconvicted and 18 had a reconviction and were readmitted to hospital.

The checklist
A checklist was developed for analysis of the reports contained in each subjects medical records (see Appendix 2). One checklist was used for each subject. The checklist included the variables of interest to this study. For each variable it was recorded whether it applied to the subject or not. If the variable was not referred to in any of the reports it was recorded as absent.

As outlined above a total of 55 variables were included covering five sections. Demographics included 9 variables, 'history', 11 variables; 'offence' 7 variables; 'behaviour in Broadmoor during last 12 months' 13 variables; and 'therapy and progress' 14 variables. These were selected from previous outcome studies and theories relating to the development of violence outlined in the introduction. In addition some variables exploring whether subjects had engaged in therapy and if so the form of therapy, were included.

The checklist was piloted using a random selection of 5 reports. Overall this revealed no problems although there were some changes made to the ordering of questions. Inter-rater reliability checks were then carried out using a further 5 randomly selected subjects. Two raters independently completed the checklist for each of the five subjects. The calculated inter-rater reliability figures were r=0.96 for each checklist, providing an overall figure of r=0.96. This is well above the acceptable ranges of 0.70 to 0.90 as recommended by Hartman (1982). With this it was decided that the checklist was ready to be used in the main study.
Procedure

The medical records for each subject were located in the hospitals medical records archives department. Once located the reports outlined above were all analysed using the checklist. One checklist was used for each subject.

Follow-up data was collected from the Special Hospitals case register. This was set up in 1972 and since the beginning of that year the Special Hospitals Research Unit (SHRU) have been recording particulars about all patients entering the special hospitals. The information is obtained by interview and from the official records. Data about the patients psychiatric history, social background, criminal record and diagnosis on admission are kept. Details about progress in hospital are not kept.

Currently the case register holds information about reconviction and rehospitalisation up to the end of 1990. The data about reconvictions is collected from the Home Office C3 division where criminal statistics about mentally disordered offenders are held. Data about rehospitalisation is collected from the central records office about National Health Service hospital admissions, in Southport. This gave a follow-up period ranging between 1 and 7 years.

Obtaining information from the SHRU is a lengthy process as direct access is not available and one has to work through the SHRU staff who have a number of demands made on their time. It was therefore possible to obtain only limited information within the time frame of this study. Figures were obtained on the number of reconvictions and rehospitalisations but not the nature of the reconvictions or reasons for rehospitalisation, although this information is held on the case register.
The data was analysed using a variety of methods and the results are reported in the following 3 sections: First, descriptive analyses are presented in order to give an understanding of the nature of the offenders under examination. In the second section bivariate analyses are reported in order to highlight those variables that are most predictive of successful outcome. While these analyses are useful in indicating the variables to be considered in decision making, they do not allow the interactions between predictors to be taken into account. For this reason section 3 presents a series of multivariate analyses using logistic regression procedures.
I. Descriptive analysis

Descriptive statistics for the various outcomes were calculated for some of the indices.

Outcome

Of the 77 subjects an overall total of 31 (40.3%) failed after discharge from Broadmoor hospital. Of those who failed 6 (19.4%) were reconvicted, 18 (58.1%) were readmitted to a special hospital and 7 (22.6%) were both reconvicted and readmitted to a special hospital. The total number of subjects reconvicted was 13 (14.3%) and the total number of subjects readmitted was 25 (32.5%).

Disposal

Subjects were discharged to either a Regional Secure Unit (RSU), a NHS hospital, a hostel, the Community, or to their family. The percentages for each possible outcome for these five options is displayed in Table 1. This demonstrates that for those who were reconvicted the majority of subjects were discharged to a hostel or into the community, whereas for those who were readmitted there was much more variety. Overall the types of facilities subjects were discharged to revealed few differences for successful compared to non successful subjects. However, those discharged to a RSU did seem to do slightly better with over 50% of successful subjects being discharged to a RSU, compared to just over 40% of those who failed.

TABLE 1. DESCRIPTIVE - DISPOSAL BY OUTCOME

<table>
<thead>
<tr>
<th>Outcome</th>
<th>RSU</th>
<th>NHS</th>
<th>Hostel</th>
<th>Family</th>
<th>Community</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Success</td>
<td>52.2%</td>
<td>23.9%</td>
<td>10.9%</td>
<td>8.7%</td>
<td>4.3%</td>
<td>100%</td>
</tr>
<tr>
<td>Reconviction</td>
<td>16.7%</td>
<td>0%</td>
<td>50.0%</td>
<td>0%</td>
<td>33%</td>
<td>100%</td>
</tr>
<tr>
<td>Readmission</td>
<td>22.2%</td>
<td>11%</td>
<td>22.2%</td>
<td>22.2%</td>
<td>22.2%</td>
<td>100%</td>
</tr>
<tr>
<td>Both Reconviction + Readmission</td>
<td>42.8%</td>
<td>28.6%</td>
<td>14.3%</td>
<td>14.3%</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Total Failure Rate</td>
<td>25.8%</td>
<td>12.9%</td>
<td>25.8%</td>
<td>16.1%</td>
<td>19.4%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Discharge

Subjects were discharged either by a MHRT or their RMO and clinical team. The findings indicate that overall there was a higher rate of subjects who were successful discharged by their RMO than by a MHRT (56.5\% vs. 43.5\%), this is seen in Table 2. In addition more subjects who were reconvicted were discharged by MHRT's (83.3\% vs. 16.7\%), as were more of the subjects who were readmitted (66.7\% vs. 33.3\%).

TABLE 2. DESCRIPTIVE - METHOD OF DISCHARGE BY OUTCOME

<table>
<thead>
<tr>
<th>Outcome</th>
<th>MHRT</th>
<th>RMO</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Success</td>
<td>43.5%</td>
<td>56.5%</td>
<td>100%</td>
</tr>
<tr>
<td>Reconviction</td>
<td>83.3%</td>
<td>16.7%</td>
<td>100%</td>
</tr>
<tr>
<td>Readmission</td>
<td>66.7%</td>
<td>33.3%</td>
<td>100%</td>
</tr>
<tr>
<td>Both reconviction and readmission</td>
<td>28.6%</td>
<td>71.4%</td>
<td>100%</td>
</tr>
<tr>
<td>Total Failure Rate</td>
<td>61.3%</td>
<td>38.7%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Age at discharge

The mean age at discharge for successful subjects was 37.5 years, ranging from 20-64.5 years. This compared to a mean age at discharge of 39.5 years, ranging from 23.9-70.1 years, for subjects who failed.

Length of stay

The mean length of stay for successful subjects was 9.3 years, ranging 8 months-29.3 years. This compared to a mean length of stay of 8.2 years for subjects who failed, ranging 1-22.8 years.

Classification

The findings indicate that overall those subjects classified as mental illness were the most successful (69.6\% vs. 30.4\%). A higher number of subjects classified as psychopathic disorder were reconvicted
(83.3% vs. 16.7%), whereas more subjects classified as mental illness were readmitted (61.1% vs. 38.9). This can be seen in Table 3.

### TABLE 3. DESCRIPTIVE - CLASSIFICATION BY OUTCOME

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Psychopathic Disorder</th>
<th>Mental Illness</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Success</td>
<td>30.4%</td>
<td>69.6%</td>
<td>100%</td>
</tr>
<tr>
<td>Reconviction</td>
<td>83.3%</td>
<td>16.7%</td>
<td>100%</td>
</tr>
<tr>
<td>Readmission</td>
<td>38.9%</td>
<td>61.1%</td>
<td>100%</td>
</tr>
<tr>
<td>Both reconviction + Readmission</td>
<td>28.6%</td>
<td>71.4%</td>
<td>100%</td>
</tr>
<tr>
<td>Total Failure Rate</td>
<td>45.2%</td>
<td>54.8%</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Sex**

The findings indicate that overall women subjects were more successful than male subjects (75% vs. 55.7%). In addition none of the women subjects were reconvicted. This can be seen in Table 4.

### TABLE 4. DESCRIPTIVE - GENDER X OUTCOME

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Success</td>
<td>55.7%</td>
<td>75.0%</td>
</tr>
<tr>
<td>Reconviction</td>
<td>9.8%</td>
<td>0%</td>
</tr>
<tr>
<td>Readmission</td>
<td>24.6%</td>
<td>18.8%</td>
</tr>
<tr>
<td>Both Reconviction + Readmission</td>
<td>9.8%</td>
<td>6.3%</td>
</tr>
<tr>
<td>Total Failure Rate</td>
<td>44.3%</td>
<td>25.0%</td>
</tr>
</tbody>
</table>
Index Offence

The index offences were divided into seven categories, 'Homicide', including murder and manslaughter; 'ABH/GBH'; 'Sexual'; 'Arson'; 'Criminal Damage/Dishonest', including property offences and offences involving theft and deception; 'other', covering any other offences; and 'no offence', covering those subjects who have no index offence but were admitted because they were not manageable elsewhere. No subjects fell into these last two categories. The findings indicate that overall 'Homicide' and 'ABH/GBH' were the most common index offence among those subjects who were successful (73.9%). Among those subjects who failed 'ABH/GBH', followed by 'Homicide' and 'Sexual' offences were the most common (45.7%, 19.3%, 19.3%). This is seen in Table 5.

TABLE 5. DESCRIPTIVE - OUTCOME BY INDEX OFFENCE

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Homicide</th>
<th>ABH/GBH</th>
<th>Sexual</th>
<th>Arson</th>
<th>Criminal Damage/dishonesty</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Success</td>
<td>32.6%</td>
<td>32.6%</td>
<td>15.2%</td>
<td>6.5%</td>
<td>13.0%</td>
<td>100%</td>
</tr>
<tr>
<td>Reconviction</td>
<td>16.6%</td>
<td>0%</td>
<td>33.3%</td>
<td>16.7%</td>
<td>33.3%</td>
<td>100%</td>
</tr>
<tr>
<td>Readmission</td>
<td>11.1%</td>
<td>66.7%</td>
<td>16.7%</td>
<td>0%</td>
<td>5.6%</td>
<td>100%</td>
</tr>
<tr>
<td>Both reconviction + readmission</td>
<td>42.9%</td>
<td>28.6%</td>
<td>14.3%</td>
<td>14.3%</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Total Failure Rate</td>
<td>19.3%</td>
<td>45.7%</td>
<td>19.4%</td>
<td>6.5%</td>
<td>9.7%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Follow-up Length

The length of the follow-up period before failure occurred ranged from 1 month - 8.5 years, with a mean of 1.9 years from discharge before failure occurred. The findings indicate two peaks for failure, the first occurring between 7-12 months after discharge and the second between 19-24 months after discharge. Just under 70% of failures occurred within the first two years following discharge.

II. BIVARIATE ANALYSIS

Two types of bivariate analyses were completed, Chi Squared analysis and Phi Coefficient Correlations. These were used to examine each variable with outcome. Outcome was analysed in two
ways. Firstly, failure in the community was broken down and categorised according to type of failure: reconviction; readmission to special hospital; or both a reconviction and readmission to a special hospital. Secondly, all of those who failed were categorised together regardless of type of failure.

III. Chi Squared analysis

Chi squared analyses were used to compare each of the 55 variables with outcome (success versus failure) and with outcome (success versus reconviction, readmission, both a reconviction and readmission). The cell size's varied according to the number of categories for each variable.

Demographic variables

A total of 9 variables were included in this section. The first analyses examined all variables with outcome (success versus reconviction, readmission, both a reconviction and readmission).

**TABLE 6. CHI SQUARE - DEMOGRAPHICS BY OUTCOME**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Success vs. failure</th>
<th></th>
<th></th>
<th>Success vs. reconviction vs. readmission vs. both reconviction + readmission</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\chi^2$</td>
<td>df</td>
<td>p</td>
<td>$\chi^2$</td>
<td>df</td>
<td>p</td>
</tr>
<tr>
<td>Sex</td>
<td>1.96</td>
<td>1</td>
<td>ns</td>
<td>2.73</td>
<td>3</td>
<td>ns</td>
</tr>
<tr>
<td>Admission age</td>
<td>9.34</td>
<td>5</td>
<td>&lt; 0.10</td>
<td>13.86</td>
<td>15</td>
<td>ns</td>
</tr>
<tr>
<td>Discharge age</td>
<td>11.24</td>
<td>5</td>
<td>&lt; 0.05</td>
<td>18.2</td>
<td>15</td>
<td>ns</td>
</tr>
<tr>
<td>Discharge (MHRT v RMO)</td>
<td>2.35</td>
<td>1</td>
<td>&lt; 0.10</td>
<td>6.72</td>
<td>3</td>
<td>&lt; 0.10</td>
</tr>
<tr>
<td>Disposal (RSU, hostel, NHS, community, family)</td>
<td>11.59</td>
<td>4</td>
<td>&lt; 0.025</td>
<td>22.17</td>
<td>12</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td>Section</td>
<td>5.62</td>
<td>1</td>
<td>ns</td>
<td>6.77</td>
<td>3</td>
<td>&lt; 0.10</td>
</tr>
<tr>
<td>Classification</td>
<td>1.74</td>
<td>1</td>
<td>ns</td>
<td>6.65</td>
<td>3</td>
<td>&lt; 0.10</td>
</tr>
<tr>
<td>WAIS</td>
<td>7.25</td>
<td>3</td>
<td>&lt; 0.10</td>
<td>15.53</td>
<td>9</td>
<td>&lt; 0.10</td>
</tr>
<tr>
<td>Mixed views about suitability for discharge</td>
<td>4.64</td>
<td>2</td>
<td>&lt; 0.10</td>
<td>22.68</td>
<td>6</td>
<td>&lt; 0.05</td>
</tr>
</tbody>
</table>

The findings indicate that only two of the variables had a relationship with outcome. Firstly, the findings indicate a relationship with 'mixed views about suitability for discharge' which is seen in Table 6. and was significant, $\chi^2$ 22.68, df = 6, p<.05. This indicates that mixed views about suitability for discharge were present for fewer of the successful subjects 6.5% vs. 22.6%).
Secondly, a relationship with 'disposal' which can be seen in Table 6, and was significant, \( \chi^2 = 22.17, \) df = 12, \( p < .05 \). This indicates that the type of facility subjects were discharged to is related with outcome, with more of the successful subjects being discharged to a RSU (62% vs. 25.8%).

In addition to this the findings indicate that four variables had a relationship with outcome that approached significance. Firstly, 'section' was related and can be seen in Table 6, and was approaching significance, \( \chi^2 = 6.77, \) df=3, \( p < .10 \). This indicates that the level of success among the patients who have no restriction order added to their section is higher than the level of success among those who are restricted (86.7% vs. 76.3%).

Secondly, the findings indicate a relationship with 'classification' which is seen in Table 6, and approached significance, \( \chi^2 = 6.65, \) df=3, \( p < .10 \). This indicates that subjects legally classified as mental illness were more successful than those legally classified as psychopathic disorder (71.4% vs. 30.4%).

Thirdly, the findings indicate a relationship with 'method of discharge' which is seen in Table 6, and was approaching significance, \( \chi^2 = 6.72, \) df=3, \( p < .10 \). This indicates that a greater number of subjects discharged by their RMO compared to a MHRT, were successful (68.4% vs. 51.3%).

Finally, the findings indicate a relationship with 'WAIS' IQ score, which is seen in Table 6, and was approaching significance, \( \chi^2 = 15.5, \) df=9, \( P < .10 \). This indicates that there were more subjects with above average IQ scores who were successful (75% vs. 25%). This indicates that there were more subjects with above average IQ scores who were successful (66.7% vs. 33.3%) and below average IQ scores who were successful (76.2 vs. 23.8).

The second analyses compared all variables with outcome (success versus failure). The findings indicate that only 3 variable's have a relationship with outcome. Firstly, the findings indicate a relationship with age at discharge' which is seen in Table 6, and was significant \( \chi^2 = 11.24, \) df=5, \( p < .05 \). This indicates that subjects aged 25 years and below at the time of discharge had a lower rate of success than those aged above 25 years (70% vs. 16.7%).
Secondly, the findings indicate a relationship with 'type of disposal' which is seen in Table 6. and was significant, $\chi^2 = 11.59$, df=4, $p<.025$. This indicates a higher success rate among those subjects discharged to a RSU compared to other facilities (75% vs. 48.9%).

In addition the findings indicate a relationship with four variables that approached significance. Firstly, the findings indicate a relationship with 'type of discharge' which is seen in Table 6. and approached significance, $\chi^2 = 2.36$, df=1, $p<.10$. This indicates a higher level of success among those subjects discharged by their RMO compared to a MHRT (68.4% vs. 51.3%).

Secondly, the findings indicate a relationship with 'age at admission' which is seen in Table 6. and approached significance, $\chi^2 = 9.37$, df=5, $p<.10$. This indicates a higher level of success among those subjects admitted before age 25 years (66.7% vs. 53.5%).

Thirdly, the findings indicate a relationship with 'mixed views' about suitability for discharge which is seen in Table 6. and was approaching significance, $\chi^2 = 4.64$, df=2, $p<.10$. This indicates a higher success rate among patients where the amount of mixed views regarding suitability for discharge were lower (64.2% vs. 33.2%).

Finally, the findings indicate a relationship with 'WAIS IQ' scores which is seen in Table 6. and was approaching significance, $\chi^2 = 7.26$, df=3, $p<.10$. This indicates that there were more subjects with above average IQ scores who were successful (66.7% vs. 33.3%) and below average IQ scores who were successful (76.2 vs. 23.8).

**History**

A total of 11 variables were included in this section. As above the first analyses compared each variable with outcome (success versus reconviction, readmission, both a reconviction and readmission).
### TABLE 7. CHI SQUARE - HISTORY BY OUTCOME

<table>
<thead>
<tr>
<th>Variable</th>
<th>Success vs. failure</th>
<th>Success vs. reconviction vs. readmission vs. both reconviction + readmission</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\chi^2$</td>
<td>df</td>
</tr>
<tr>
<td>Stability</td>
<td>1.23</td>
<td>2</td>
</tr>
<tr>
<td>Violence during childhood</td>
<td>1.56</td>
<td>2</td>
</tr>
<tr>
<td>Previous psychiatric contact-childhood</td>
<td>0.19</td>
<td>2</td>
</tr>
<tr>
<td>Previous psychiatric contact-adult</td>
<td>1.8</td>
<td>3</td>
</tr>
<tr>
<td>Under 18 first arrest</td>
<td>0.33</td>
<td>2</td>
</tr>
<tr>
<td>4 or more convictions</td>
<td>1.86</td>
<td>2</td>
</tr>
<tr>
<td>Drug/alcohol abuse</td>
<td>3.8</td>
<td>2</td>
</tr>
<tr>
<td>History violence-childhood</td>
<td>0.39</td>
<td>2</td>
</tr>
<tr>
<td>History violence-adult</td>
<td>2.72</td>
<td>2</td>
</tr>
<tr>
<td>Problem behaviour as a child</td>
<td>0.09</td>
<td>3</td>
</tr>
<tr>
<td>Physical/sexual abuse</td>
<td>1.48</td>
<td>2</td>
</tr>
<tr>
<td>Work history</td>
<td>0.20</td>
<td>2</td>
</tr>
</tbody>
</table>

The findings indicate that only the variable 'history of violence in adulthood' had a relationship with outcome. This is seen in Table 7. and was significant, $\chi^2 18.5$, df=9, p<.05. This indicates a higher level of success among those who did not have a history of violence in adulthood (78.3% vs. 83.9%).

The second analyses compared each variable with outcome (success versus failure). The findings indicate no relationship for any of the variables. This is seen in Table 7.

**Index Offence**

A total of 7 variables were included in this section. The first analyses compared each variable with outcome (success versus reconviction, readmission, both a reconviction and readmission). The findings indicate no relationship with any of the variables.
TABLE 8. CHI SQUARE - OFFENCE BY OUTCOME

<table>
<thead>
<tr>
<th>Variable</th>
<th>Success vs. failure</th>
<th>Success vs. reconviction vs. readmission vs. both reconviction + readmission</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\chi^2$</td>
<td>df</td>
</tr>
<tr>
<td>Premeditated</td>
<td>3.99</td>
<td>3</td>
</tr>
<tr>
<td>Drugs/alcohol used</td>
<td>3.88</td>
<td>3</td>
</tr>
<tr>
<td>Psychotic at time of offence</td>
<td>3.18</td>
<td>3</td>
</tr>
<tr>
<td>History of violence while psychotic</td>
<td>2.28</td>
<td>3</td>
</tr>
<tr>
<td>More than one victim</td>
<td>4.38</td>
<td>1</td>
</tr>
<tr>
<td>Victim is a child</td>
<td>0.05</td>
<td>1</td>
</tr>
<tr>
<td>Relationship with victim</td>
<td>8.83</td>
<td>9</td>
</tr>
</tbody>
</table>

The second analysis compared each variable with outcome (success versus failure). The findings indicate no relationship with any of the variables. This is seen in Table 8.

**Behaviour in Broadmoor over last 12 months**

A total of 13 variables were included in this section. It was not possible to complete any analyses on the variable 'Self harm' or the variable 'Self harm on more than one occasion' as only one subject was reported to have engaged in self harm.

The first analyses compared each variable with outcome (success versus reconviction, readmission, both a reconviction with and readmission). The findings indicate that only the variable 'medication' which is seen in Table 9. and was significant, $\chi^2$ 9.48, df=2, p<.05. This indicates a higher level of success among those subjects who take medication (74.4% vs. 25.6%).

The second analyses compared each variable with outcome (success versus failure). The findings indicate that a relationship was found with only one variable, 'medication'. This is seen in Table 9. and was significant, $\chi^2$ 7.07, df=2, p<.05. This indicates a higher level of success among those subjects who take medication (74.4% vs. 25.7%).
TABLE 9. CHI SQUARE - BEHAVIOUR DURING LAST TWELVE MONTHS BY OUTCOME

<table>
<thead>
<tr>
<th>Variable</th>
<th>Success vs. failure</th>
<th>Success vs. reconviction vs. readmission vs. both reconviction + readmission</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X²</td>
<td>df</td>
</tr>
<tr>
<td>Verbal aggression</td>
<td>0.08</td>
<td>1</td>
</tr>
<tr>
<td>Physical aggression</td>
<td>3.60</td>
<td>1</td>
</tr>
<tr>
<td>Direction of aggression</td>
<td>3.06</td>
<td>4</td>
</tr>
<tr>
<td>More than once</td>
<td>3.74</td>
<td>2</td>
</tr>
<tr>
<td>Attitude to work</td>
<td>0.99</td>
<td>2</td>
</tr>
<tr>
<td>Difficulties at work</td>
<td>0.42</td>
<td>2</td>
</tr>
<tr>
<td>Family difficulties</td>
<td>0.18</td>
<td>2</td>
</tr>
<tr>
<td>Delusions present at offence still active</td>
<td>1.65</td>
<td>56</td>
</tr>
<tr>
<td>Still psychotic</td>
<td>0.6</td>
<td>2</td>
</tr>
<tr>
<td>Takes medication</td>
<td>7.07</td>
<td>2</td>
</tr>
<tr>
<td>Reluctant to take med.</td>
<td>7.75</td>
<td>3</td>
</tr>
<tr>
<td>Sees need for med.</td>
<td>5.24</td>
<td>2</td>
</tr>
<tr>
<td>Mixed views</td>
<td>2.84</td>
<td>2</td>
</tr>
</tbody>
</table>

In addition the findings indicate a relationship with two variables that was approaching significance. Firstly, the findings indicate a relationship with physical aggression which is seen in Table 9. and was approaching significance, $\chi^2 = 3.60$, df=1, $p<0.10$. This indicates that among those subjects where physical aggression was present, all were successful compared to 43.1% of subjects where physical aggression was not present.

Secondly, the findings indicate a relationship with reluctance to take medication which is seen in Table 9. and was approaching significance, $\chi^2 = 7.75$, df=3, $p<0.10$. This indicates a higher level of success among those subjects who were not reluctant to take medication compared to those who were reluctant (67.3% vs. 46.4%).

**Therapy and Progress**

A total of 14 variables were included in this section. The first analyses compared each variable with outcome (success versus reconviction, readmission, both a reconviction and a readmission).
TABLE 10. CHI SQUARE - THERAPY AND PROGRESS BY OUTCOME

<table>
<thead>
<tr>
<th>Variable</th>
<th>( \chi^2 )</th>
<th>df</th>
<th>p</th>
<th>( \chi^2 )</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognises need-therapy</td>
<td>1.92</td>
<td>2</td>
<td>ns</td>
<td>8.29</td>
<td>6</td>
<td>ns</td>
</tr>
<tr>
<td>Engaged in therapy</td>
<td>3.01</td>
<td>2</td>
<td>ns</td>
<td>9.17</td>
<td>6</td>
<td>ns</td>
</tr>
<tr>
<td>Type of therapy</td>
<td>5.76</td>
<td>4</td>
<td>ns</td>
<td>13.56</td>
<td>12</td>
<td>ns</td>
</tr>
<tr>
<td>Social skills group</td>
<td>4.07</td>
<td>2</td>
<td>ns</td>
<td>5.35</td>
<td>6</td>
<td>ns</td>
</tr>
<tr>
<td>Anger management group</td>
<td>5.19</td>
<td>2</td>
<td>&lt;0.10</td>
<td>5.19</td>
<td>6</td>
<td>ns</td>
</tr>
<tr>
<td>Progress</td>
<td>8.41</td>
<td>2</td>
<td>&lt;0.05</td>
<td>19.44</td>
<td>9</td>
<td>&lt;0.025</td>
</tr>
<tr>
<td>Deterioration</td>
<td>6.87</td>
<td>3</td>
<td>&lt;0.05</td>
<td>6.87</td>
<td>6</td>
<td>ns</td>
</tr>
<tr>
<td>Impulsive</td>
<td>0.44</td>
<td>2</td>
<td>ns</td>
<td>4.72</td>
<td>6</td>
<td>ns</td>
</tr>
<tr>
<td>Insight</td>
<td>5.15</td>
<td>2</td>
<td>&lt;0.10</td>
<td>2.79</td>
<td>6</td>
<td>ns</td>
</tr>
<tr>
<td>Remorse</td>
<td>2.53</td>
<td>2</td>
<td>ns</td>
<td>2.79</td>
<td>6</td>
<td>ns</td>
</tr>
<tr>
<td>Alternative coping strategies</td>
<td>2.23</td>
<td>2</td>
<td>ns</td>
<td>4.09</td>
<td>6</td>
<td>ns</td>
</tr>
<tr>
<td>Contact with victim</td>
<td>2.78</td>
<td>3</td>
<td>ns</td>
<td>8.54</td>
<td>9</td>
<td>ns</td>
</tr>
<tr>
<td>Future triggers to offending</td>
<td>0.93</td>
<td>2</td>
<td>ns</td>
<td>7.2</td>
<td>6</td>
<td>ns</td>
</tr>
<tr>
<td>Mixed views</td>
<td>2.16</td>
<td>2</td>
<td>ns</td>
<td>2.10</td>
<td>6</td>
<td>ns</td>
</tr>
</tbody>
</table>

The findings indicate a relationship with only one variable 'progress', which is seen in Table 10 and was significant, \( \chi^2 = 19.44 \), df=9, \( p < 0.025 \). This indicates that among the subjects who were successful a greater number had progress reported than among those who failed (60% vs. 39%).

The second analysis compared each variable with outcome (success versus failure). The findings indicate a relationship with two variables. Firstly, the findings indicate a relationship with 'progress' which is seen in Table 10 and was significant, \( \chi^2 = 18.41 \), df=3, \( p < .05 \). This indicates that among those subjects who were successful a greater number had progress reported than among those who failed (60% vs. 30%).

Secondly, the findings indicate a relationship with 'deterioration' which is seen in Table 10 and was significant, \( \chi^2 = 6.87 \), df=3, \( p < .05 \). This indicates that reports of deterioration were only found among those who failed.

In addition the findings indicate a relationship approaching significance for two of the variables. Firstly, the results indicate a relationship with 'insight' which is seen in Table 10 and was approaching
significance, $\chi^2 = 5.15$, df=2, $p<.10$. This indicates that among those subjects who were successful there were a greater number with insight reported compared to those who failed (69% vs. 31%).

Secondly, the findings indicate a relationship with 'anger management' which is seen in Table 10, and was approaching significance, $\chi^2 = 5.19$, df=2, $p<.10$. This indicates a greater level of success among those subjects reported to have completed an anger management group (55.7% vs. 44.3%).

**IIIii. Phi Coefficient Correlations**

Phi coefficient correlations were calculated for all 54 variables with outcome. Outcome was categorised in three ways. Firstly, subjects were divided into two categories (successful versus failure). Secondly, they were divided into two categories (reconviction versus no reconviction) and thirdly, they were divided into two categories (readmission versus no readmission).

**Demographic variables**

This section included a total of 9 variables. In the first analyses comparing each variable with outcome (reconviction vs. no reconviction) the findings indicate no relationship with any of the variables. This is seen in Table 11.

<table>
<thead>
<tr>
<th>TABLE 11. PHI COEFFICIENTS - DEMOGRAPHIC VARIABLES BY OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Sex</td>
</tr>
<tr>
<td>Admission age</td>
</tr>
<tr>
<td>Discharge age</td>
</tr>
<tr>
<td>Discharge (MHRT v RMO)</td>
</tr>
<tr>
<td>Disposal (RSU, host, NHS, community, family)</td>
</tr>
<tr>
<td>Section</td>
</tr>
<tr>
<td>Classification</td>
</tr>
<tr>
<td>Index offence</td>
</tr>
<tr>
<td>WAIS</td>
</tr>
<tr>
<td>Mixed views about suitability for discharge</td>
</tr>
</tbody>
</table>

df = 70
In the second analyses comparing each variable with outcome (readmission vs. no readmission) the findings indicate a relationship with only one variable 'section'. This is seen in Table 11. and was significant, Phi 0.27, df = 70, P<.025. This indicates a relationship with reconviction and being a restricted subject, with a higher number of reconvicted subjects being restricted (83.3% vs. 13.3%).

In the third analyses comparing each variable with outcome (success vs. failure) the findings indicates a relationship with two variables. Firstly, the findings indicate a relationship with the variable 'section' which is seen in Table 11. and was significant, Phi 0.27, df = 70, p<.025. This indicates a relationship between being a non restricted subject and being successful (86.7% vs. 13.3%).

Secondly, the findings indicate a relationship with index offence which is seen in Table 11. and was significant Phi 0.02, df = 70, p<.025. This indicates that those subjects who were successful had a higher level of index offences that fell into the category 'homicide' or 'ABH/GBH' (32.6%, 41.3%), where as those who failed had a higher percentage of 'ABH/GBH' (51.6%), followed by a greater spread of index offences.

In addition, the findings indicate a relationship with the variable 'method of discharge' which is seen in Table 11. and approached significance, Phi 0.18, df = 70, p<.10. This indicates a relationship between being successful in the community and being discharged by a RMO and clinical team rather than a MHRT (68% vs. 51.6% success rate).

**History**

This section included a total of 11 variables. In the first analysis comparing each variable with outcome (reconviction vs. no reconviction) the findings indicate a relationship with only one variable, 'under 18 years at first arrest'. This is seen in Table 12. and was significant, Phi 0.20, df = 70, p<.05. This indicates a relationship between being under age 18 years at first conviction and being reconvicted (66.7% vs. 16.7%).
TABLE 12. PHI COEFFICIENTS - HISTORY BY OUTCOME

<table>
<thead>
<tr>
<th>Variable</th>
<th>Success failure vs. Reconviction vs. Readmission vs. no reconviction</th>
<th>Readmission vs. no readmission</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\phi$</td>
<td>$p$</td>
</tr>
<tr>
<td>Violence during childhood</td>
<td>0.14</td>
<td>ns</td>
</tr>
<tr>
<td>Stable childhood</td>
<td>0.09</td>
<td>ns</td>
</tr>
<tr>
<td>Previous psychiatric contact-childhood</td>
<td>-0.09</td>
<td>ns</td>
</tr>
<tr>
<td>Previous psychiatric contact-adult</td>
<td>-0.94</td>
<td>ns</td>
</tr>
<tr>
<td>Under 18 first arrest</td>
<td>0.07</td>
<td>ns</td>
</tr>
<tr>
<td>4 or more convictions</td>
<td>0.15</td>
<td>ns</td>
</tr>
<tr>
<td>Drug/alcohol abuse</td>
<td>0.13</td>
<td>ns</td>
</tr>
<tr>
<td>History violence-childhood</td>
<td>-0.04</td>
<td>ns</td>
</tr>
<tr>
<td>History violence-adult</td>
<td>0.16</td>
<td>ns</td>
</tr>
<tr>
<td>Problem behaviour in childhood</td>
<td>-0.02</td>
<td>ns</td>
</tr>
<tr>
<td>Physical/sexual abuse</td>
<td>0.08</td>
<td>ns</td>
</tr>
<tr>
<td>Work history</td>
<td>0.04</td>
<td>ns</td>
</tr>
</tbody>
</table>

$df = 70$

In the second analyses comparing each variable with outcome (readmission vs. no readmission) the findings indicate no relationship with any of the variables. This is seen in Table 12.

In the third analyses comparing each variable with outcome (success vs. failure) the findings indicate no relationship with any of the variables. This is seen in Table 12.

**Index Offence**

This section included a total of 7 variables. In the first analyses comparing each variable with outcome (reconviction vs. no reconviction) the findings indicate no relationship with any of the variables.

In the second analyses comparing each variable with outcome (readmission vs. no readmission) the findings indicate no relationship with any of the variables. This is seen in Table 13.

In the third analyses comparing each variable with outcome (success vs. failure) the findings indicate a relationship with one of the variables, 'more than one victim' which is seen in Table 13.
significant, Phi 0.22, df = 70, p<.05. This indicates a relationship between successful and not having more than one victim compared to those who failed, (86.21% vs. 63.61%).

**TABLE 13. PHI COEFFICIENTS - OFFENCE BY OUTCOME**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Success failure vs. Reconviction vs. Readmission vs. failure no reconviction no readmission</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( \phi )</td>
</tr>
<tr>
<td>Premeditated</td>
<td>-0.00 ns</td>
</tr>
<tr>
<td>Drugs/alcohol used</td>
<td>-0.08 ns</td>
</tr>
<tr>
<td>Psychotic at time offence</td>
<td>-0.18 ns</td>
</tr>
<tr>
<td>History of violence while psychotic</td>
<td>-0.16 ns</td>
</tr>
<tr>
<td>More than one victim</td>
<td>0.22 &lt;0.05</td>
</tr>
<tr>
<td>Victim is a child</td>
<td>-0.02 ns</td>
</tr>
<tr>
<td>Relationship with victim</td>
<td>0.03 ns</td>
</tr>
</tbody>
</table>

df = 70

**Behaviour in Broadmoor over last 12 months**

This section included a total of 13 variables. It was not possible to complete a statistical analyses on the variable 'self harm' or the variable 'self harm on more than one occasion' as only one subject was recorded as engaging in self harm. This subject was in the reconvicted outcome group.

In the first analyses comparing each variable with outcome (success vs. failure) the findings indicate a relationship with three of the variables. Firstly, the findings indicate a relationship with 'medication' which is seen in Table 14. and was significant, Phi 0.30, df = 70, p<.05. This indicates a relationship between taking medication and being successful compared to failing (65.9% vs. 34.5%).

Secondly, the findings indicate a relationship with 'reluctant to take medication' which is seen in Table 14. and was significant, Phi 0.23, df = 70, p<.05. This indicates that among those who take medication there is a relationship between being successful and not being reluctant to take medication (86.2% vs. 13.8%).
Finally, the findings indicate a relationship with physical aggression, which is seen in Table 14, and was significant, Phi 0.22, df = 70, p<05. This indicates a relationship between 'physical aggression' and not being reconvicted. No observations of physical aggression were made among those subjects who were reconvicted.

**TABLE 14. PHI COEFFICIENTS - BEHAVIOUR DURING LAST TWELVE MONTHS BY OUTCOME**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Success failure vs. Reconviction vs. Readmission</th>
<th>Readmission vs. No readmission</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( \phi )</td>
<td>p</td>
</tr>
<tr>
<td>Verbal aggression</td>
<td>-0.03</td>
<td>ns</td>
</tr>
<tr>
<td>Physical aggression</td>
<td>-0.22</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Direction of aggression</td>
<td>0.07</td>
<td>ns</td>
</tr>
<tr>
<td>More than once</td>
<td>0.05</td>
<td>ns</td>
</tr>
<tr>
<td>Attitude to work</td>
<td>-0.09</td>
<td>ns</td>
</tr>
<tr>
<td>Difficulties at work</td>
<td>-0.03</td>
<td>ns</td>
</tr>
<tr>
<td>Family difficulties</td>
<td>0.02</td>
<td>ns</td>
</tr>
<tr>
<td>Still psychotic</td>
<td>-0.07</td>
<td>ns</td>
</tr>
<tr>
<td>Delusions present at offence</td>
<td>-0.06</td>
<td>ns</td>
</tr>
<tr>
<td>active</td>
<td>Takes medication</td>
<td>0.30</td>
</tr>
<tr>
<td>Reluctant to take medication</td>
<td>0.23</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Sees need for medication</td>
<td>0.16</td>
<td>ns</td>
</tr>
<tr>
<td>Mixed views</td>
<td>0.00</td>
<td>ns</td>
</tr>
</tbody>
</table>

df = 70

In the second analyses comparing each variable with outcome (readmission vs. no readmission) the findings indicate no relationship with any of the variables. This is seen in Table 14.

In the third analyses comparing each variable with outcome (reconviction vs. no reconviction) the findings indicate a relationship with two variables. Firstly, 'medication' which is seen in Table 14, and was significant, Phi 0.23, df = 70, p<05. This indicates a relationship between taking medication and being successful in the community (74.4% vs. 44.7%).

Secondly, the findings indicate a relationship with 'difficulties at work' which is seen in Table 14, and was significant, Phi 0.23, df = 70, p<05. Few subjects had difficulties at work reported, 6.5% of the
successful subjects, 5.8% of the readmitted and none of the reconvicted. The findings indicate that 75% of those who had difficulties at work reported were successful.

Therapy and Progress

This section had a total of 14 variables. In the first analyses comparing each variable with outcome (reconviction vs. no reconviction) the findings indicate a relationship with 'triggers'. This is seen in Table 15. and was significant Phi 0.24, df = 70, p<.025. This indicates a relationship between reconviction and having possible future triggers to offending identified, with those subjects who went on to be reconvicted not having triggers identified.

In the second analyses comparing each variable with outcome (readmission vs. no readmission) the findings indicate no relationship with any of the variables. This is seen in Table 15.

In the third analyses comparing each variable with outcome (success vs. failure) the findings indicate no relationship with any of the variables. This is seen in Table 15.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Success failure vs. Reconviction vs. no reconviction</th>
<th>Readmission vs. no readmission</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>φ</td>
<td>p</td>
</tr>
<tr>
<td>Recognises need-therapy</td>
<td>0.05</td>
<td>ns</td>
</tr>
<tr>
<td>Engaged in therapy</td>
<td>-0.04</td>
<td>ns</td>
</tr>
<tr>
<td>Type of therapy</td>
<td>0.09</td>
<td>ns</td>
</tr>
<tr>
<td>Social skills group</td>
<td>-0.06</td>
<td>ns</td>
</tr>
<tr>
<td>Anger management group</td>
<td>-0.04</td>
<td>ns</td>
</tr>
<tr>
<td>Progress</td>
<td>0.15</td>
<td>ns</td>
</tr>
<tr>
<td>Deterioration</td>
<td>0.03</td>
<td>ns</td>
</tr>
<tr>
<td>Impulsive</td>
<td>-0.05</td>
<td>ns</td>
</tr>
<tr>
<td>Insight</td>
<td>-0.32</td>
<td>ns</td>
</tr>
<tr>
<td>Remorse</td>
<td>0.03</td>
<td>ns</td>
</tr>
<tr>
<td>Alternative coping strategies</td>
<td>0.14</td>
<td>ns</td>
</tr>
<tr>
<td>Contact with victim</td>
<td>0.08</td>
<td>ns</td>
</tr>
<tr>
<td>Future triggers to offending</td>
<td>-0.03</td>
<td>ns</td>
</tr>
<tr>
<td>Mixed views</td>
<td>-0.05</td>
<td>ns</td>
</tr>
</tbody>
</table>

df = 70
III. Multivariate analyses.

A Logistic Regression was selected to examine the interaction between variables and examine their predictive power for outcome. The findings from the univariate analyses were used to select the variables for inclusion in the multivariate analysis. Initially all of the variables that had a relationship with outcome that was significant were included. The variables were divided into three categories: 'demographics'; 'behaviour in hospital'; and 'history'. Three separate Logistic Regression analyses were completed. In addition, a small number of variables were excluded including physical aggression as only a small proportion of subjects were recorded as having displayed physical aggression, and index offence as this had a number of categories each with a small number of subjects in. The findings of all three analyses failed to produce a combination of predictor variables that reached significance.

**Demographics**

Logistic regressions were used to complete three analyses using the variables in this section to predict the three possible outcomes (reconviction vs. no reconviction; readmission vs. no readmission; and success vs. failure).

In the first analysis the power of the variables to predict outcome (success vs. failure) was examined the findings indicate that the combination of variables in this section did not have a relationship with outcome which is seen in Table 16. and was not significant, $\chi^2 = 1.39, df = 4$.

The findings indicate no variables were related with outcome these are seen in Table 16. and were not significant: 'length of follow-up' $\beta = 0.3, S.E. 0.63$; 'admission age' $B=-0.26, S.E. 0.41$; 'length of stay' $\beta = 0.07, S.E. 0.24$, 'WAIS' $\beta = -0.14, 0.29$.

In the second analysis the power of the variables to predict outcome (readmission vs. no readmission) was examined. The findings indicate that the combination of variables in this section did not have a relationship with readmission, which is seen in Table 17. and was not significant, $\chi^2 = 6.15, df = 4$. 

149
**TABLE 16. LOGISTIC REGRESSION - DEMOGRAPHICS BY OUTCOME**  
(SUCCESS vs. FAILURE)

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>β</th>
<th>S.E.</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow-up length</td>
<td>0.3</td>
<td>0.63</td>
<td>ns</td>
</tr>
<tr>
<td>Admission age</td>
<td>-0.26</td>
<td>0.41</td>
<td>ns</td>
</tr>
<tr>
<td>Length of stay</td>
<td>0.07</td>
<td>0.24</td>
<td>ns</td>
</tr>
<tr>
<td>WAIS</td>
<td>-0.14</td>
<td>0.29</td>
<td>ns</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chi-Square</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Chi-Square</td>
<td>1.39</td>
<td>4</td>
</tr>
</tbody>
</table>

**Prediction Table**

<table>
<thead>
<tr>
<th></th>
<th>Predicted 1</th>
<th>Predicted 2</th>
<th>% correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observed 1</td>
<td>3</td>
<td>22</td>
<td>12.0</td>
</tr>
<tr>
<td>Observed 2</td>
<td>4</td>
<td>34</td>
<td>89.47</td>
</tr>
</tbody>
</table>

Overall 58.73%

The findings indicate that none of the variables were related to readmission; these are seen in Table 17. and were not significant: 'follow-up length' $\beta = 0.71$, S.E. 0.71; 'admission age' $\beta = -0.58$, S.E. 0.49; 'length of stay' $\beta = 0.11$, S.E. 0.26; 'WAIS' $\beta = 0.35$, S.E. 0.35.

**TABLE 17. LOGISTIC REGRESSION - DEMOGRAPHICS BY READMISSION**

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>β</th>
<th>S.E.</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow-up length</td>
<td>0.71</td>
<td>0.71</td>
<td>ns</td>
</tr>
<tr>
<td>Admission age</td>
<td>-0.58</td>
<td>0.49</td>
<td>ns</td>
</tr>
<tr>
<td>Length of stay</td>
<td>0.11</td>
<td>0.26</td>
<td>ns</td>
</tr>
<tr>
<td>WAIS</td>
<td>0.35</td>
<td>0.35</td>
<td>ns</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chi-Square</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Chi-Square</td>
<td>6.15</td>
<td>4</td>
</tr>
</tbody>
</table>

**Prediction Table**

<table>
<thead>
<tr>
<th></th>
<th>Predicted 1</th>
<th>Predicted 2</th>
<th>% correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observed 1</td>
<td>1</td>
<td>18</td>
<td>5.26</td>
</tr>
<tr>
<td>Observed 2</td>
<td>3</td>
<td>41</td>
<td>93.18</td>
</tr>
</tbody>
</table>

Overall 66.67%
In the third analysis the power of the variables to predict outcome (reconviction vs. no reconviction) was examined. The findings indicate that the combination of variables in this section did not have a relationship with reconviction, which is seen in Table 18. and was not significant, $\chi^2 = 3.47$, df = 4.

The findings indicate that none of the variables were related to reconviction these are seen in Table 18. and were not significant: 'follow-up length' $\beta = 0.43$, S.E. 0.81; 'admission age' $\beta = -0.11$, S.E. 0.51; 'length of stay' $\beta = -0.26$, S.E. 0.35; 'WAIS' $\beta = -0.57$, S.E. 0.36.

**TABLE 18. LOGISTIC REGRESSION - DEMOGRAPHICS BY RECONVICTION**

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>$\beta$</th>
<th>S.E.</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow-up length</td>
<td>0.43</td>
<td>0.81</td>
<td>ns</td>
</tr>
<tr>
<td>Admission age</td>
<td>-0.11</td>
<td>0.51</td>
<td>ns</td>
</tr>
<tr>
<td>Length of stay</td>
<td>-0.26</td>
<td>0.35</td>
<td>ns</td>
</tr>
<tr>
<td>WAIS</td>
<td>-0.57</td>
<td>0.36</td>
<td>ns</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chi-Square</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Chi-Square</td>
<td>3.47</td>
<td>4</td>
</tr>
</tbody>
</table>

**Prediction Table**

<table>
<thead>
<tr>
<th>Predicted</th>
<th>Observed</th>
<th>Predicted</th>
<th>Observed</th>
<th>% correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1</td>
<td>0</td>
<td>11</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2 2</td>
<td>0</td>
<td>52</td>
<td>2</td>
<td>100</td>
</tr>
</tbody>
</table>

Overall 82.54%

History

Logistic regressions were used to complete three analyses using the variables in this section to predict the three possible outcomes (reconviction vs. no reconviction; readmission vs. no readmission; and success vs. failure).

In the first analysis the power of the variables to predict outcome (success vs. failure) was examined. The findings indicate that the combination of variables in this section did not have a relationship with outcome which is seen in Table 19. and was not significant, $\chi^2 = 2.03$, df = 2.
The findings indicate that none of the variables were related to outcome these are seen in Table 19.
and were not significant: 'under 18 at first arrest' $\beta = 0.08$, S.E. 0.4; 'history of violence as an adult' $\beta = 0.76$, S.E. 0.61.

**TABLE 19. LOGISTIC REGRESSION - HISTORY BY OUTCOME (SUCCESS vs. FAILURE)**

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>$\beta$</th>
<th>S.E.</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 18 first arrest</td>
<td>0.08</td>
<td>0.4</td>
<td>ns</td>
</tr>
<tr>
<td>History of violence as adult</td>
<td>0.76</td>
<td>0.61</td>
<td>ns</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chi-Square</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Chi-Square</td>
<td>2.03</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prediction Table</th>
<th>Predicted 1</th>
<th>Predicted 2</th>
<th>% correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observed 1</td>
<td>1</td>
<td>30</td>
<td>3.23</td>
</tr>
<tr>
<td>Observed 2</td>
<td>0</td>
<td>46</td>
<td>100</td>
</tr>
</tbody>
</table>

Overall    61.04%

In the second analysis the power of the variables to predict outcome (readmission vs. no readmission) was examined. The findings indicate that the combination of variables in this section did not have a relationship with readmission, which is seen in Table 20. and was not significant, $\chi^2 8.14$, df = 2.

The findings indicate that the variable 'under 18 at first arrest' was not related to readmission which is seen in Table 20. and was not significant: $\beta = -0.24$, S.E. 0.44.

They also indicate that one variable was related to readmission 'history of violence as an adult' which is seen in Table 20. and was significant $\beta = 2.29$, S.E. 1.07, P< 0.05.
TABLE 20. LOGISTIC REGRESSION - HISTORY BY READMISSION

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>β</th>
<th>S.E.</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 18 first arrest</td>
<td>-0.24</td>
<td>0.44</td>
<td>ns</td>
</tr>
<tr>
<td>History of violence as adult</td>
<td>2.29</td>
<td>1.07</td>
<td>&lt;.05</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chi-Square</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Chi-Square</td>
<td>8.14</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prediction Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predicted 1 1</td>
</tr>
<tr>
<td>Observed 1 1</td>
</tr>
<tr>
<td>Observed 2 2</td>
</tr>
<tr>
<td>Overall</td>
</tr>
</tbody>
</table>

In the third analysis the power of the variables to predict outcome (reconviction vs., no reconviction) was examined. The findings indicate that the combination of variables in this section did not have a relationship with reconviction, which is seen in Table 21. and was not significant, \( \chi^2 3.47, df = 2 \).

The findings indicate that one variable 'under 18 at first admission' was related to reconviction which is seen in Table 21. and approached significance, \( \beta = 1.03, \) S.E. 0.59, \( P<0.10 \).

They also indicate that the variable 'history of violence as an adult' was not related to reconviction which is seen in Table 21. and was not significant, -1.79, S.E. 0.74.
TABLE 21. LOGISTIC REGRESSION - HISTORY BY RECONVICTION

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>β</th>
<th>S.E.</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 18 first arrest</td>
<td>1.03</td>
<td>0.59</td>
<td>&lt;.10</td>
</tr>
<tr>
<td>History of violence as adult</td>
<td>-1.79</td>
<td>0.74</td>
<td>ns</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chi-Square</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Chi-Square</td>
<td>3.47</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prediction Table</th>
<th>Predicted 1</th>
<th>Predicted 2</th>
<th>% correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observed 1</td>
<td>0</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>Observed 2</td>
<td>0</td>
<td>64</td>
<td>100</td>
</tr>
</tbody>
</table>

Overall 83.12%

Behaviour in hospital

Logistic regressions were used to complete three analyses using the variables in this section to predict the three possible outcomes (reconviction vs. no reconviction; readmission vs. no readmission; and success vs. failure).

In the first analysis the power of the variables to predict outcome (success vs. failure) was examined. The findings indicate that the combination of variables in this section did not have a relationship with outcome which is seen in Table 22. and was not significant, $\chi^2 = 15.58$, df $= 13$.

The findings indicated that one variable, disposal to RSU, had a relationship with outcome which is seen in Table 22. and was significant, $\beta = 1.06$, SE $0.51$, p $<.05$.

They also indicates that no other variables were related to outcome these are seen in Table 22. and were not significant: 'difficulties at work' $\beta = -0.26$, S.E. 0.63; 'medication' $\beta = -0.56$, S.E. 0.51; 'reluctant to take medication' $\beta = 0.001$, S.E. 0.3; 'mixed views' $\beta = -0.34$ S.E. 13; 'anger management' $-0.83$ S.E. 1.05; 'deterioration' $\beta = -0.3$ S.E. 0.99; 'progress' $\beta = 0.40$, S.E. 0.47;
'triggers' $\beta = 0.01$, S.E. 0.58; 'mixed views' $\beta = -0.21$, S.E. 0.94; 'disposal-hostel' $\beta = -0.04$, S.E. 0.57; 'disposal-family' $\beta = -0.58$, S.E. 0.70; 'disposal-community' $\beta = -1.01$, S.E. 0.85.

TABLE 22. LOGISTIC REGRESSION - BEHAVIOUR DURING LAST TWELVE MONTHS

BY OUTCOME (SUCCESS vs. FAILURE)

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>$\beta$</th>
<th>SE</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulties at work</td>
<td>-0.26</td>
<td>0.63</td>
<td>ns</td>
</tr>
<tr>
<td>Medication</td>
<td>-0.56</td>
<td>0.51</td>
<td>ns</td>
</tr>
<tr>
<td>Reluctant to take medication</td>
<td>0.001</td>
<td>0.3</td>
<td>ns</td>
</tr>
<tr>
<td>Mixed views</td>
<td>-0.34</td>
<td>1.3</td>
<td>ns</td>
</tr>
<tr>
<td>Anger Management</td>
<td>-0.83</td>
<td>1.05</td>
<td>ns</td>
</tr>
<tr>
<td>Deterioration</td>
<td>-0.3</td>
<td>0.99</td>
<td>ns</td>
</tr>
<tr>
<td>Progress</td>
<td>0.40</td>
<td>0.47</td>
<td>ns</td>
</tr>
<tr>
<td>Triggers</td>
<td>0.01</td>
<td>0.58</td>
<td>ns</td>
</tr>
<tr>
<td>Mixed views</td>
<td>-0.21</td>
<td>0.94</td>
<td>ns</td>
</tr>
<tr>
<td>Disposal - RSU</td>
<td>1.06</td>
<td>0.51</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Disposal - Hostel</td>
<td>-0.04</td>
<td>0.57</td>
<td>ns</td>
</tr>
<tr>
<td>Disposal - Family</td>
<td>-0.58</td>
<td>0.70</td>
<td>ns</td>
</tr>
<tr>
<td>Disposal - Community</td>
<td>-1.01</td>
<td>0.85</td>
<td>ns</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chi-Square</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Chi-Square</td>
<td>15.58</td>
<td>13</td>
</tr>
</tbody>
</table>

Prediction Table

<table>
<thead>
<tr>
<th>Observed</th>
<th>Predicted 1</th>
<th>Predicted 2</th>
<th>% correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1</td>
<td>19</td>
<td>12</td>
<td>61.29</td>
</tr>
<tr>
<td>2 2</td>
<td>9</td>
<td>37</td>
<td>80.43</td>
</tr>
</tbody>
</table>

Overall 72.73%

In the second the power of the variables to predict outcome (readmission vs. no readmission) was examined. The findings indicate that the combination of variables in this section did not have a relationship with readmission, which is seen in Table 23. and was not significant, $\chi^2 = 8.4$, df = 12.

The findings indicate that the variable 'disposal-RSU' was related to readmission which is seen in Table 23. and approached significance, $\beta = 0.89$, S.E. 0.52, $P<0.10$.

They also indicates that no other variables were related to outcome these are seen in Table 23. and were not significant: 'difficulties at work' $\beta = -0.53$, S.E. 0.60; 'medication' $\beta = -0.19$, S.E. 0.52;
'reluctant to take medication' $\beta = 0.23$, S.E. 0.3; 'mixed views' $\beta = -0.41$, S.E. 1.26; 'deterioration' $\beta = -0.72$, S.E. 0.97; 'progress' $\beta = 0.24$, S.E. 0.46; 'triggers' $\beta = 0.59$, S.E. 0.57; 'mixed views' $\beta = -0.59$, S.E. 0.93; 'disposal-hostel' $\beta = 0.1$, S.E. 0.57; 'disposal-family' $\beta = -0.79$, S.E. 0.66; 'disposal-community' $\beta = -0.53$, S.E. 0.77.

**TABLE 23. LOGISTIC REGRESSION - BEHAVIOUR DURING LAST TWELVE MONTHS BY READMISSION**

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>$\beta$</th>
<th>SE</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulties at work</td>
<td>-0.53</td>
<td>0.60</td>
<td>ns</td>
</tr>
<tr>
<td>Medication</td>
<td>-0.19</td>
<td>0.52</td>
<td>ns</td>
</tr>
<tr>
<td>Reluctant to take medication</td>
<td>0.23</td>
<td>0.3</td>
<td>ns</td>
</tr>
<tr>
<td>Mixed views</td>
<td>-0.041</td>
<td>1.26</td>
<td>ns</td>
</tr>
<tr>
<td>Deterioration</td>
<td>-0.072</td>
<td>0.97</td>
<td>ns</td>
</tr>
<tr>
<td>Progress</td>
<td>0.24</td>
<td>0.46</td>
<td>ns</td>
</tr>
<tr>
<td>Triggers</td>
<td>0.59</td>
<td>0.57</td>
<td>ns</td>
</tr>
<tr>
<td>Mixed views</td>
<td>-0.59</td>
<td>0.93</td>
<td>ns</td>
</tr>
<tr>
<td>Disposal - RSU</td>
<td>0.89</td>
<td>0.52</td>
<td>&lt;.10</td>
</tr>
<tr>
<td>Disposal - Hostel</td>
<td>0.1</td>
<td>0.57</td>
<td>ns</td>
</tr>
<tr>
<td>Disposal - Family</td>
<td>-0.079</td>
<td>0.66</td>
<td>ns</td>
</tr>
<tr>
<td>Disposal - Community</td>
<td>-0.53</td>
<td>0.77</td>
<td>ns</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chi-Square</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Chi-Square</td>
<td>8.4</td>
<td>12</td>
</tr>
</tbody>
</table>

**Prediction Table**

<table>
<thead>
<tr>
<th>Predicted 1</th>
<th>Predicted 2</th>
<th>% correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observed 1</td>
<td>11</td>
<td>9  16</td>
</tr>
<tr>
<td>Observed 2</td>
<td>6</td>
<td>46  46</td>
</tr>
</tbody>
</table>

**Overall** 71.43%

In the third analysis the power of the variables to predict outcome (reconviction vs., no reconviction) was examined. The findings indicate that the combination of variables in this section did not have a relationship with reconviction, which is seen in Table 24. and was not significant, $\chi^2$ 12.88, df = 12.

The findings indicates that none of the variables were related to reconviction these are seen in Table 24. and were not significant: 'difficulties at work' $\beta = -1.26$, S.E. 0.82; 'medication' $\beta = -0.20$, S.E. 0.70; 'reluctant to take medication' $\beta = 0.11$, S.E. 0.4; 'mixed views' $\beta = -1.24$, S.E. 1.87;
'deterioration' $\beta = 0.63$, S.E. 1.87; 'progress' $\beta = -0.01$, S.E. 0.62; 'triggers' $\beta = -1.89$, S.E. 0.62; mixed views' $\beta = 1.11$, S.E. 1.13; 'disposal-RSU' $\beta = 0.33$, S.E. 0.65; 'disposal-hostel' $\beta = -0.63$, S.E. 0.68; 'disposal-family' $\beta = 0.06$, S.E. 0.1; 'disposal-community' $\beta = -0.22$, S.E. 0.99.

**TABLE 24. LOGISTIC - BEHAVIOUR DURING LAST TWELVE MONTHS BY RECONVICTION**

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>$\beta$</th>
<th>SE</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulties at work</td>
<td>-1.26</td>
<td>0.82</td>
<td>ns</td>
</tr>
<tr>
<td>Medication</td>
<td>-0.20</td>
<td>0.70</td>
<td>ns</td>
</tr>
<tr>
<td>Reluctant to take medication</td>
<td>0.11</td>
<td>0.4</td>
<td>ns</td>
</tr>
<tr>
<td>Mixed views</td>
<td>-1.24</td>
<td>1.87</td>
<td>ns</td>
</tr>
<tr>
<td>Deterioration</td>
<td>0.63</td>
<td>1.58</td>
<td>ns</td>
</tr>
<tr>
<td>Progress</td>
<td>-0.01</td>
<td>0.62</td>
<td>ns</td>
</tr>
<tr>
<td>Triggers</td>
<td>-1.89</td>
<td>0.95</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Mixed views</td>
<td>1.11</td>
<td>1.13</td>
<td>ns</td>
</tr>
<tr>
<td>Disposal - RSU</td>
<td>0.33</td>
<td>0.65</td>
<td>ns</td>
</tr>
<tr>
<td>Disposal - Hostel</td>
<td>-0.63</td>
<td>0.68</td>
<td>ns</td>
</tr>
<tr>
<td>Disposal - Family</td>
<td>0.06</td>
<td>0.1</td>
<td>ns</td>
</tr>
<tr>
<td>Disposal - Community</td>
<td>-0.22</td>
<td>0.99</td>
<td>ns</td>
</tr>
</tbody>
</table>

Chi-Square df $p$

Model Chi-Square 12.88 12 ns

**Prediction Table**

<table>
<thead>
<tr>
<th>Predicted 1</th>
<th>Predicted 2</th>
<th>% correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observed 1</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Observed 2</td>
<td>1</td>
<td>63</td>
</tr>
</tbody>
</table>

Overall 85.71 %
Overall the findings offer some support for four of the five hypotheses. Firstly, there was some support for the hypothesis that the variables included would differentiate between subjects who were successful and subjects who failed after discharge. Secondly, there was some support for the hypothesis that there would be a higher rate of subjects classified as mental illness compared to psychopathic disorder readmitted to hospital and for the hypothesis that there would be a higher rate of reconviction among subjects classified as psychopathic disorder compared to mental illness. Thirdly, there was some support for the hypothesis that different variables would be related to outcome for reconvicted compared to readmitted subjects. The findings did not support the hypothesis that logistic regression would combine the variables to produce a prediction model that could successfully predict outcome. In addition, a number of variables not identified in previous research were found to be related to outcome.

I. Descriptive Analyses

The descriptive statistics demonstrate an overall rate of failure of 40.3%, which is slightly lower to that achieved by Black and Spinks (1982) who found a 48.8% failure rate for discharged Broadmoor hospital patients. It is considerably lower than rates achieved in studies such as Tennent and Way (1984) finding a 61% failure rate among discharged special hospital patients, although they report that this was lower among the Broadmoor subjects and Robertson and Gunn (1987) who found a failure rate of 92% among released prisoners from H. M. Prison Grendon Underwood.

This lower rate may reflect the slightly shorter follow-up period used in the current study or it may indicate that Broadmoor is more successful at treating patients. The Psychology department at Broadmoor was established in 1960, with a small number of clinical psychologists whose main function was assessment. Over the past 34 years the department has expanded and currently has 16 full time equivalent clinical psychologists and a number of Assistant and Trainee psychologists. This
reduced rate of failure may reflect the increase in clinical psychologists and subsequent increase in the amount of psychotherapy offered.

The descriptive analyses revealed that for successful subjects the average age at discharge was 37.5 years, with an average length of stay of 9.3 years. The most frequent index offence was homicide followed by ABH/GBH. Among the subjects who failed the average age at discharge was slightly higher, 39.5 years and the average length of stay was slightly shorter, 8.2 years. The most frequent index offence among this sample was homicide followed by GBH/ABH and sexual offences. With regard to length of time before failure the findings indicate an average of 1.9 years after discharge before failure. In addition there appear to be two peaks for failures, the first being between the first 7-12 months after discharge and the second between the 19th-24th month after discharge.

In addition, the descriptive analyses indicate a lower rate of failure among those subjects discharged to a RSU. Finally, there was a higher rate of failure among psychopathic disorder compared to mental illness and as predicted more psychopathic disorder subjects were reconvicted and more mental illness subjects readmitted.

II. Bivariate analyses

The findings from the bivariate analyses revealed a relationship between some of the variables and the different possible outcomes, offering some support for the hypothesis that the variables would differentiate between those subjects who were successful and those who failed. In addition some variables were related to a particular type of outcome offering some support for the hypothesis that different variables will be related to reconviction compared to readmission.

Demographic variables

The findings indicate a relationship between 8 of the 9 variables, with gender being the only variable that was not related. This is likely to be a result of the small number of female subjects, 16. The descriptive analyses indicate that the women tended to do better after discharge than their male
counterparts with no women being reconvicted and the success rate being 75% compared to 55.7% for men.

Firstly, the variable 'mixed views regarding suitability for discharge' was found to be related with outcome. This variable was an attempt to incorporate the Home Office's checklist of points when considering the suitability of restricted patients for discharge, specifically, the area of 'the views of the patients clinical team' and indicates that fewer mixed views were expressed for those subjects who were successful.

Secondly, the variable 'disposal' was found to be related to outcome indicating that more of the successful subjects had been discharged to a RSU. Generally, patients transferred to RSU's are provided with daily support from care staff, whereas those discharged directly into the community usually receive support on a weekly basis, through appointments with their probation officer or a therapist. This highlights Monahan and Steadman's (1994) arguments that future outcome research should include situational factors such as the type and amount of aftercare provided.

Thirdly, the variable 'section' was found to be related to outcome indicating a higher success rate among those with no restriction order on their section. This offers some support to Dell and Robertson's (1988) findings although they found a higher rate of reconviction compared to readmission among subjects who were restricted. One might expect an increased likelihood of violent behaviour after discharge among patients with a restriction order as these are only applied where the courts consider it 'necessary for the protection of the public from serious harm' and are therefore likely to have committed the most serious index offences. Unfortunately, time limitations of this study made it impossible to collect information about the nature of failure.

Fourthly, the variable 'age at discharge' was found to be related to outcome indicating that subjects with a young age at discharge were less successful than subjects who were older at the time of discharge. This has been found by a number of other researchers (Hui 1991; and Black and Spinks, 1982) and appears to be a stable predictor of reoffending, although the nature of this relationship has not yet been addressed.
Finally, the variable 'index offence' was found to be related to outcome indicating that both successful and non successful subjects had a high frequency of ABH/GBH as their index offence but that those who were successful also had a high frequency of homicide as the index offence whereas those who failed had more variation in their offences. This supports previous research which highlights a variety of offences, excluding homicide, as being related to reoffending but not (Black and Spinks, 1982; Dell and Robertson, 1988; Quinsey and Maguire, 1986; and Payne et al 1974). This is an important finding as both Tribunals in particular place weight on the seriousness of the index offence (Peay, 1989). Roberts (in press) found that the clinicians reports about patients who had been discharged by Tribunals, who had committed serious aggressive offences against the person, particularly homicide, were significantly more positive than the reports provided for patients with other types of index offences. This indicates that Tribunals seem to view the more violent offences particularly homicide as predictors of potential future dangerousness.

In addition to these findings a number of variables were related to outcome but only at a level approaching significance. 'Method of discharge' was one of these variables and is of interest to this study. The findings indicate that a greater number of subjects discharged by their RMO were successful. This is of particular interest as recently there appear to be a growing number of patients being discharged by MHRTs without the RMO and clinical teams support. There have been a number of such cases that have gone seriously wrong with either the patient committing suicide or a serious offence shortly after discharge. Perhaps the most well known of such recent cases is that of Brian Carter who was discharged from Broadmoor by a Tribunal against the recommendation of hospital clinicians and shortly after this committed homicide. Given Peay's (1989) findings that Tribunal decision making is unsystematic with personal bias influencing decisions this is an area that requires further exploration.

Secondly, the variable 'classification' was found to be related to outcome indicating that those subjects classified as mentally ill were more successful than those classified as psychopathic disorder. In addition, the descriptive statistics indicate that among those who failed more of the mental illness group were readmitted and more of the psychopathic group were reconvicted. This offers support for
the hypothesis that there would be a higher rate of reconviction among psychopathic disorder compared to mental illness subjects and the hypothesis that there would be a higher rate of readmission among mental illness compared to psychopathic disorder subjects. It also provides support for the findings of Black and Spinks (1982) that readmitted patients tended to be psychotic whereas reconvicted patients tended to be psychopathic disorder, and the findings of Dell and Robertson (1988) that there was a lower rate of reconviction among those classified as mentally ill.

History

The findings from analyses of variables in this category offer little support to the hypothesis that these variables would differentiate between subjects who were successful and subjects who failed, with only two variables making such a differentiation.

Firstly, the variable 'history of violence in adulthood' was found to be related to outcome indicating a higher level of success among those subjects where a history of violence in adulthood was not reported. This offers some support to earlier studies (Klassen and O'Connor, 1987; and Payne et al, 1974), although these studies found a history of violence was predictive of future violence. As mentioned earlier, it was not possible in this study to identify the type of failure, specifically whether violent behaviour occurred. Further research that addresses this issue is needed.

Secondly, the variable 'under 18 at time of first conviction' was related to outcome indicating it is related to reconviction with more subjects who were reconvicted being under 18 at the time of first conviction. This variable has been found to have predictive value in the majority of outcome studies (Tennent and Way, 1984; Dell and Robertson, 1988; Pritchard, 1979; and Hassin, 1986). Being a young age at first conviction seems to be a stable predictor of further reoffending, but as highlighted earlier it is not clear why. Further research that explores the nature of this relationship would be of value and should consider theories of the causes of violent behaviour such as that of Bandura (1973).

A number of variables in this section were not found to be related to outcome. Firstly, the variable 'drug and alcohol abuse' was not found to be related to outcome or to have any predictive failure. This is surprising given research that indicates it has a role in violent behaviour (Swanson et al 1990) and
the number of outcome studies where it has been identified as a predictor of recidivism (Pritchard, 1979; Klassen and O'Connor, 1988). In addition this is an area identified for consideration on the Home Office checklist.

Secondly, the variables focusing on previous psychiatric history were not found to be related to outcome. Previous research has produced equivocal findings for the relationship of this variable with outcome. Of the research reviewed in this study, Robertson (1989) and Hassin (1986) were the only two to find such an association.

Thirdly, having four or more conviction prior to being admitted to Broadmoor, was not found to be associated with outcome. This finding was surprising as the majority of research in this area has identified previous convictions as associated with reconviction (Black and Spinks, 1982; Tennent and Way, 1984; Pritchard, 1979; Payne et al, 1974; and Hassin, 1986). However, few of these studies specify the number of previous convictions that must be present. It would be interesting to examine the relationship between previous convictions and outcome without specifying the number of convictions that must have occurred.

Fourthly, those variables examining the type of environment subjects were raised in and childhood behaviour, were not found to be related to outcome. These variables were an attempt to operationalise some of the childhood correlates of violence identified by various theorists. Bandura (1983) argued that modelling is an important factor in the development of aggression and that children are likely to model parental aggression. Patterson et al (1989) added to this arguing that a disrupted family background is likely to provide a variable ratio pattern of reinforcement which has been demonstrated as one of the most difficult to extinguish. There is a considerable body of evidence to support these theories identifying childhood experiences such as observing parental violence, a history of physical and sexual abuse, early behaviour problems, early use of aggression, and being raised in a disrupted family as all being associated with adult violence (McCord, 1979; Klassen and O'Connor, 1988; Herman et al, 1989; and Loeber and Dishion, 1983).
The majority of previous research has not included variables based on theory. This is an area highlighted by Monahan and Steadman (1994) who propose that future research must develop new measures to assess risk factors that appear theoretically relevant to violent behaviour. It therefore seems that further research is required exploring theories such as Bandura's about the development and maintenance of violent behaviour.

**Offence**

The findings from the analyses in this section offered little support for the hypothesis that they would discriminate between subjects who fail and subjects who were successful. Only one variable was found to have a relationship with outcome, 'more than one victim'. This indicates that more of the subjects who failed committed index offences involving more than one victim.

The majority of outcome studies only focused on the type of index offence committed. Additional variables such as the relationship with the victim, the use of drugs or alcohol and premeditation seem to be limited to research focusing on sex offender recidivism (Smith and Monastersky, 1986; Furby, Weinrott and Blackshaw, 1989). It therefore seems that this is an area requiring further exploration, particularly if one considers the weight placed on information about the index offence by Tribunals.

**Behaviour during last 12 months in Broadmoor**

The findings from analyses of the variables in this category offer some support for the hypothesis they variables would differentiate between subjects who were successful and subjects who failed. They also offered some support for the hypothesis that different variables would be related to outcome for reconvicted subjects compared to readmitted subjects.

Firstly, the variable 'medication' was found to be related to outcome, particularly reconviction and the variable 'reluctant to take medication' was found to be related to outcome. These findings indicate a higher rate of failure, particularly reconviction among subjects who are reluctant to take medication. This offers support to Cohen et al's (1986) finding of a higher success rate among released offenders in the United States, who adhered to medication recommendations. The majority of outcome studies are retrospective focusing on case notes and have not included the extent to which patients adhere to
treatment recommendations. The current study attempted to address this by exploring whether the patient takes medication and their attitude to it prior to discharge. However, it was not possible to examine what happened after discharge. This highlights the need for prospective research into this area, particularly as it is an area that is included in the Home Office’s checklist for restricted patients and has been found to influence Tribunals decisions about discharge of patients classified as mentally ill (Peay, 1989; and Roberts, in press).

Secondly, the variable ‘difficulties at work’ was found to be related to reconviction, with none of the reconvicted group being reported as having difficulties at work. Of the small number of subjects who did have difficulties reported at work were all from the successful sample. This measure was an attempt to tap the subjects behaviour in Broadmoor prior to discharge. Both Peay (1989) and Roberts (in press), identified behaviour in the institution, as being related to discharge decisions about psychopathic disorder patients and Roberts found an association between work both within and prior to institutionalisation with discharge. Interestingly, this finding was not as expected with reconviction rates being lower among subjects who had no reports of difficulties at work. The nature of this finding is not clear and needs further exploration.

Finally, the variable ‘physical aggression’ was found to be related to outcome, particularly reconviction indicating that among subjects where physical aggression was reported none were reconvicted. This is a surprising result as there is a tendency to assume that the presence of physical aggression prior to discharge is an indication that physical aggression is likely to occur after discharge. Previous research has produced equivocal results with Black and Spinks (1982) finding hostile attitudes to be associated with more convictions and Quinsey and Maguire (1986) finding no association. Again, this is an area that both the Home Office and Tribunals place weight. The Home Office checklist specifically asks if the patient responds to frustration with physical aggression. Also, Roberts (in press) found that the presence of aggressive behaviour was associated with no discharge.

Surprisingly, the variables focusing on positive symptoms, such as the ‘presence of psychosis’ and the continuation of the delusional system that was present at the time of the index offence, was not found to be related to outcome. This is a particularly interesting finding as a number of researchers have
focused on this issue and there is some evidence that there is a relationship between the positive symptoms of mental illness and violence (Dohrenwend et al., 1980; and Hofner and Bokner, 1982). Also, Peay (1989) and Roberts (in press) found the presence of positive symptoms to be associated with Tribunals decisions about discharge of patients classified as mentally ill and the Home Office's checklist specifically asks 'do any symptoms remain?'. However, these studies do not address whether they are related to reoffending after treatment and the outcome studies indicate that the presence of positive symptoms are not predictive variables.

**Therapy and Progress**

The findings from analyses of the variables in this section offer some support to the hypothesis that they will differentiate between subjects who are successful and subjects who fail. They also offer some support for the hypothesis that different variables will be related to reconviction compared to readmission.

Firstly, the variable 'progress' was found to be related to outcome indicating a higher success rate among subjects where progress was reported. Secondly, the variable 'deterioration' was found to be related to outcome indicating that where deterioration was reported it was for subjects who failed. Previous outcome research appears not to have examined these variables, although there is some indication that they influence discharge decisions (Roberts, in press). This result needs to be validated by further research.

Secondly, the variable 'triggers' was found to be related to outcome, specifically, reconviction indicating that triggers were identified on fewer occasions for those subjects who were reconvicted. Again, this is a variable that previous outcome research has not explored, although is an area identified by the Home Office for consideration.

With regard to therapy the only variable that was found to be related to outcome was 'anger management' indicating a greater level of success among those subjects reported to have engaged in anger management training. This provides some support for the finding of Hui (1991) that sex offenders rated as aggressive and socially inadequate have lower rates of recidivism. One
interpretation of these results is that therapy focusing on anger management is effective in reducing reoffending and readmission among the Broadmoor population providing some support for Howells (1986), theories about the role of interpersonal deficits with offending behaviour.

This was the only variable relating to treatment that was found to be related to outcome. The effect of treatment on future reoffending and readmission is of particular interest to clinical psychologists as they are the main providers of therapy. Currently, there is a dearth of methodologically acceptable research exploring the effectiveness of treatment. This is an area of great importance as offenders are detained in Broadmoor for treatment and evidence about the most effective forms of treatment and their impact on reoffending is crucial for decisions about future dangerousness.

III. Multivariate analysis

The findings failed to provide any support for the hypothesis that a multivariate statistical model would be able to combine the predictor variables to predict subjects who were successful and subjects who failed. However there were two variables within this model that did have some predictive power. These were 'having a history of violence in adulthood' which was related to readmission and 'disposal to a RSU' which was related to overall outcome.

Previous research using Logistic analysis has demonstrated that it can be effective at predicting outcome (Payne, et al, 1974; and Benda, 1987). However these studies included large numbers of subjects, (456 and 932 subjects). This result may therefore indicate that the sample size was too small, particularly for the number of predictive variables being examined. There were too many predictor variables to complete the analysis, therefore they had to be broken down into three subsets of predictor variables. It is possible that even within the three subsets that the sample size was still too small to detect any interaction between the variables. Benda (1987) discusses some of the problems of logistic regression with a small sample size, arguing that it is divisive and this type of statistical analysis typically needs a larger number of subjects. Thus, before drawing any conclusions about the usefulness of logistic regression for producing a combination of variables that can successfully predict outcome, further research is needed on a larger sample.
Conclusion

The use of logistic regression to predict subjects who failed and subjects who were successful failed to provide a combination of variables that were predictive. However, a number of variables were found to be associated with outcome. In summary those who failed were more likely to be a young age at discharge, have a restriction order, have an index offence involving violence but not homicide, classified as psychopathic disorder, discharged by a Tribunal, discharged to a facility other than a RSU, mixed views expressed about suitability for discharge, a history of violence during adulthood, will be under 18 at first arrest, will have index offences involving more than one victim, they will not be taking medication or will be reluctant to take it, they will be reported to have deteriorated and not made progress, triggers to future offending will not have been identified, and they will not have attended an anger management group.

In addition the findings indicate some differences in the variables associated with readmission compared to reconviction. In summary, those identified with reconviction were being psychopathic disorder, under 18 at first arrest, not taking medication or being reluctant to take it, having no difficulties at work and not engaging in physical aggression whilst in Broadmoor, and having no triggers for future offending identified. Being classified as mentally ill and having a restriction order, were the only variables associated with readmission.

Finally, these findings raise questions about the decisions made by clinicians and Tribunals. Steadman, et al (1994) highlight dangerousness as being a focal concern of mental health law throughout the world and how there is currently little robust empirical knowledge to guide practice and social policy. These findings indicate that Tribunals are focusing on areas that are not related to outcome. Similarly, it appears that a number of points included in the Home Office checklist for considering suitability of discharge of restricted patients, are not related to outcome. It appears that currently, discharge decisions are not made on the basis of empirical evidence about factors associated with outcome. In addition there is some evidence that Tribunals make more 'wrong' decision about suitability for discharge, with a higher rate of patients who fail compared to patients discharged by their RMO and clinical team.
Outcome research is still in its infancy and to date has primarily been restricted to retrospective examinations of case notes for information about subjects. There is a need for longitudinal prospective research following patients from the time they enter the special hospital system. This should include variables based on theories about violence and should also focus on treatment received and its impact on outcome. In addition Steadman et al (1994) argue that dangerousness must be disaggregated into component parts, including risk factors that cover multiple domains, the amount and type of violence likely to occur and the likelihood it will occur. They also argue that it should include a broad range of subjects across multiple sites and should consider how to manage risk not just assess it.


Roberts, L. J. (in press) Mental Health Review Tribunals: A comparison of the content of Tribunal reports for discharged and not discharged patients and for the effect of classification (psychopathic disorder vs. mental illness)


APPENDIX 1

1. Has any information come to light since the last report which increases understanding of the circumstances surrounding the index offence?

2. Is the motivation for the behaviour that has put others at risk understood?

3. Is there any evidence that the patient has a persistent preoccupation with a particular type of victim or a particular type of violent/sexual/arsonist activity?

4. What are the chances of circumstances similar to those surrounding the offence arising again and similar offences occurring?

5. In cases of mental illness, what effects have prescribed drugs had? Do any symptoms remain? How important is the medication for continued stability? Has stability maintained in differing circumstances? Does the patient have insight into the need for medication?

6. In cases of mental impairment, has the patient benefited from training? Is the patient's behaviour more socially acceptable? Is the patient's explosive or impulsive?

7. In cases of psychopathic disorder, is the patient now more mature, predictable and concerned about others? Is he more tolerant of frustration and stress? Does he now take into account the consequences of his actions? Does he learn from experience?

8. Does the patient now have greater insight into his condition? Is he more realistic and reliable?

9. Have alcohol or drugs affected the patient in the past? Did either contribute towards the offence?

10. How has the patient responded to stressful situations in the hospital in the past and how does he respond now - with physical aggression or verbal aggression?

11. If the patient is a sex offender, has he shown in the hospital an undesirable interest in the type of a he has previously been known to been the results of any psychological tests?

12. What views do members of the clinical team have about the patient's continuing dangerousness?

13. Is it considered that the patient should/should not continue to be detained? For what reasons?

14. If so, is it considered that detention in conditions of special security is necessary?
APPENDIX 2.

CHECKLIST-FOLLOW-UP RESEARCH

SECTION A - GENERAL

Name Number Sex DOB
1 Age at admission discharge Sex DOB Length of stay
2. Index offence
3. section (restricted)
4. Diagnosis
5. Disposal - RSU, Hostel, community, family, other
6. Discharge via RMO or MHRT (if MHRT did RMO support)
7. Were differing views re. suitability for discharge present within hospital
8. Valence score
9. Re-admission/re-offend/hospitalisation/nothing
10. Type of offence

SECTION B - ADMISSION INFO. Source - Admission social work, psychiatrist, psychology and probation.

History (yes=+ve, no=-ve) YES NO ABSENT
1. Extreme/frequent violence during childhood
2. Family described as unstable Were parents divorced
3. Previous contact with psychiatric services - in childhood in adulthood
4. 18yrs or under at 1st arrest
5. 4+ previous convictions
6. History of drug/alcohol abuse
7. History of violent behaviour - in childhood in adulthood
8. Behavioural problems in childhood
9. Sexual or physical abuse in childhood
10. Poor work record

Index Offence (yes=+ve, no=-ve)
11. Was offence premeditated
12. Have similar offences been committed
13. Who was the (stranger/family/friend)
14. Were drugs/alcohol used during offence
15. Was patient psychotic at time of offence
17. Is there a history of violence whilst psychotic

Psychological Info
15. WAIS - R score
SECTION C - PROGRESS IN BROADMOOR-Source- Case conference, incident forms, psychology or therapy report, MHRT reports if after November 1993

Name            Number

Behaviour within last 12 mths (yes=-ve, no=+ve)

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
<th>ABSENT</th>
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<tbody>
<tr>
<td>1. Is verbal aggression present</td>
<td></td>
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<tr>
<td>2. Is physical aggression present</td>
<td></td>
<td></td>
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<td>3. Was it directed against - object</td>
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<td>4. Has it occurred more than once</td>
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<td>5. Did it result in movement to another ward</td>
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<td>6. Has patient engaged in self harm</td>
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<td>7. Is patient described as impulsive</td>
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<td>8. Is attendance at work or education irregular</td>
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<tr>
<td>9. Have there been difficulties at work/education</td>
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<tr>
<td>10. Are there family difficulties</td>
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<tr>
<td>11. Are psychotic symptoms still present</td>
<td></td>
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<tr>
<td>12. Is the same delusional system that was active at time of offence, still present</td>
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<tr>
<td>13. Does the patient take medication</td>
<td></td>
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<tr>
<td>14. Does the patient see a need after discharge for - medication</td>
<td></td>
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<tr>
<td>15. Are there mixed views about any of above questions</td>
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THERAPY (yes=+ve, no=-ve)

<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
<th>Deterioration Reported</th>
</tr>
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<tbody>
<tr>
<td>14. Has patient engaged in therapy</td>
<td></td>
<td></td>
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<tr>
<td>15. Is progress reported</td>
<td></td>
<td></td>
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<tr>
<td>16. Is insight or understanding about offence reported</td>
<td></td>
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<td>17. Is remorse or regret reported</td>
<td></td>
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<tr>
<td>18. Are alternative coping strategies reported</td>
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<tr>
<td>19. Has a social skills group been attended</td>
<td></td>
<td></td>
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<tr>
<td>20. Has an anger management group been attended</td>
<td></td>
<td></td>
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<tr>
<td>21. Are there mixed views about these questions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Are future triggers of dangerousness predicted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. Does the patient still have contact with victim.</td>
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MENTAL HEALTH REVIEW TRIBUNALS

A comparison of the content of Tribunal reports for discharged and not discharged patients and for the effect of classification (psychopathic disorder vs mental illness)

Thesis submitted for the degree of M.Sc. in Clinical Psychology
ABSTRACT

This study examined the content of reports provided for Mental Health Review Tribunals. A retrospective design was used to compare the tribunal reports of fifty subjects. Two groups of twenty-five subjects were compared one including subjects discharged by tribunals and the other subjects not discharged. Social combination theory and the valance theory were used to analyse the content of the reports and to assess whether they were associated with tribunal outcome. The results indicated that the content of the reports was associated with tribunal outcome. Opinion statements discussing suitability for discharge were more closely associated with outcome than fact statements. For the statements presenting subjects positively or negatively fact statements were more closely associated with outcome. The valance of both types of statements was also found to be related to outcome, with more positive values being achieved for discharged subjects. Comparison of reports written for previous tribunals before any of the subjects in the study were discharged, indicated that those subjects who went on to be discharged at their next tribunal had the least negative valences. In addition to this the effect of legal classification on outcome was explored and indicated that there is a difference in the valance of reports for discharged and no discharge subjects, between the two classifications. Subjects classified as mentally ill had clearly different report valances for the two outcomes, with a much more positive valance associated with a discharge. Psychopathic disorder subjects did not have this difference.
Finally, the valance of reports was compared between subjects who had committed different types of offences, with outcome. This showed that the valence's of reports for subjects who had committed violent physical offences against others were considerably higher for discharged subjects, the highest being for the 'murder/attempt murder' category.
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I thank you all.

Lona J. Roberts
MENTAL HEALTH REVIEW TRIBUNAL DECISION MAKING

A comparison of the content of Tribunal reports for discharged and not discharged patients, and of the effect of psychopathic disorder versus mental illness classification

INTRODUCTION

Mental Health Review Tribunals (MHRT’s) were introduced as part of the 1959 Mental Health Act to safeguard psychiatric patients against unjustified detention (Grounds 1989). Woods (1974) stated that they form an "important part of the fabric of civil liberties". Since the introduction of Tribunals their complex role in decision making has developed following a judgement by the European Court of Human Rights in 1981 which upheld the right of all detained patients to regular reviews. This led to the introduction of the 1983 Mental Health Act (MHA), which extended the powers of Tribunals to include the discharge of offender patients sentenced by crown courts and given special hospital orders and restrictions on discharge (Grounds 1989).

MHRT’s, although constituted by the MHA, are independent bodies whose members are appointed by the Lord Chancellor. They provide the opportunity for patients to have their detention reviewed and give a right of appeal should they object to being kept in hospital or under guardianship
compulsorily (Bluglass 1983). There is a MHRT for each of the fourteen National Health Service Regions in England, and one Tribunal for Wales (Bluglass 1983).

A MHRT consists of three members, a 'legal' member, a 'medical' member and a 'lay' member. The 'legal' member is considered to have suitable legal experience and holds the position of president of the Tribunal, and they have wide discretion regarding the conduct of the proceedings. The 'medical' member is a registered practitioner and usually a psychiatrist. Their duty is to examine the patient prior to the Tribunal and form an opinion about the mental condition of the patient. The 'lay' member is neither legal or medical, having experience in administration, social services or have other qualifications or experience that is considered suitable. (Gostin, Rassaby and Buchan, 1984).

All patients have a Tribunal hearing once every three years but are at liberty to apply for one every twelve months. Gostin et al (1984) provide a clear description of the type of information made available to Tribunals when considering patients for discharge. Firstly, there is a statement by the responsible authority which must contain name, age, date of admission, details of original authority for detention and subsequent renewals, legal category of mental disorder, the name of the Responsible Medical Officer (RMO) and other doctors involved and the dates of any previous Tribunal hearings.

Secondly, there is an up-to-date medical report prepared specifically for the Tribunal which must include a relevant
medical history and a full report on the patients' current mental condition. An up-to-date social circumstances report is also prepared for the Tribunal. This includes information about the patients' home and family circumstances, the attitude of the nearest relative(s), employment and occupation prospects, housing facilities if discharged, financial circumstances, community support and relevant medical facilities.

Thirdly, the responsible authorities' views on the patients' suitability for discharge are presented (this is usually the RMO's opinion), along with any other information or observations that the responsible authority wishes to make. There is also a statement by the Home Secretary which includes opinions regarding suitability for discharge. This can include the Aarvold Board's (Advisory Board on restricted patients) reports, conclusions or main concerns, although the actual reports are confidential to the Home Secretary. Finally, other relevant information, such as other professional reports, is also provided. Previous Tribunal applications are also available.

In addition to this information, the medical member may see case and nursing notes from the hospital including reports from the RMO, routine reports by nursing staff, letters to other professionals or relatives and reports by other professionals. The other Tribunal members are not, however, explicitly entitled to this information.

Normally, a Tribunal hearing takes approximately one hour. All three members are present along with the patient and the RMO, and the patient may have a representative, usually
his/her solicitor. In addition to this, if the patient gives permission other professionals and family members may attend. After the hearing, the Tribunal reaches a decision by a majority vote. The Tribunal has the power to make a Conditional or an Absolute discharge, or no discharge. A Conditional discharge allows the patient to be discharged into the community, but a number of conditions are made to which they must abide, otherwise they may be recalled to hospital. These conditions usually refer to taking medication, regular contact with health, probation or social services, and living at a particular address. An Absolute discharge is where the patient is discharged to the community with no condition and they are not liable to recall to hospital. If they decide that a patient is not suitable for discharge they may make recommendations about future treatment or transfer to other hospitals or units. However, such recommendations are not compulsory and it is left to the RMO's discretion as to whether they are acted upon or not.

When considering a case the Tribunal have a number of criteria upon which to base their decision. The Tribunal should direct an Absolute discharge if the following criteria are fulfilled:

(a) The patient is not suffering from mental illness, psychopathic disorder, severe mental impairment or mental impairment, or from any of those forms of disorder of a nature or degree which makes it appropriate for him/her to be liable to be detained in hospital for medical treatment; or
(b) That it is not necessary for the health and safety of the patient, or for the protection of other persons, that he/she should receive such treatment; and

(c) That it is not appropriate for the patient to remain liable to be recalled to hospital for further treatment. (Gostin et al 1984).

If the patient does not fit these criteria then the Tribunal must consider a Conditional discharge. The Tribunal must order a Conditional discharge if they are satisfied that:

(a) The patient is not suffering from mental illness, psychopathic disorder, severe mental impairment or from any of these forms of disorder of a nature or degree which makes it appropriate for him/her to be liable to be detained in a hospital for medical treatment; or

(b) That it is not necessary for the health and safety of the patient or the protection of others that he/she should receive such treatment. (Gostin et al 1984).

The decision processes of MHRT’s has been of interest since the 1970’s with Ciryl Greenland (1970) publishing the first specialised research into MHRT’s and raising questions about the effectiveness of Tribunals in their duty to protect the liberty of the individual (Hepworth 1983-1). Greenland’s research spurred others to explore the processes and factors influencing Tribunals decisions regarding detained patients.
suitability for discharge both before, and after, the 1983 Mental Health Act.

Fennell (1977) explored how Tribunals operate, particularly focusing on the discharge of compulsory detained patients. He observed a fact-finding process concerned mainly in justifying the responsible authority's report, supporting the need for continued detention. Hearsay evidence was regarded as 'fact' and the influence of the concept of 'insight' undermining the patient's credibility as an informant. Fennell also found that MHRT's had little difficulty answering the question "is mental disorder present?" and that this tended to be answered during contact with the patient. With regard to the question of continued detention being necessary for the protection of the patient and others, the patients past behaviour and the assessment of their prospects outside of the hospital appeared to be influential (Hepworth 1983-1).

Peay (1981) explored the factors that influence both the interpretation and application of Mental Health legislation by Tribunal members, and found several factors that influenced medical, legal, and lay members when making decisions. Firstly, medical members demonstrated attitudes relatively more disposed towards discharge than the lay group. Non-medical members were significantly more likely to conceptualise the mentally disordered as dangerous, impulsive, showing little insight, and having disabilities of a relatively permanent nature, whereas the medical members were generally more enlightened with regard to stereotypes about mental disorder, the mentally abnormal
offender and treatment under secure provision.

Secondly, legal and medical members had a more consistent approach to cases and were more likely to have an effect on the decision. Peay also found that non-medical members expressed confidence in the ability of the medical profession to predict the occurrence of dangerous behaviour, a view not shared by the medical profession. Thirdly, factually informed members and those with positive attitudes to discharge tended to have a significantly larger number of discharging experiences than less factually informed or those with a negative attitude to discharge. Those with extreme attitudes were more likely to have either very high or very low discharge rates. Finally, members tended to form opinions early on in the hearing, usually after the responsible authority's report was received. They then tended to assess evidence and perceive new information in accordance with initially preferred view.

Hepworth (1983-2) examined a study into the process by which Tribunals decide on the dangerousness of a patient as a basis for their discharge or continued detention. He found that the facts about a case were influential along with several other variables. Firstly, there was a negative correlation between danger and release. Secondly, there was a correlation between mental disorder and release, with evidence of continued mental disorder being used as a guide to assessing the degree of risk. Thirdly, discharge was only ever considered when there was doubt about the need for continued detention and, finally, there was a greater tendency where the danger or the potential victim, could be
identified rather than people generally being at risk.

These studies explored information influencing Tribunal decisions before the 1983 MHA which expanded the power of Tribunals. Peay (1989) has been the main pioneer in examining the operation of Tribunal's since the 1983 MHA. Her fieldwork involved interviews with patients, RMO's and judicial members of Tribunals, observations of hearings, and the examination of case files.

Peay's (1989) post-1983 work has covered many aspects of Tribunal decision making, and her findings indicated that Tribunals tend to focus on different factors according to the patients legal classification. When a patient is admitted to a Special Hospital they are given the legal classification of Psychopathic Disorder or Mental Illness according to the nature of their symptoms.

Peay found that when considering Psychopathic Disorder patients, Tribunals' tended to frequently focus on the following factors:

(a) The RMO's opinion was important and could transform a case for 'no discharge' to suitable for discharge.

(b) The passage of time was influential in two ways. Firstly it could aid discharge in that the question was asked "had the patient passed the appropriate threshold to enable a decision to be made realistically about discharge?". On the other hand long periods were thought to contribute
to dangerousness because the patient may resent being detained for so long.

(c) The seriousness of the behaviour was often discussed. The more serious the index offence (the offence which resulted in hospitalisation) the more evidence was required for discharge to be an option. This evidence needed to be of an irrefutable nature.

(d) The concept of future control and the type of future offences that could be anticipated.

When considering patients with the legal classification of Mental illness the Tribunals tended to discuss and focus on different factors:

(a) The patients level of insight was important. The patient needed to demonstrate insight into the reasons for the offence and accept that they were ill at the time. They had to have insight into their condition and accept they remained ill and understand why they needed medication. This was regarded as crucial by both Tribunals and RMO's.

(b) The expression of remorse by the patient for their behaviour was desired by Tribunals and the RMO. Patients not only had to express remorse but they had to sound as though they meant it.

(c) There needed to be an absence of disorder in that the patients experience of hallucinations or delusions had ceased.
(d) The EMO's opinion was important and was normally followed.

It appears, then, that legal classification is crucial when making decisions regarding a patient's suitability for discharge as this determines the types of questions the Tribunal will ask, and the factors that will influence their decision.

Peay's (1981) finding that Tribunal members tend to form opinions early on and then perceive new information as supporting their preferred view is of interest to this study. It suggests that the reports provided for the Tribunal are extremely important in influencing the direction of their final decision about discharge, and the current study intends to examine the content of the reports provided for Tribunal members and their relation to the outcome. Peay's (1989) finding that Tribunals use different criteria when considering patients classified as either psychopathic disorder or mental illness will also be considered. The reports that are provided for Tribunals will be analysed to assess whether they too focus on different issues according to the patient's legal classification. The actual Tribunal hearing and discussions will not be explored because of time limitations and difficulties in gaining access to such hearings, which are held in private.

The process of group decision making is a widely researched area in Psychology and a number of theories and models have been developed to explain and predict the outcome of problem
solving groups. Many of these models require access to the
decision makers and therefore limit the models that can be
applied to this study, which will only focus upon the
reports provided for the decision makers. The study will
make use of two decision models and adapt them so that they
may be used to analyse the content of the reports provided
for the decision makers. The two models that will be
employed are the Social Combination model and Valance
theory.

Social Combination theory
Laughlin (1980) proposes a group-task continuum anchored by
intellective and judgemental tasks. An intellective task
involves a demonstrably correct solution whereas a
judgemental task involves group consensus on some non-
demonstrable behavioural, ethical or attitudinal judgement.
Laughlin suggests that the basic social combination process
differs for intellective and judgemental tasks. On
intellective tasks the basic social combination is truth
supported wins, and two or more correct members are
necessary and sufficient for a correct group response. On
judgemental tasks the basic social combination process is
majority wins - the majority of members' preferences
determines the collective decision. Laughlin and Earley
(1982) compared group and individual choice-dilemma
decisions using the Social Combination model. They found
that persuasive arguments are most influential for
intellective tasks with demonstrably correct solutions,
whereas the opinions of others are relatively more important
on judgemental tasks without demonstrably correct solutions.
They concluded that there is a correspondence between the
nature of the group task and the nature of the group interaction process. Kaplan and Miller (1983) found that different types of decisions are influenced by different types of information. Responses requiring subjective certainty were influenced by the information provided, while responses requiring levels or criteria to be set were more influenced by the norms of the group than by facts and information. The process by which a group will reach a decision therefore depends on the type of problem that the group has to solve, with groups who must attempt to find a correct solution making use of truthful or factual information, while groups who must make a decision on a problem that has no correct solution make use of attitudes and opinions and the norms of the group.

MHRT's have a specific question to answer: "is this patient currently suffering from mental illness or mental impairment to such a degree that he/she requires treatment and care in a hospital environment, for his/her own health and safety and for the protection of others?", or, in short, "is this patient suitable for discharge?". Although this question is not strictly answerable, in that one can only ever predict a patient's suitability for discharge, and can not know this for certain, the group are required to be as accurate as possible. It appears likely, then, that the task of MHRT's is an intellective task on Laughlin's continuum. For MHRT's, matters of truth or fact should have more influence upon decision than opinions or attitudes. This study analyses the contents of reports provided for Tribunals with regard to both factual and non-factual information, such as
opinions. If matters of truth are more influential upon Tribunals decisions, one would expect the facts provided in the reports to be associated with the Tribunal’s decisions. Fennell’s (1977) finding that Tribunals attempt to find factual information to support the responsible authority’s report lends some support to the proposition that Tribunals are intellective problem solving groups.

Valance theory

The concept of valance was originally discussed by Lewin (1935) but has been developed by Hoffman (1961) who applied the concept to the attractiveness of cognitions arising in the solving of problems by groups. Hoffman and Maier (1964) describe valance as "the degree of acceptability a solution has for a group or individual. Positive valance indicates an acceptable solution and negative valance an unacceptable one" (p.264). He goes on to state that "a solution to be adopted by a group must acquire a more positive valance than some minimum value." Hoffman and Maier have operationalised this concept by means of a coding system for group processes in problem-solving groups which successfully predicted group decisions in eighty per cent of experimental groups.

Hoffman and Maier’s model has also been employed in studies exploring decision processes by mock juries by Hastie, Penrod and Pennington (1983), who used the model to analyse the decision processes of mock juries who were deliberating the transcript of a murder trial that they had just viewed. They found that the verdict valance was positively associated with the final verdict choice.

It would, therefore, appear that the way in which a problem
is discussed, either positively or negatively, may predict the final decision with possible decisions discussed positively being more likely to be adopted than those solutions which were discussed negatively. Peay (1981) found evidence to support this in relation to MHRT decisions. She found that members with positive attitudes towards discharge tended to make larger numbers of discharge decisions than those with negative attitudes. The current study will analyse the content of reports to MHRT's, adapting Valance theory methods to assess whether the valance of reports has any relationship with outcome.

Two aspects of valance will be explored. Firstly, the reports will be analysed in terms of the valance of statements referring to discharge. If the statements generally promote discharge, that is they have a positive valance for a discharge decision, then the Tribunal should reach a discharge decision. In contrast, if statements in the reports tend to be negative towards discharge, the Tribunal's decision should reflect this negative valance and make a no discharge recommendation.

Secondly, the contents of the reports will be analysed for the way in which they present the patient in either a positive, neutral, or negative light. If the majority of statements present the patient in a positive light, then the Tribunal's decision should reflect this and be more likely to recommend discharge. However, if the reports present the patient in a negative light the Tribunal should reflect this and reach a 'no discharge' decision. This study will explore Peay's (1989) finding that the reports provided for
Tribunals are influential upon the outcome. In addition, Peay's (1989) finding that Tribunals discuss different issues for psychopathic disorder compared to mental illness patients will be explored to assess whether such differences also exist in the reports provided for Tribunals.

With regard to Clinical Psychology, this study is important for two reasons. Firstly, reports by clinical psychologists are not compulsory for Tribunals and may not be provided even though the psychologist may be involved in the care and treatment of the patient being considered. If the reports provided to the Tribunal are as influential as Peay's (1981) results indicate, then the automatic provision of reports by clinical psychologists should be considered, particularly if there is disagreement between professions about a particular patient's suitability for discharge. This is particularly relevant for psychopathic disorder patients as, generally, psychotherapy rather than medication tends to be the predominant form of treatment, and this is often provided by clinical psychologists. In such cases the psychologist may be the most informed professional regarding the patient's progress and suitability for discharge, and therefore possibly the best equipped for making recommendations to Tribunals.

Secondly, psychologists are not only involved in the provision of individual therapy for patients, but also in the wider service provision. As Tribunals have the ultimate responsibility of deciding whether a patient is ready for discharge it is important that such decisions are made as systematically as possible with minimal personal biases.
influencing decisions. It is therefore important to explore whether Tribunals use information, and reach decisions, systematically, and whether there is scope for improvement in the way MHRT's operate.

This study will examine the following four hypotheses:

(1) Factual statements in reports provided for Tribunals will have a greater association with Tribunal decisions than will opinions.

(2) Reports containing more statements promoting discharge than no discharge are more likely to be associated with discharge decisions than reports having more statements against discharge.

(3) Reports containing more positive than negative statements about the patient are more likely to be associated with discharge decisions than reports containing more negative statements about the patient.

(4) There will be a difference in the types of statements included in reports for Tribunals for psychopathic disorder, as compared to mental illness, subjects.
METHOD

Design

A retrospective design was chosen to analyse the content of the reports provided for MHRT's. This involved searching each subjects' medical records for the relevant reports. The reports included in the study were those written by the RMO, the Social Worker and the independent psychiatrist if one was involved. These reports were selected for two reasons. Firstly, MHRT's always require reports by the RMO and a social worker, therefore all subjects in the study should, have at least these two reports in their records. Reports by independent psychiatrists also appear frequently, therefore several of the subjects in the study should have such reports available for their Tribunals. Secondly, reports by other professionals are provided occasionally and the RMO normally includes any pertinent information relating to other professions' involvement with the patient in his/her own report.

A between- and within-subjects design was employed. The between-subjects design involved four groups of subjects: firstly, patients who had received either an absolute or conditional discharge by a MHRT since the 1983 MHA, with one group consisting of subjects classified as suffering from a psychopathic disorder, and the other mental illness. The other two groups contained patients who had not been discharged by a MHRT's since the 1983 MHA, again separated in to those diagnosed as suffering from either a psychopathic disorder or mental illness. The within-subjects design compared the reports of subjects for their
last two MHRT's (when two or more Tribunal hearings had been held).

Subjects
The sample included all 27 patients who had received either an absolute or conditional discharge from Broadmoor hospital by a MHRT after the 1983 MHA. Initially, the 27 patients were identified using a daily movement register kept by the hospital. This register includes details about all patients leaving the hospital and indicates whether the discharge was from a Tribunal. Two of the patients were not included as the relevant sections of their medical records were not available. A total of 25 patients were therefore included in the study.

Of these 25 subjects, three had received absolute discharges and 22 conditional discharges. 14 subjects were classified as having a psychopathic disorder (five female, nine male). Their ages ranged from 23 to 58 years old. 11 subjects were classified as having a mental illness (two female, nine male). Their ages ranged from 27 to 68 years old. The medical records of 'discharged' subjects were checked for the relevant reports, and then matched with subjects who had not received discharges from MHRT's. Subjects were matched as closely as possible on the following parameters:

(a) Legal classification;
(b) Sex;
(c) Date of admission to Broadmoor hospital;
(d) Index offence (the offence that precipitated the patient being admitted to Broadmoor hospital);
(e) Age;
(f) Subject received a no discharge decision from a MHRT in the same year as the patient with whom they were being matched received a discharge.

The checklist

A checklist was developed for analysis of the reports provided to Tribunals (see Appendix 1). One checklist was used for each report. The checklist included a number of statements that might occur in the reports. Each statement was then ticked off if it appeared in particular report. The statements were based on the issues that Peay(1989) identified as frequently being discussed by Tribunals. For each statement the rater recorded their level of confidence that the passage in the report had the same meaning as the statement on the checklist. The level of confidence ranged from '1' which represented 'certainty' to '3' which represented 'fairly confident' (see Appendix 2 for definitions). Three additional codings were made for each statement. The first recorded whether a statement in the report was a fact or an opinion (Appendix 2), in order to operationalise Social Combination theory, and the use of facts rather than opinions by intellective problem solving groups (Laughlin 1980). The second recorded whether a particular statement promoted discharge, was against discharge, or was neutral (Appendix 2), in order to operationalise the Valance concept, and the postulate that solutions discussed in a positive way by the group are more likely to be the solution accepted by the group (Hoffman 1961).

The third coding recorded whether a particular statement
discussed the subject in a positive, neutral or negative manner (Appendix 2). This was another attempt to operationalise Valance theory and to assess whether there was any association between the extent to which the subject was presented in a positive or negative valance and Tribunal outcome.

The checklist was piloted using a random selection of five reports for subjects. This revealed that some statements were not used at all in the reports, while other issues not included in the checklist were frequently discussed. It was also found that there was considerable variation in the levels of confidence that a particular statement on the checklist had the same meaning as the passage in the report. During the pilot study all issues not covered by the checklist were recorded. Any statement that was used in 25% or more of the reports was then included in a revised checklist. After these additions and exclusions the checklist totalled fifty seven statements. The remainder of the checklist was easy to use, and there were no further problems with it during the pilot study.

A second pilot study was then conducted using the revised checklist on the reports of a further six randomly selected subjects. The revised checklist now covered the majority of issues discussed in the reports analysed. It also resolved the problem with raters' confidence experienced with the initial checklist. It was therefore decided that no further alterations would be made.

Inter-rater reliability checks were also carried out during
the second pilot study. Two raters independently used the checklist on six reports. Both raters were provided with definitions for each of the statements and for each of the columns. The calculated inter-rater reliability figures were:

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Presence of particular statement:</td>
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</tr>
<tr>
<td>Facts versus opinions:</td>
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</tr>
<tr>
<td>Valence of statements:</td>
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</tr>
<tr>
<td>Statements pro-, anti-, neutral towards discharge</td>
<td>0.98</td>
</tr>
<tr>
<td>Level of confidence in meaning</td>
<td>0.98</td>
</tr>
<tr>
<td>Whole checklist</td>
<td>0.95</td>
</tr>
</tbody>
</table>

Barlow and Hersen (1984) discuss reliability measures and refer to Hartmann (1982) who found that acceptable ranges of reliability and reports them as ranging from 0.70 to 0.90 for raw agreement and from 0.60 to 0.75 for other statistical procedures applicable to such data. As all of the reliability rates for this study fall within these suggested levels, it was decided that the checklist was ready to be used in the main study.

Procedure

The reports for each subject's most recent Tribunal were analysed using the checklist. In addition, for the 32 subjects who had had previous MHRT's post-1983 MHA, the reports of their next most recent Tribunal were used for within-subjects comparisons.

One checklist was completed for each report so that each subject had a range of between two and six checklists for
analysis. Each checklist took approximately twenty minutes to complete. Once data collection had been completed, it was necessary to standardise the scoring as the reports varied in length.

Firstly, for each Tribunal, the checklists were collapsed to provide an overall picture of the type of information being provided. From this it was possible to calculate a standardised figure for the extent to which reports were positive or negative and the extent to which they promoted discharge. This was calculated for facts and opinions separately by totalling the number of 'pro-discharge' facts/opinions and the number of 'against discharge' facts/opinions and the number of 'neutral' facts/opinions. The following formula (for both facts and opinions) was then used to produce a standardised figure:

\[
\text{Total Pro-Discharge Facts} - \text{Total Against Discharge Facts} \over \text{Total Number of Facts}
\]

These standardised figures ranged from '+1' to '-1'. representing the extent to which a report promoted discharge, with '+1' representing reports that were for absolutely pro-discharge, '0' representing reports that were neutral overall and '-1' representing reports that were absolutely against discharge. The same procedure was followed for opinions relating to discharge. The whole procedure was then repeated for the reports of the 32 subjects who had had a previous MHRT hearing. This resulted in four standardised figures for these subjects:

(a) Current factual statements relating to discharge;

(b) Current opinion statements relating to discharge;
(c) Previous factual statements relating to discharge;
(d) Previous opinion statements relating to discharge.

Each figure was then compared with psychiatric classification, Tribunal outcome, and type of index offence. Standardised figures were then calculated for the extent to which a set of reports presented the subject in a positive, neutral or negative light. Again, separate standard figures were calculated for current Tribunal factual statements, current Tribunal opinion statements, previous Tribunal factual statements and previous Tribunal opinion statements. To summarise, the 18 subjects who had had only one Tribunal hearing had four standardised figures, while the 32 subjects who had had two Tribunal hearings had eight standardised figures. Each of these was compared with Tribunal outcome, classification and type of index offence. The standardised figures calculated for the 32 subjects with two Tribunals, were used to compare recent Tribunal reports with previous Tribunal reports.

While subjects’ index offences fell into five categories, only those subjects in the ‘murder/attempt murder’, ‘G.B.H./A.B.H’ and ‘sexual’ categories were included in the analysis comparing the standardised figures with index offence and outcome. For the other two categories, only four subjects’ index offences fell into the ‘offence against property’ category and one into the ‘other’ category.

Statements that focused on similar issues, such as effectiveness of treatment, were linked together to produce a total of sixteen statement categories for each report.
(Appendix 3). As each statement category included several statements, a standardised figure was produced which reflected the way in which these statements were used, either positively, neutrally or negatively. This figure was calculated by totalling the number of positive statements within each statement category, the number of negative statements and the total number of statements. The following formula was used:

\[
\frac{\text{Total Positive Statements} - \text{Total Negative Statements}}{\text{Total Number of Statements}}
\]

As with the other standardised figures, this produced a score ranging from '+1' to '-1' for each statement categories. This method was used for all reports. These scores were then compared with Tribunal outcome and psychiatric classification.
RESULTS

Four types of general analysis were conducted. In the first the standardised fact and opinion scores for the extent to which the reports were for or against discharge were compared between subjects who had received a discharge and subjects who had not and for subjects classified as having a mental illness or a psychopathic disorder. This was conducted for the most recent tribunal and the previous tribunal. Previous reports were analysed to assess whether they were associated with the outcome of the recent tribunal and so that each subject's recent and previous reports could be compared. This procedure was an attempt to combine the analysis of the influence of facts compared to opinions and the analysis of the for or against discharge valence of the reports and to explore the hypothesis that factual information will be associated with outcome rather than opinions and the hypothesis that reports with a valence that promotes discharge is more likely to be associated with a discharge.

In the second analysis, the standardised fact and opinion scores for the extent to which reports consisted of statements discussing subjects in a positive or negative manner were compared between discharged and not discharged subjects and between subjects classified as having a mental illness and subjects classified as having a psychopathic disorder. This was conducted for the most recent tribunal and the previous tribunal reports to assess whether previous reports were associated with the outcome of recent tribunals.
and so that each subjects recent and previous reports could be compared. Again this was an attempt to combine the analysis of the influence of facts compared to opinions and the valence for the extent to which reports describe the subject in a positive or negative light and to explore the hypothesis that factual information would be associated with outcome rather than opinions and the hypothesis that reports that discuss the subject in a positive manner are more likely to be associated with a discharge outcome.

In the third analysis, the use of the statement categories and the extent to which they were used positively or negatively was compared between discharged and not discharged subjects and between subjects classified as having a mental illness and subjects classified as having a psychopathic disorder. This was conducted on recent and previous reports so that it could be assessed whether statements used in previous reports were associated with the outcome of recent tribunals. This was an attempt to explore the hypothesis that different statements would be used for subjects with the two different classifications and to assess whether the valences differed according to outcome on particular statements.

In the fourth analysis, the valences for the extent to which statements promoted discharge were compared between the three different index offence categories and outcome. The valences for the extent to which subjects were presented positively or negatively were also compared between index offence and outcome. In addition to this fact and opinion statements were analysed for their relationship with index
offence category and outcome.

In addition to these formal analysis the relationship between the RMO's formal recommendation and the tribunal outcome was explored. Also average lengths of stay were calculated.

I: Valence for extent to which reports promote discharge, fact and opinion statements

A total of six two-way analysis of variance between subjects were conducted on this data, three on the recent tribunal reports and three on the previous tribunal reports. The three analysis of variance for each set of data were conducted on factual statements, opinion statements and fact plus opinion statements. All of these were comparing outcome (discharge versus no discharge) and classification (mental illness versus psychopathic disorder) with the degree to which statements were for or against discharge.

In addition to this three two-by-two within and between analysis of variance were conducted comparing each subjects recent tribunal reports with their previous reports with outcome (discharge versus no discharge) and with classification (mental illness versus psychopathic disorder) for the degree to which fact statements, opinion statements and fact plus opinion statements are for or against discharge. For all of these analysis of variance a negative value indicates that reports consisted mainly of statements against discharge and a positive value indicates that reports consisted mainly of statements for discharge.

I.i Recent tribunal reports, fact statements
No significant findings were achieved.

I.ii Recent tribunal reports, opinion statements
The findings indicate a relationship with outcome which is seen in Table 1 and was significant, $F 1,46 = 6.62$, $p<0.025$. Means were
-0.108 for discharged and -0.391 for no discharge subjects indicating that statements tended to be negative for both groups but were least negative for discharged subjects.

I.iii Recent tribunal reports, fact plus opinion statements
The findings indicate a relationship with outcome which is seen in Table 2 and was significant, $F 1,46 = 4.10$, $p<0.05$. Means were -0.010 for discharged and -0.100 for no discharge subjects and indicate that statements tended to be negative for both groups but were least negative for discharged subjects.

I.iv Previous tribunal reports, facts
The findings indicate a relationship with outcome which is seen in Table 3 and was significant, $F 1,28 = 7.66$, $p<0.025$. Means were 0.022 for discharged and -0.040 for no discharge subjects and indicate that statements tended to be negative no discharge subjects and positive for discharged subjects.

I.v Previous tribunal reports, opinions
The findings indicate a relationship with outcome which is seen in Table 4 and was significant, $F 1,25 = 4.55$, $p<0.05$. Means were -0.095 for discharged and -0.432 for no discharge subjects and indicate that statements tended to be negative for both groups but were least negative for discharged
subjects.

I.vi Previous tribunal reports, facts plus opinions
The findings indicate a relationship with outcome which is seen in Table 5 and was significant $F_{1,23} = 10.13$, $p<0.005$. Means were

-0.013 for discharged and -0.132 for no discharge subjects and indicate that statements tended to be negative for both groups but were least negative for discharged subjects.

I.vii Recent and previous tribunal reports, facts
The findings indicate a relationship with outcome which is seen in Table 6 but was not quite significant, $F_{1,28}= 3.16$, $p<0.1$. Means were 0.015 for discharged and -0.036 for no discharge subjects and indicates that discharged subjects tended to have mostly positive fact statements whereas no discharge subjects tended to have mostly negative fact statements.

I.viii Recent and previous tribunal reports, opinions
Firstly, the findings indicate a relationship with outcome which can be seen in Table 7 and approached significance, $F_{1,28} = 3.14$, $p<0.1$. Means were -0.104 for discharged and -0.264 for no discharge subjects and indicate that opinions tended to be negative for both groups with the least negative being for discharged subjects.

Secondly, the findings also indicate a relationship between recent and previous opinions which can be seen in Table 7 and was significant, $F_{1,28} = 20.96$, $p<0.0001$. Means were -0.311 for recent opinions and -0.086 for previous opinions indicating that both recent and previous opinions tended to
Table 1. Results of analysis of variance for recent reports, degree to which opinions promote discharge

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Seq ss</th>
<th>Adj ms</th>
<th>f</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome</td>
<td>1</td>
<td>0.8264</td>
<td>0.9648</td>
<td>6.62</td>
<td>0.025</td>
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</table>

Means for recent opinions

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Mean</th>
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</thead>
<tbody>
<tr>
<td>Discharge</td>
<td>-0.108</td>
</tr>
<tr>
<td>No Discharge</td>
<td>-0.391</td>
</tr>
</tbody>
</table>

Table 2. Results of analysis of variance for recent reports, degree to which facts and opinions promote discharge

<table>
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<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome</td>
<td>1</td>
<td>0.08935</td>
<td>0.09817</td>
<td>4.10</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Means for recent facts plus opinions

<table>
<thead>
<tr>
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<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discharge</td>
<td>-0.010</td>
</tr>
<tr>
<td>No discharge</td>
<td>-0.100</td>
</tr>
</tbody>
</table>

Table 3. Results of analysis of variance for previous reports, degree to which facts promote discharge

<table>
<thead>
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<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>outcome</td>
<td>1</td>
<td>0.022416</td>
<td>0.027630</td>
<td>7.66</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Means for previous facts

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discharge</td>
<td>0.021</td>
</tr>
<tr>
<td>No discharge</td>
<td>-0.399</td>
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</table>
Table 4. Results of analysis of variance for previous reports, degree to which opinions promote discharge

<table>
<thead>
<tr>
<th>Source</th>
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<th>Seq ss</th>
<th>Adj ms</th>
<th>f</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>outcome</td>
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<td>0.7523</td>
<td>0.7238</td>
<td>4.55</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Means for previous opinions

| Outcome    | Mean | Discharge | -0.095 | No discharge | -0.432 |

Table 5. Results of analysis of variance for previous reports, degree to which facts and opinions promote discharge

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Seq ss</th>
<th>Adj ms</th>
<th>f</th>
<th>p</th>
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<tbody>
<tr>
<td>outcome</td>
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<td>0.09915</td>
<td>0.10615</td>
<td>10.13</td>
<td>0.005</td>
</tr>
</tbody>
</table>

Means for previous facts and opinions

| Outcome    | Mean | Discharge | -0.013 | No discharge | -0.132 |

Table 6. Results of analysis of variance for recent and previous reports, degree to which facts promote discharge

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Seq ss</th>
<th>Adj ms</th>
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<th>p</th>
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</thead>
<tbody>
<tr>
<td>outcome</td>
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<td>0.046</td>
<td>0.046</td>
<td>3.160</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Means for outcome

| Outcome    | Mean | Discharge | 0.015  | No discharge | -0.036 |
Table 7. Results of analysis of variance for recent and previous reports, degree to which opinions promote discharge

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
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<th>Adj ms</th>
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<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>outcome</td>
<td>1</td>
<td>0.457</td>
<td>0.457</td>
<td>3.137</td>
<td>0.1</td>
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<tr>
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<td>0.732</td>
<td>0.732</td>
<td>20.963</td>
<td>0.0001</td>
</tr>
<tr>
<td>opinions, RxP* x outcome</td>
<td>1</td>
<td>0.148</td>
<td>0.148</td>
<td>4.136</td>
<td>0.05</td>
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</table>

Means for outcome

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discharge</td>
<td>-0.104</td>
</tr>
<tr>
<td>No discharge</td>
<td>-0.264</td>
</tr>
</tbody>
</table>

Means for opinions RxP*

<table>
<thead>
<tr>
<th>Opinion</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recent</td>
<td>-0.311</td>
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<tr>
<td>Previous</td>
<td>-0.086</td>
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</tbody>
</table>

Means for opinions RxP* x outcome

<table>
<thead>
<tr>
<th>Opinions, outcome</th>
<th>Means</th>
</tr>
</thead>
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<td>R* opinion discharge</td>
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</tr>
<tr>
<td>R* opinion no discharge</td>
<td>-0.412</td>
</tr>
<tr>
<td>P* opinion discharge</td>
<td>-0.045</td>
</tr>
<tr>
<td>P* opinion no discharge</td>
<td>-0.115</td>
</tr>
</tbody>
</table>
be in a negative direction, with recent opinions being the most negative.

Finally, the findings indicate an interaction between recent and previous opinions and outcome which can be seen in Table 7 and was significant, F 1,28 = 4.24, p<0.05. Means were -0.163 for recent opinions/discharged, -0.412 for recent opinions/no discharge, -0.045 for previous opinion/discharged and -0.115 for previous opinion/no discharge and can be seen in Figure 1. These indicate that opinions tended to be negative for all four groups with the least negative being for previous opinions/discharged and the most negative being the recent opinions/no discharge subjects.

I.ix Recent and previous tribunal reports, facts plus opinions

Firstly, the findings indicate a relationship with outcome which can be seen in Table 8 and approached significance, F 1,28 = 3.52, p<0.1. Means were -0.045 for discharged and -0.150 for no discharge subjects and indicate that the opinions tended to be negative for both groups with the least negative being for discharged subjects.

Secondly, the findings indicate a relationship between recent and previous facts which can be seen in Table 8 and was significant F 1,28 = 20.01, p<0.0001. Means were -0.015 for recent facts and -0.199 for previous facts indicating that all facts tended to be negative with the least negative being recent reports.

Thirdly, the findings indicate a relationship between recent
Table 8. Results of analysis of variance for recent and previous reports, degree to which facts and opinions promote discharge

<table>
<thead>
<tr>
<th>Source</th>
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<th>Adj ms</th>
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<tbody>
<tr>
<td>outcome</td>
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<td>0.397</td>
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<td>0.0001</td>
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<td>1</td>
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<td>0.354</td>
<td>15.481</td>
<td>0.0005</td>
</tr>
<tr>
<td>facts x opinions x outcome</td>
<td>1</td>
<td>0.082</td>
<td>0.082</td>
<td>3.583</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Means for outcome

<table>
<thead>
<tr>
<th>Outcome</th>
<th>means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discharge</td>
<td>-0.045</td>
</tr>
<tr>
<td>No discharge</td>
<td>-0.150</td>
</tr>
</tbody>
</table>

Means for facts RxP*

<table>
<thead>
<tr>
<th>Facts</th>
<th>means</th>
</tr>
</thead>
<tbody>
<tr>
<td>recent</td>
<td>-0.015</td>
</tr>
<tr>
<td>previous</td>
<td>-0.199</td>
</tr>
</tbody>
</table>

Means for opinions

<table>
<thead>
<tr>
<th>Opinions</th>
<th>means</th>
</tr>
</thead>
<tbody>
<tr>
<td>recent</td>
<td>-0.165</td>
</tr>
<tr>
<td>previous</td>
<td>-0.049</td>
</tr>
</tbody>
</table>

Means for facts x opinions RxP

<table>
<thead>
<tr>
<th>Fact x opinion</th>
<th>means</th>
</tr>
</thead>
<tbody>
<tr>
<td>R* facts x R* opinions</td>
<td>-0.019</td>
</tr>
<tr>
<td>R* facts x P* opinions</td>
<td>-0.012</td>
</tr>
<tr>
<td>P* facts x R* opinions</td>
<td>-0.311</td>
</tr>
<tr>
<td>P* facts x P* opinions</td>
<td>-0.066</td>
</tr>
</tbody>
</table>

Means for facts x opinions RxP* x outcome

<table>
<thead>
<tr>
<th>Fact x opinion x outcome</th>
<th>means</th>
</tr>
</thead>
<tbody>
<tr>
<td>R* facts x R* opinions x discharge</td>
<td>0.01</td>
</tr>
<tr>
<td>R* facts x R* opinions x no discharge</td>
<td>-0.05</td>
</tr>
<tr>
<td>R* facts x P* opinions x discharge</td>
<td>0.025</td>
</tr>
<tr>
<td>R* facts x P* opinions x no discharge</td>
<td>-0.34</td>
</tr>
<tr>
<td>P* facts x R* opinions x discharge</td>
<td>-0.163</td>
</tr>
<tr>
<td>P* facts x R* opinions x no discharge</td>
<td>-0.412</td>
</tr>
<tr>
<td>P* facts x P* opinions x discharge</td>
<td>-0.045</td>
</tr>
<tr>
<td>P* facts x P* opinions x no discharge</td>
<td>-0.115</td>
</tr>
</tbody>
</table>

* R=recent, P=previous
and previous opinions which can be seen in Table 8 and was significant, $F_{1,28} = 14.82$, $p < 0.001$. Means were $-0.165$ for recent opinions and $-0.049$ for previous opinions indicating that all opinions tended to be negative with the least negative being previous reports.

Fourthly, the findings indicate a relationship between facts and opinions, recent and previous which can be seen in Table 8 and was significant, $F_{1,28} = 15.48$, $p < 0.0005$. Means were $-0.019$ for recent facts/recent opinions, $-0.012$ for recent facts/previous opinions, $-0.311$ for previous facts/recent opinions and $-0.086$ for previous facts/previous opinions indicating that all were negative with the least negative being recent facts/previous opinions and the most negative being previous facts/recent opinions.

Finally, the results indicate an interaction between recent and previous facts and opinions and outcome which can be seen in Table 8 and approached significance, $F_{1,28} = 3.58$, $p < 0.1$. Means were $0.009$ for recent facts/recent opinions/discharge, $-0.038$ for recent facts/recent opinions/no discharge, $0.020$ for recent facts/previous opinions/discharge, $-0.34$ for recent facts/previous opinions/no discharge, $-0.163$ for previous facts/recent opinions/discharge, $-0.412$ previous facts/recent opinions/no discharge, $-0.045$ for previous facts/previous opinions/discharge and $-0.115$ for previous facts/previous opinions/no discharge and can be seen in Figure 2. These indicate that discharged subjects tended to have more positive combinations of fact and opinion statements for recent and previous tribunals with the most positive being
Figure 1. Figure displaying the relationship between outcome and the degree that recent and previous opinions promote discharge.

Figure 2. Figure displaying the relationship between outcome with degree that recent and previous facts and opinions promote discharge.
for recent facts compared to previous opinions whilst no discharge subjects tended to have negative combinations with the most negative being for recent facts compared to previous opinions.

II: Valence for extent to which reports present subject positively, fact and opinion statements

A total of six two-way analysis of variance between subjects were conducted on this data, three on the recent tribunal reports and three on the previous tribunal reports. The three analysis of variance for each set of data were conducted on fact statements, opinion statements and fact plus opinion statements. All of these were comparing outcome (discharge versus no discharge) and classification (mental illness versus psychopathic disorder) with the degree to which the statements in the reports presented subjects in a positive or negative light. In addition to this three two by two within and between analysis of variance were conducted comparing each subjects recent tribunal reports with their previous reports and outcome (discharge versus no discharge) and classification (mental illness versus psychopathic disorder) for the degree to which fact statements, opinion statements and fact plus opinion statements present the subject in a positive light. A positive value indicates that reports presented subjects in a positive light and a negative value indicates that reports presented subjects in a negative light.

II.i Recent tribunal reports, fact statements

Firstly, the findings indicate a relationship with classification which can be seen in Table 9 and approached
Table 9. Results of analysis of variance degree to which recent fact statements present subjects positively or negatively

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Seq ss</th>
<th>Adj ms</th>
<th>f</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>classification</td>
<td>1</td>
<td>0.5003</td>
<td>0.4878</td>
<td>3.69</td>
<td>0.1</td>
</tr>
<tr>
<td>outcome</td>
<td>1</td>
<td>0.6162</td>
<td>0.8066</td>
<td>6.11</td>
<td>0.025</td>
</tr>
<tr>
<td>class x outcome</td>
<td>1</td>
<td>0.4226</td>
<td>0.4226</td>
<td>3.20</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Means for classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>psychopathic disorder</td>
<td>0.217</td>
</tr>
<tr>
<td>mental illness</td>
<td>0.015</td>
</tr>
</tbody>
</table>

Means for outcome

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>discharge</td>
<td>0.246</td>
</tr>
<tr>
<td>no discharge</td>
<td>-0.013</td>
</tr>
</tbody>
</table>

Means for classification x outcome

<table>
<thead>
<tr>
<th>Classification x outcome</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>psychopathic /discharge</td>
<td>0.253</td>
</tr>
<tr>
<td>psychopathic/no discharge</td>
<td>0.181</td>
</tr>
<tr>
<td>mental illness/discharge</td>
<td>0.239</td>
</tr>
<tr>
<td>mental illness/no discharge</td>
<td>-0.208</td>
</tr>
</tbody>
</table>
significance, $F_{1,46} = 3.69, p<0.1$. Means were 0.217 for psychopathic disorder and 0.015 for mental illness indicating that both groups tended to have statements projecting them positively but this was more so for psychopathic disorder.

Secondly, the findings indicate a relationship with outcome which can be seen in Table 9 and was significant $F_{1,46} = 6.11, p<0.025$. Means were 0.246 for discharged and -0.013 for no discharge subjects indicating that discharged subjects have reports that present them positively and no discharge subjects have reports that present them negatively.

Thirdly, the findings indicate an interaction effect between outcome and classification which can be seen in Table 9 and approached significance, $F_{1,46} = 3.20, p<0.1$. Means were 0.253 for psychopathic disorder/discharge, 0.181 for psychopathic disorder/no discharge, 0.239 for mental illness/discharge and -0.2082 for mental illness/no discharge and can be seen in Figure 3. These indicate that all subjects who were discharged have a greater number of positive statements than those not discharged, but the difference being extremely different for the two classifications with psychopathic disorder having a small difference and both outcomes falling within the positive category and mentally ill subjects having a large difference with discharged subjects having reports presenting them positively and no discharge having reports that present them negatively.

II.ii Recent tribunal reports, opinion statements
Figure 3. Figure displaying the relationship between outcome and classification with degree that recent facts present subjects positively.

Figure 4. Figure displaying the relationship between outcome with degree that recent and previous facts and opinions present subjects positively.
No significant findings achieved.

II.iii Recent tribunal reports, fact and opinions
Firstly, the findings indicate a relationship with outcome which can be seen in Table 10 and was significant, $F_{1,46} = 4.38$, $p<0.05$. Means were 0.165 for discharged and -0.039 for not discharged subjects indicating that discharged subjects tended have reports consisting of mainly positive facts and opinions whereas subjects who were not discharged tended to have reports that consisted of mainly negative facts and opinions.

Secondly, the findings indicate a relationship with classification which can be seen in Table 10 and approached significance, $F_{1,46} = 2.86$, $p<0.1$. Means were 0.165 for psychopathic disorder and -0.017 for mental illness indicating that the two classification groups tended to be presented in different lights with psychopathic disorder being positive and mentally ill being negative.

II.iv Previous tribunal reports, fact statements
No significant findings were achieved.

II.v Previous tribunal statements, opinion statements
Firstly, the results indicate a relationship with outcome which can be seen in Table 11 and was significant, $F_{1,28} = 6.39$, $p<0.025$. Means were -0.0003 for discharged and -0.471 for no discharge subjects indicating that all subjects regardless of the outcome tended to have negative opinions in the reports with the least negative for discharged subjects.
Table 10. Results of analysis of variance degree to which recent fact and opinion statements present subjects positively or negatively

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Seq ss</th>
<th>Adj ms</th>
<th>f</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>outcome</td>
<td>1</td>
<td>0.4775</td>
<td>0.6131</td>
<td>4.38</td>
<td>0.05</td>
</tr>
<tr>
<td>class</td>
<td>1</td>
<td>0.4111</td>
<td>0.3998</td>
<td>2.68</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Means for outcome

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discharge</td>
<td>0.187</td>
</tr>
<tr>
<td>No discharge</td>
<td>-0.039</td>
</tr>
</tbody>
</table>

Means for classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychopathic disorder</td>
<td>0.1655</td>
</tr>
<tr>
<td>Mental illness</td>
<td>-0.0172</td>
</tr>
</tbody>
</table>

Table 11. Results of analysis of variance degree to which previous opinions present subjects positively or negatively

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Seq ss</th>
<th>Adj ms</th>
<th>f</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>outcome</td>
<td>1</td>
<td>1.5880</td>
<td>1.6532</td>
<td>6.39</td>
<td>0.025</td>
</tr>
<tr>
<td>classification</td>
<td>1</td>
<td>0.9817</td>
<td>1.0476</td>
<td>4.05</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Means for outcome

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>discharge</td>
<td>-0.001</td>
</tr>
<tr>
<td>no discharge</td>
<td>-0.471</td>
</tr>
</tbody>
</table>

Means for classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>psychopathic</td>
<td>-0.048</td>
</tr>
<tr>
<td>mental illness</td>
<td>-0.423</td>
</tr>
</tbody>
</table>
Secondly, the results indicate a relationship with classification which can be seen in Table 11 and approached significance, $F_{1,28} = 4.05$, $p<0.1$. Means were -0.048 for psychopathic disorder and -0.423 for mental illness indicating that opinions tended to be used to present all subjects in a negative light, with the least negative being for psychopathic disorder subjects.

II.vi Previous tribunal reports, fact and opinion statements

No significant findings were achieved.

II.vii Recent and previous tribunal reports, facts

No significant results were achieved.

II.viii Recent and previous tribunal reports, opinions

The findings indicate a relationship between recent and previous opinions with outcome which can be seen in Table 12 and approached significance $F_{1,8} = 3.81$, $p<0.1$. Means were -0.139 for recent opinions/discharge, -0.098 for recent opinions/no discharge, -0.018 for previous opinions/discharge and -0.435 for previous opinions/no discharge indicating that discharged subjects tended to have previous reports with opinions that portrayed them positively and recent opinions portraying them negatively, whereas subjects who were not discharged had both recent and previous opinions that portrayed them negatively, with previous being more negative.

II.ix Recent and previous tribunal reports, facts and opinions

Firstly, the findings indicate a relationship between recent
Table 12. Results of analysis of variance degree to which recent compared to previous opinions present subjects positively or negatively

<table>
<thead>
<tr>
<th>Source</th>
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<th>Adj ms</th>
<th>f</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>RxP* opinion x outcome</td>
<td>1</td>
<td>0.904</td>
<td>0.904</td>
<td>3.814</td>
<td>0.1</td>
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</tbody>
</table>

Means for RxP* opinions x outcome

<table>
<thead>
<tr>
<th>Opinion</th>
<th>Outcome</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>R* opinion</td>
<td>discharge</td>
<td>-0.139</td>
</tr>
<tr>
<td>R* opinion</td>
<td>no discharge</td>
<td>-0.098</td>
</tr>
<tr>
<td>P* opinion</td>
<td>discharge</td>
<td>0.018</td>
</tr>
<tr>
<td>P* opinion</td>
<td>no discharge</td>
<td>-0.435</td>
</tr>
</tbody>
</table>

Table 13. Results of analysis of variance degree to which recent compared to previous facts and opinions present subjects positively or negatively

<table>
<thead>
<tr>
<th>Source</th>
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<th>Seq ss</th>
<th>Adj ms</th>
<th>f</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>RxP* facts</td>
<td>1</td>
<td>1.651</td>
<td>1.651</td>
<td>11.239</td>
<td>0.0025</td>
</tr>
<tr>
<td>RxP* facts x RxP* opinions x outcome</td>
<td>1</td>
<td>0.511</td>
<td>0.511</td>
<td>3.629</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Means for recent x previous facts

<table>
<thead>
<tr>
<th>Facts</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>recent</td>
<td>0.05</td>
</tr>
<tr>
<td>previous</td>
<td>-0.183</td>
</tr>
</tbody>
</table>

Means for RxP* facts x RxP* opinions x outcome

<table>
<thead>
<tr>
<th>Facts</th>
<th>Opinions</th>
<th>Outcome</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>R*fact</td>
<td>Ropinion</td>
<td>discharge</td>
<td>0.218</td>
</tr>
<tr>
<td>R*fact</td>
<td>Ropinion</td>
<td>no discharge</td>
<td>0.050</td>
</tr>
<tr>
<td>R*fact</td>
<td>Popinion</td>
<td>discharge</td>
<td>0.086</td>
</tr>
<tr>
<td>R*fact</td>
<td>Popinion</td>
<td>no discharge</td>
<td>-0.059</td>
</tr>
<tr>
<td>P*fact</td>
<td>Ropinion</td>
<td>discharge</td>
<td>-0.139</td>
</tr>
<tr>
<td>P*fact</td>
<td>Ropinion</td>
<td>no discharge</td>
<td>-0.098</td>
</tr>
</tbody>
</table>

* R=recent  P=previous.
and previous facts within subjects which can be seen in Table 13 and was significant $F_{1,28} = 11.24$, $p<0.0025$. Means were 0.05 for recent facts and -0.183 for previous facts indicating that recent facts tended to be positive and previous facts negative.

Secondly, a relationship was found between recent and previous facts and opinions within subjects and outcome which can be seen in Table 13 and approached significance $F_{1,28} = 3.63$, $p<0.1$. Means were 0.218 for recent facts/recent opinions/discharge, 0.050 for recent facts/recent opinions/no discharge, 0.086 for recent facts/previous opinions/discharge, -0.059 for recent facts/previous opinions/no discharge, -0.139 for previous facts/recent opinions/discharge and -0.098 for previous facts/recent opinions/no discharge which can be seen in Figure 4. This indicates that discharged subjects tended to have positive recent facts and negative previous facts with a combination of opinions whereas no discharge subjects tended to have more negative combinations. The most positive value was for recent facts and recent opinions for discharged subjects and the most negative value was for previous facts and current opinions.

III: Valence for the extent to which statement categories present subjects in a positive light

Two-way analysis of variance were used to compare the extent to which each statement category presented subjects positively or negatively for outcome (discharge versus no discharge) and for classification (mental illness versus psychopathic disorder). A total of six reports consisting
of sixteen statement categories each were examined totalling ninety six two-way analysis of variance. Of these, eleven statement categories were found to have a relationship with either outcome or classification it is possible that these were due to a Type I error and obtained by chance alone. However, as can be seen from the results those statement categories that were found to be associated with outcome or classification, had a similar pattern to the other results obtained. Also, as will be seen in the discussion the results are similar to previous research findings. It therefore seems unlikely that they were obtained by chance alone. A positive value indicates that statements presented subjects in a positive light and a negative value indicates that statements presented subjects in a negative light.

III.i   'Improvement of illness' recent report by Broadmoor psychiatrist

The findings indicate an interaction effect between classification and outcome which can be seen in Table 14 and was significant $F_{1,43} = 5.66$, $p<0.025$. Means were 0.129 for psychopathic/discharge, 0.385 for psychopathic/no discharge, 0.500 for mental illness/discharge and -0.360 for mental illness/no discharge subjects and can be seen in Figure 5. These indicate that this statement was used positively for psychopathic disorder subjects regardless of outcome, with no discharge being higher, and for mental illness subjects who were discharged, this being the most positive score, but was used negatively for mental illness subjects who were not discharged.

III.ii   'Behaviour in Broadmoor' recent report by
Table 14. Results of analysis of variance degree to which 'improvement of illness' in recent R.M.O. report presents subjects positively or negatively

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Seq ss</th>
<th>Adj ms</th>
<th>f</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>class x outcome</td>
<td>1</td>
<td>3.5756</td>
<td>3.5756</td>
<td>5.66</td>
<td>0.025</td>
</tr>
</tbody>
</table>

Means for classification and outcome

<table>
<thead>
<tr>
<th>Classification</th>
<th>Outcome</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>psychopathic</td>
<td>discharge</td>
<td>0.129</td>
</tr>
<tr>
<td>psychopathic</td>
<td>no discharge</td>
<td>0.385</td>
</tr>
<tr>
<td>mental illness</td>
<td>discharge</td>
<td>0.500</td>
</tr>
<tr>
<td>mental illness</td>
<td>no discharge</td>
<td>-0.360</td>
</tr>
</tbody>
</table>

Table 15. Results of analysis of variance degree to which 'behaviour in Broadmoor' in recent R.M.O. reports present subjects positively or negatively

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Seq ss</th>
<th>Adj ms</th>
<th>f</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>outcome</td>
<td>1</td>
<td>2.6186</td>
<td>2.9462</td>
<td>4.36</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Means for outcome

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>discharge</td>
<td>0.310</td>
</tr>
<tr>
<td>no discharge</td>
<td>-0.297</td>
</tr>
</tbody>
</table>

Table 16. Results of analysis of variance degree to which 'history' in recent R.M.O. reports presents subjects positively or negatively

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Seq ss</th>
<th>Adj ms</th>
<th>f</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>classification</td>
<td>1</td>
<td>0.24045</td>
<td>0.25407</td>
<td>3.70</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Means for classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>psychopathic</td>
<td>0.100</td>
</tr>
<tr>
<td>mental illness</td>
<td>-0.120</td>
</tr>
</tbody>
</table>
Figure 5. Figure displaying the relationship between outcome, classification and degree that 'improvement of illness' presents subjects positively.

Figure 6. Figure displaying the relationship between outcome, classification and degree that 'cooperation' presents subjects positively.
Table 25. Analysis of variance degree that opinion statements promote discharge for subjects with different index offences

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Seq ss</th>
<th>Adj ms</th>
<th>f</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>outcome</td>
<td>1</td>
<td>0.8060</td>
<td>0.6852</td>
<td>6.16</td>
<td>0.025</td>
</tr>
<tr>
<td>outcome x offence</td>
<td>2</td>
<td>0.7075</td>
<td>0.3538</td>
<td>3.18</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Means for outcome

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>discharge</td>
<td>-0.143</td>
</tr>
<tr>
<td>no discharge</td>
<td>-0.399</td>
</tr>
</tbody>
</table>

Means for outcome x offence

<table>
<thead>
<tr>
<th>Offence</th>
<th>Outcome</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>murder/attempt murder</td>
<td>discharge</td>
<td>-0.145</td>
</tr>
<tr>
<td>murder/attempt murder</td>
<td>no discharge</td>
<td>-0.616</td>
</tr>
<tr>
<td>G.B.H./A.B.H.</td>
<td>discharge</td>
<td>0.058</td>
</tr>
<tr>
<td>G.B.H./A.B.H.</td>
<td>no discharge</td>
<td>-0.358</td>
</tr>
<tr>
<td>sexual</td>
<td>discharge</td>
<td>-0.342</td>
</tr>
<tr>
<td>sexual</td>
<td>discharge</td>
<td>-0.222</td>
</tr>
</tbody>
</table>

Table 26. Analysis of variance degree that fact statements present subjects positively for subjects with different index offences

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Seq ss</th>
<th>Adj ms</th>
<th>f</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>outcome</td>
<td>1</td>
<td>0.6297</td>
<td>0.5830</td>
<td>5.47</td>
<td>0.025</td>
</tr>
<tr>
<td>outcome x offence</td>
<td>2</td>
<td>0.5649</td>
<td>0.2825</td>
<td>2.70</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Means for outcome

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>discharge</td>
<td>0.302</td>
</tr>
<tr>
<td>no discharge</td>
<td>0.066</td>
</tr>
</tbody>
</table>

Means for outcome x offence

<table>
<thead>
<tr>
<th>Offence</th>
<th>Outcome</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>murder/attempt murder</td>
<td>discharge</td>
<td>0.432</td>
</tr>
<tr>
<td>murder /attempt murder</td>
<td>no discharge</td>
<td>-0.057</td>
</tr>
<tr>
<td>G.B.H./A.B.H.</td>
<td>discharge</td>
<td>0.367</td>
</tr>
<tr>
<td>G.B.H./A.B.H.</td>
<td>no discharge</td>
<td>0.056</td>
</tr>
<tr>
<td>sexual</td>
<td>discharge</td>
<td>0.106</td>
</tr>
<tr>
<td>sexual</td>
<td>no discharge</td>
<td>0.199</td>
</tr>
</tbody>
</table>
Broadmoor psychiatrist

The findings indicate a relationship with outcome which can be seen in Table 15 and was significant $F_{1,43} = 4.36$, $p<0.05$. Means were 0.310 for discharged subjects and -0.207 for no discharge subjects indicating that this statement was used positively for subjects who were discharged and negatively for subjects who were not.

III.iii 'History' recent report by Broadmoor psychiatrist

The findings indicate a relationship with classification which can be seen in Table 16 and approached significance, $F_{1,18} = 3.70$, $p<0.1$. Means were 0.100 for psychopathic disorder and -0.12 for mental illness subjects indicating that this statement tended to be used positively for psychopathic disorder and negatively for mental illness subjects.

III.iv 'Family involvement' recent report by social worker

The findings indicate a relationship with outcome which can be seen in Table 17 and approached significance, $F_{1,40} = 3.91$, $p<0.1$. Means were 0.092 for discharge and 0.105 for no discharge subjects indicating that the statement tended to be used positively regardless of outcome but was slightly higher for no discharge subjects.

III.v 'Cooperation' recent report by social worker

The findings indicate an interaction effect between classification and outcome which can be seen in Table 18 and was significant, $F_{1,17} = 10.66$, $p<0.005$. Means were 0.200 for psychopathic disorder/discharge, 0.750 for psychopathic disorder/no discharge, 0.800 for mental illness/discharge
Table 17. Results of analysis of variance degree to which 'family involvement' in recent social work report presents subjects positively or negatively

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Seq ss</th>
<th>Adj ms</th>
<th>f</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>outcome</td>
<td>1</td>
<td>0.7203</td>
<td>0.8132</td>
<td>3.91</td>
<td>0.55</td>
</tr>
</tbody>
</table>

Means for outcome:

- discharge: 0.347
- no discharge: 0.071

Table 18. Results of analysis of variance degree to which 'cooperation' in recent social work reports presents subjects positively or negatively

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Seq ss</th>
<th>Adj ms</th>
<th>f</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>class x outcome</td>
<td>1</td>
<td>3.3013</td>
<td>3.3013</td>
<td>10.66</td>
<td>0.005</td>
</tr>
</tbody>
</table>

Means for classification and outcome:

- Psychopathic:
  - discharge: 0.200
  - no discharge: 0.750

- Mental Illness:
  - discharge: 0.800
  - no discharge: -0.333

Table 18. Results of analysis of variance degree that 'insight' in previous R.M.O. reports presents subjects positively or negatively

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Seq ss</th>
<th>Adj ms</th>
<th>f</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>classification</td>
<td>1</td>
<td>4.0381</td>
<td>3.5363</td>
<td>7.15</td>
<td>0.025</td>
</tr>
</tbody>
</table>

Means for classification:

- Psychopathic: -0.0833
- Mental Illness: -0.9417
and -0.333 for mental illness/no discharge and can be seen in Figure 6. These indicate that it was used positively for psychopathic disorder subjects regardless of outcome, being higher for no discharge, and for mentally ill subjects who were discharged, with this being the most positive. It tended to be used negatively for mentally ill subjects who were not discharged.

III.vi  'Insight' previous report by Broadmoor psychiatrist

The findings indicate a relationship with classification which can be seen in Table 18 and was significant, \( F_{1,17} = 7.15, p<0.025 \). Means were -0.083 for psychopathic disorder and -0.942 for mental illness subjects indicating that this statement tended to be used negatively for both classifications with the most negative for mental illness subjects.

III.vii  'Control' previous report by Broadmoor psychiatrist

The findings indicate a relationship for outcome which can be seen in Table 19 and approached significance \( F_{1,6} = 4.60, p<0.1 \). Means were -0.450 for discharged and 0.500 for no discharge subjects indicating that this statement tended to be used negatively for discharged subjects and positively for no discharge subjects.

III.viii  'Dangerousness' previous report by Broadmoor psychiatrist

The findings indicate an interaction between classification and outcome which can be seen in Table 20 and approached
Table 19. Results of analysis of variance degree that 'control' in previous R.M.O. reports presents subjects positively or negatively

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Seq ss</th>
<th>Adj ms</th>
<th>f</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>outcome</td>
<td>1</td>
<td>1.3586</td>
<td>1.4250</td>
<td>4.60</td>
<td>0.076</td>
</tr>
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</table>

Means for outcome

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>discharge</td>
<td>-0.4500</td>
</tr>
<tr>
<td>no discharge</td>
<td>0.5000</td>
</tr>
</tbody>
</table>

Table 20. Results of analysis of variance degree that 'dangerousness' in previous R.M.O. reports presents subjects positively or negatively

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Seq ss</th>
<th>Adj ms</th>
<th>f</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>class x outcome</td>
<td>1</td>
<td>1.0349</td>
<td>1.0349</td>
<td>3.37</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Means for classification x outcome

<table>
<thead>
<tr>
<th>Classification</th>
<th>Outcome</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>psychopathic</td>
<td>discharge</td>
<td>-0.125</td>
</tr>
<tr>
<td></td>
<td>no discharge</td>
<td>-1.000</td>
</tr>
<tr>
<td>mental illness</td>
<td>discharge</td>
<td>-1.000</td>
</tr>
<tr>
<td></td>
<td>no discharge</td>
<td>-0.800</td>
</tr>
</tbody>
</table>

Table 21. Results of analysis of variance degree that 'employment' in previous R.M.O. reports presents subjects positively or negatively

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Seq ss</th>
<th>Adj ms</th>
<th>f</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>class x outcome</td>
<td>1</td>
<td>3.9358</td>
<td>3.9358</td>
<td>14.77</td>
<td>0.005</td>
</tr>
</tbody>
</table>

Means for classification x outcome

<table>
<thead>
<tr>
<th>Classification</th>
<th>Outcome</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>psychopathic</td>
<td>discharge</td>
<td>0.650</td>
</tr>
<tr>
<td></td>
<td>no discharge</td>
<td>-0.400</td>
</tr>
<tr>
<td>mental illness</td>
<td>discharge</td>
<td>-0.466</td>
</tr>
<tr>
<td></td>
<td>no discharge</td>
<td>0.500</td>
</tr>
</tbody>
</table>
significance $F_{1,13} = 3.37, p<0.1$. Means were $-0.125$ for psychopathic disorder/discharge, $-1.00$ for psychopathic disorder/no discharge, $-1.00$ for mental illness/discharge and $-0.800$ for mental illness/no discharge and can be seen in Figure 7. These indicate that this statement tended to be used negatively on all occasions regardless of class or outcome with the least negative being for psychopathic disorder discharged subjects and the most negative being equal for psychopathic disorder no discharge and mental illness discharge subjects.

III.ix 'Employment' previous report by Broadmoor psychiatrist

The findings indicate an interaction between classification and outcome which can be seen in Table 21 and was significant $F_{1,12} = 14.77, p<0.0025$. Means were $0.650$ for psychopathic disorder/discharge, $-0.400$ for psychopathic disorder/no discharge, $-0.467$ for mental illness/discharge and $0.500$ for mental illness/no discharge subjects and can be seen in Figure 8. These indicate that this statement tended to be used positively for psychopathic disorder discharge and mental illness no discharge subjects with the former being the most positive and tended to be used negatively for psychopathic disorder no discharge and mental illness discharge subjects with the former being the most negative.

III.x 'Relationships' previous report by Broadmoor psychiatrist

The findings indicate a relationship with outcome which can be seen in Table 22 and was significant $F_{1,12} = 6.44,$
Table 22. Results of analysis of variance degree that 'relationships' in previous R.M.O. reports presents subjects positively or negatively

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Seq ss</th>
<th>Adj ms</th>
<th>f</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>outcome</td>
<td>1</td>
<td>1.9102</td>
<td>1.8730</td>
<td>6.44</td>
<td>0.026</td>
</tr>
</tbody>
</table>

Means for outcome

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>discharge</td>
<td>-0.159</td>
</tr>
<tr>
<td>no discharge</td>
<td>-0.917</td>
</tr>
</tbody>
</table>

Table 23. Results of analysis of variance degree that 'family involvement' in previous social work reports presents subjects positively or negatively

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Seq ss</th>
<th>Adj ms</th>
<th>f</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>outcome</td>
<td>1</td>
<td>0.7926</td>
<td>0.6091</td>
<td>3.26</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Means for outcome

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>discharge</td>
<td>0.241</td>
</tr>
<tr>
<td>no discharge</td>
<td>-0.167</td>
</tr>
</tbody>
</table>
Figure 7. Figure displaying the relationship between outcome, classification and the degree that 'dangerousness' presents subjects positively.

Figure 8. Figure displaying the relationship between outcome, classification and the degree that 'employment' presents subjects positively.
p<0.05. Means were -0.159 for discharged and -0.917 for no discharge subjects indicating that this statement tended to be used negatively for both outcomes but more so for subjects who were not discharged.

III.xi 'Family involvement' previous report by social worker

The findings indicate a relationship with outcome which can be seen in Table 23 and approached significance F 1,18 = 0.619, p<0.1. Means were 0.241 for discharged and -0.167 for no discharge subjects indicating that this statement tended to be used positively for discharged and negatively for no discharge subjects.

IV: Valence for extent to which reports promote discharge and for extent to which reports present subjects positively, with type of index offence and outcome

Four two-way analysis of variance were conducted, two were used to compare outcome (discharge versus no discharge) with index offence (‘murder/attempt murder’ versus ‘GBH/ABH’ versus ‘sexual’) with the extent that statements promote discharge. One of these used fact statements the other opinion statements. The other two analysis of variance were used to compare the same variables as above with the extent that statements presented subjects positively or negatively. One was conducted on fact statements and the other on opinions. A positive value indicates that the majority of statements were used to promote discharge or that statements presented subjects in a positive light and a negative value indicates that the majority of statements were against discharge or presented subjects negatively.
IV.i The extent to which statements promote discharge, facts

Firstly, the findings indicate a relationship with type of offence which can be seen in Table 24 and approached significance, $F_{2,39} = 2.90$, $p<0.1$. Means were 0.069 for 'murder/attempt murder', -0.009 for GBH/ABH and -0.047 for 'sexual' offences, indicating that facts for the extent to which statements promote discharge tended to be used positively for the 'murder/attempt murder' category and negatively for the other two.

Secondly, the findings indicate a relationship with outcome which can be seen in Table 24 and was significant, $F_{1,39} = 4.89$, $p<0.05$. Means were 0.046 for discharge and -0.037 for no discharge subjects, indicating that facts for the extent to which statements promote discharge were used positively for discharge and negatively for no discharge subjects.

Thirdly, the findings indicate an interaction between outcome and type of offence with outcome which can be seen in Table 24 and was significant, $F_{2,39} = 4.62$, $p<0.025$. Means were 0.193 for discharged and -0.056 for no discharge subjects in the 'murder' category, 0.007 for discharge and -0.025 for no discharge subjects in the 'GBH' category and -0.063 for discharged and -0.031 for no discharge subjects in the 'sexual' category and can be seen in Figure 9. This indicates that discharged subjects in the 'murder' and 'GBH' category have facts for the extent to which statements promote discharge, that are positive with subjects in these two categories who have not been discharged having negative
Table 24. Results of analysis of variance degree that fact statements promote discharge for subjects with different index offence categories

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Seq ss</th>
<th>Adj ms</th>
<th>f</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>offence</td>
<td>2</td>
<td>0.08559</td>
<td>0.04297</td>
<td>2.90</td>
<td>0.1</td>
</tr>
<tr>
<td>outcome</td>
<td>1</td>
<td>0.5825</td>
<td>0.07245</td>
<td>4.89</td>
<td>0.05</td>
</tr>
<tr>
<td>offence x outcome</td>
<td>2</td>
<td>0.13690</td>
<td>0.06845</td>
<td>4.62</td>
<td>0.025</td>
</tr>
</tbody>
</table>

Means for outcome

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>discharge</td>
<td>0.046</td>
</tr>
<tr>
<td>no discharge</td>
<td>-0.037</td>
</tr>
</tbody>
</table>

Means for offence

<table>
<thead>
<tr>
<th>Offence</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>murder/attempt murder</td>
<td>0.088</td>
</tr>
<tr>
<td>G.B.H./A/B.H.</td>
<td>-0.009</td>
</tr>
<tr>
<td>sexual</td>
<td>-0.047</td>
</tr>
</tbody>
</table>

Means for offence x outcome

<table>
<thead>
<tr>
<th>Offence</th>
<th>Outcome</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>murder/attempt murder</td>
<td>discharge</td>
<td>0.193</td>
</tr>
<tr>
<td>murder/attempt murder</td>
<td>no discharge</td>
<td>-0.056</td>
</tr>
<tr>
<td>G.B.H./A.B.H.</td>
<td>discharge</td>
<td>0.007</td>
</tr>
<tr>
<td>G.B.H./A.B.H.</td>
<td>no discharge</td>
<td>-0.025</td>
</tr>
<tr>
<td>sexual</td>
<td>discharge</td>
<td>-0.083</td>
</tr>
<tr>
<td>sexual</td>
<td>no discharge</td>
<td>-0.031</td>
</tr>
</tbody>
</table>
facts, whereas all subjects regardless of outcome, in the 'sexual' category have negative fact statements with the most negative for discharged subjects.

IV.ii The extent to which statements promote discharge, opinions
Firstly, the findings indicate a relationship with outcome which can be seen in Table 25 and is significant, $F_{1,39} = 6.16, p<0.025$. Means were $-0.143$ for discharged and $-0.399$ for no discharge subjects indicating that opinion statements for the extent to which discharge was promoted were negative for both outcomes but more so for no discharge subjects.

Secondly, the findings indicate an interaction between offence and outcome which can be seen in Table 25 and approached significance, $F_{2,39} = 3.18, p<0.1$. Means were $-0.145$ for discharge and $-0.616$ for no discharge subjects in the 'murder' category, $0.0578$ for discharge and $-0.358$ for no discharge subjects in the 'GBH' category and $-0.342$ for discharge and $-0.222$ for discharge subjects in the 'sexual' category and can be seen in Figure 10. These means indicate that the only opinion statement for the extent to which reports promote discharge that was positive was for discharge subjects in the 'GBH' category. All other values were negative, with discharge subjects in the 'murder' category having less negative opinions than no discharge and discharge in the 'sexual' category having more negative opinions than no discharge.

IV.iii Extent to which reports preset subjects positively or negatively, facts
Firstly, the findings indicate a relationship with outcome which can be seen in Table 26 and was significant, $F_{2,39} = 5.57, p<0.025$. Means were 0.302 for discharge and 0.066 for no discharge subjects indicating that facts for the extent to which subjects were presented positively were all positive, with the most positive facts for discharge subjects. Secondly, the findings indicate an interaction between offence and outcome which can be seen in Table 26 and approached significance, $F_{2,39} = 2.70, p<0.1$. Means were 0.432 for discharge and -0.057 for no discharge subjects in the 'murder' category, 0.367 for discharge and 0.056 for no discharge in the 'GBH' category and 0.106 for discharge and 0.199 for no discharge in the 'sexual' category and can be seen in Figure 11. The means indicate that the only negative fact statement for the extent that reports present subjects positively, was for no discharge subjects in the 'murder' category. All other facts were positive with a higher value for discharge subjects in the 'GBH' category and a higher value for no discharge subjects in the 'sexual' category.

IV.iv Extent that statements present subjects positively or negatively, opinions

No significant findings were achieved.

Other analyses

Informal analysis of the association between the RMO's formal recommendation about suitability for discharge and tribunal outcome showed that RMO's only recommended discharge on five occasions. Therefore the RMO's formal recommendation was not adhered to twenty four times. Average
Figure 11. Figure displaying the relationship between outcome, classification and degree that recent facts present subjects positively.

Valence

Discharge  No discharge

Sexual

'GRH'

'murder'

Figure 12. Figure displaying median length of stay at Broadmoor by outcome, classification and index offense.
length of stay for discharged and no discharge subjects were calculated using median figures which can be seen in Figure 12. This was conducted for discharge and no discharge outcomes for both classifications and for the three index offence categories. Overall subjects classified as psychopathic disorder compared to mental illness tended to have been in hospital the longest, with a median of 8 years for discharged and 8.5 years for no discharge subjects.
DISCUSSION

Some of the results supported the hypotheses for Valence theory (Hoffman, 1961) and Social Combination theory (Laughlin, 1980), indicating that the extent to which statements promote discharge and present subjects positively is associated with outcome, with the most positive reports and those with more for discharge statements being associated with discharge outcomes. Facts are also associated with outcome, with the greatest association being with facts that presenting subjects either positively or negatively. The facts referring to suitability for discharge also had some association with outcome, but this tends to relate to facts from previous Tribunal reports, opinions had a stronger association with outcome for recent reports.

The findings also indicate some difference in the use of the information for mental illness and psychopathic subjects which lends some support to Peay's (1989) findings. This difference tended to be in the valence of statements, presenting subjects positively or negatively, between discharge and no discharge outcomes. Finally the results indicate that for those subjects whose index offence involved physical violence against others, the more serious the crime the more positive the valence promoting discharge and presenting the subject positively or negatively had to be. The majority of these statements were facts.

I Extent reports promote or are against discharge

The results from the between-subjects analysis of variance
indicate that factual statements do have some relationship with outcome, but no more than opinions. The facts in the previous Tribunal reports were associated with outcome, and more so than for opinions. However, for the most recent Tribunal reports the whole report, including facts and opinions, was associated with outcome, but facts alone were not. Therefore factual statements do have some relationship with outcome but this is restricted to previous reports and recent Tribunal outcome. No association was found with psychiatric classification.

The results for the between-subjects analysis of variance comparing each subjects recent reports with their previous reports showed a similar pattern. Facts for recent and previous Tribunals were found to be associated with outcome but not at a significant level. Recent and previous opinions were also associated with outcome. The analysis of facts and opinions showed that facts and opinions were associated with outcome but not at a significant level. No association was found between different psychiatric classifications. Therefore indicating that opinions have a greater association with outcome.

These findings indicate that factual statements are associated with outcome but opinions are also, and their association is stronger, thus not supporting the hypothesis that facts will be more influential than opinions. Miller (1987) suggests that it is "impossible to prepare a detailed report without including one's own opinion about whether a patient is ready for release" p485. Therefore it is possible that these reports contained more opinions than
facts discussing discharge. Marra, Konzelman and Giles (1987) state that dangerousness is a focal point for decision making even though the exact qualities are difficult to describe. The difficulty of describing and assessing dangerousness must then make it difficult to provide facts that support a patient's suitability for discharge leaving reports filled with opinions about the information that is available about a particular individual's suitability for discharge. This may explain why opinions seemed to have a greater association with outcome.

With regard to the valence of the reports the findings lend some support to the hypothesis. Differences between the valence for the reports for discharged compared to no discharge subjects were achieved however, on only three occasions was that difference such that discharge subjects tended to have reports consisting mainly of positive statements and no discharge subjects tended to have reports consisting of mainly negative statements. The rest of the findings indicate that both discharged and no discharge subjects had reports with a negative valence but the level for discharged subjects was much lower. One possible explanation for these findings is that twenty of the discharged subjects had RMO reports recommending no discharge therefore it is likely that most RMO reports tend to consist mainly of statements against discharge. Decisions regarding discharge must always be a matter of judgment and as Marra et al (1987) point out there is a lack of reliable and valid approaches in this area. They also
suggest that health professionals have a duty to protect the public by identifying dangerous persons and take proper professional action. Therefore the RMO and possibly other report writers are cautious about recommending discharge with the result that there are few statements that actually promote discharge resulting in statements that nearly always have a negative valence for discharge.

If this is so it may be more appropriate to hypothesis that different levels of negative valence will be associated with discharge compared to no discharge outcome. The range of the means for discharged and no discharge subjects offer some support for this explanation. Discharged subjects had scores ranging from 0.209 to -0.016, with the median being -0.045 and no discharge subjects having scores ranging from -0.036 to -0.432, with the median being -0.123. These ranges show that for discharged subjects the negative values are very low and close to neutral whereas the scores for the no discharge subjects quite clearly fall within the negative category.

Interestingly, when the difference between the valence of discharged and no discharged subjects was such that discharged subjects received a positive valence, on all occasions this was factual information. It would therefore seem that when factual information is associated with outcome the valence tends to be positive whereas all opinions tend to be negative.

In summary opinions seem to have a greater association with outcome. All opinions tend to be negative but they are lower for those subjects with a discharge outcome. Facts
have some relationship with outcome and tend to be positive when they are associated with a discharge and negative with a no discharge outcome. No association was found for the valence of the reports between the two psychiatric classifications. It would therefore seem that the way in which statements relating to discharge are used does not differ for psychopathic disorder compared to mental illness.

II Statements promoting subjects positively or negatively
The analysis of variance conducted between-subjects lend support for all three relevant hypothesis. Firstly it would seem that the valence relating to whether subjects were presented in a positive or negative light was associated with outcome in the predicted direction. Secondly, it appears that factual information has a greater association with outcome than opinions. Thirdly, the association of fact statements with outcome and the valence of outcome seems to differ for psychopathic disorder compared to mental illness subjects.

Firstly, analysis of the association between facts and opinions with outcome between-subjects supported the social combination theory Laughlin (1981). For the recent reports no association was found with outcome for opinions alone. The whole report including facts and opinions was associated with outcome. There was also a difference in the way the two different psychiatric classifications were discussed although not quite significant. As for fact statements the results indicate a relationship with outcome. They also show a relationship with psychiatric classification and an interaction between outcome and psychiatric classification.
Therefore facts in recent reports seem to be associated with outcome and psychiatric classification. However, analysis of previous reports revealed a different picture in that facts are not associated with outcome or psychiatric classification but opinions are. It would therefore seem that both recent and previous reports are influential for outcome and psychiatric classification but in different ways with opinions from previous reports with facts from recent reports that have the combination of positive recent facts and previous low negative opinions associated with a discharge result.

With regard to the valence of these reports there was an association with outcome and with psychiatric classification. In the recent reports discharged subjects were discussed in a positive manner and no discharge subjects were discussed in a negative manner. This result is as predicted with a positive valence being adopted by the Tribunal and a discharge occurring and a negative valence not being adopted and no discharge occurring. As for psychiatric classification both tended to be discussed positively, but psychopathic disorder being more positive. With regard to the previous reports the results also support the valence theory. Both outcome groups had a negative valence for reports, this is expected as at this stage no subjects were discharged, those with the least negative valence were the subjects who were discharged in the recent Tribunal. This may be because they were getting close to being ready for discharge but not yet suitable and the reports were reflecting this.
Secondly, the recent reports indicted an interaction between outcome and psychiatric classification lending some support to Peay’s (1989) finding that mental illness patients are discussed differently to psychopathic disorder patients. Although this result was not significant it will be discussed as it follows the pattern of other findings. The interaction indicates that both psychiatric classifications have a positive valence when discharged. However the difference between the discharge and no discharge groups for the two psychiatric classifications is very different. Mentally ill subjects who were not discharged had reports that presented them negatively, whereas those who were discharged had reports that presented them positively. Psychopathic disorder subjects tended to have positive reports regardless of outcome although discharge subjects were more positive.

There are two possible explanations for this finding. Firstly, the two most positive valences were for discharged subjects, therefore it is possible that there is a particular positive level that the valence must reach before subjects are discharged. Secondly, it is possible that different factors are considered when assessing different client groups. Mental illness subjects often have symptoms that are more easily recognised and assessed than psychopathic disorder for example hallucinations, delusions and thought disorder. Also mental illness subjects more frequently take medication which can produce quick and easily recognised changes making it more easy to see when improvement has occured. Hepworth (1983-2), found that
evidence of continued mental disorder was used as a guide to assessing the degree of risk. It is possible that such evidence is more easily identifiable for mental illness subjects and thus more easily accepted by Tribunals whereas change or improvement in psychopathic disorder is not so easily accepted because of the problems with definition of the disorder and recognising or explaining changes that occur.

The within-subject analysis of variance discovered a similar pattern for recent and previous facts and opinions with outcome but no relationship was found with psychiatric classification. The previous opinions tended to be negative for all outcomes but were least negative for subjects who went on to be discharged. Again for discharged subjects recent facts tended to be positive as did the combination of recent facts and previous opinions, also previous facts and previous opinions tended to be positive. No discharge subjects also had a positive valence for recent facts and recent opinions but not positive previous opinions or facts.

In summary, it would seem that factual information in recent reports, presenting subjects in a positive light is associated with a discharge. However this alone is not sufficient for a discharge and must be accompanied by previous positive or low negative opinions for a discharge to occur. Also, there is a difference in the valence for discharge and no discharge subjects between mental illness and psychopathic disorder subjects.
III  Statement categories extent to which they were used positively or negatively

The results indicate that most of the statement categories were not associated with a particular outcome or with either psychiatric classification. No statement categories in the reports by non Broadmoor psychiatrists, recent or previous were found to have any significant results. Only two of the statement categories in the reports by social workers, recent or previous were found to be significant and eight by the RMO recent and previous. This finding would lend some support to Peay's (1989) finding that the RMO's opinions were influential in the Tribunals decision. However it is not clear whether the RMO's report as a whole is influential or if it is only particular statements. Peay's (1989) finding that the RMO's recommendation regarding discharge was normally adhered to was not supported in this study as on only five occasions within the discharge group of subjects was discharge proposed.

III.i  Improvement of illness

The results indicate an interaction between outcome and psychiatric classification when in recent RMO reports for the improvement of illness category. For both psychiatric classifications with a discharge it was used in a positive manner. However, the difference between discharge and no discharge within classifications was quite different. There was a large difference in the valence for mental illness subjects with discharge being positive and no discharge being negative, whereas psychopathic disorder subjects had valences close together, both were positive with no discharge subjects being more positive.
This finding is not surprising as the statements in this category were taken from Peay’s (1989) work which identified different issues being discussed for the two different psychiatric classifications. She found that medication and its effectiveness and symptoms such as delusions and hallucinations were more frequently associated with patients classified as mentally ill. Therefore, Tribunals may be more ready to accept a positive valence as indicative of suitability for discharge and a negative valence for no discharge for mental illness subjects thus resulting in more extreme differences in the valence for discharge and no discharge, mental illness subjects compared to psychopathic disorder.

III.ii Behaviour in Broadmoor

This statement category was found to be associated with outcome when in recent RMO reports, being used positively for discharge subjects and negatively for no discharge subjects. The category includes general behaviour, aggression, personality and trustworthiness. This finding is in line with previous research. Carroll, Weiner, Coates, Galegher and Alibrio (1982) explored parole decisions in Pennsylvania and found that two of the five variables associated with predicting the granting of parole were good discipline in institution and good attitude in prison. It is also supported by Hepworth’s (1983) finding that the personality of the patient appeared to be one of the most influential factors of evidence in the decision-making of Tribunals.
III.iii History

This statement category was associated with psychiatric classification when in recent RMO reports, being negative for mental illness and positive for psychopathic disorder. The association did not quite reach significance but will be discussed as it offers some support to previous findings in this area. This statement includes previous aggression, offending and history of illness. These issues have been found to be important when assessing dangerousness and suitability for discharge by other researchers. Poythress (1987) suggests that patients who have a history of aggressive behaviour "pose perplexing problems" p.1051, for mental health professionals considering the issue of discharge. Marra, Konzelman and Giles (1987) produced a 'dangerousness assessment sheet' that was fairly successful at predicting outcome and included a category for the type of mental disorder related to acting out and previous offence pattern linked with mental disorder. Fennel (1977) also found past behaviour to be an important factor when considering whether continued detention was necessary.

It therefore seems that history particularly referring to past aggression is an important consideration in discharge decisions. However, it is not clear from previous studies why the different types of mental disorder are important when considering past offences and behaviour, or why the two different classifications receive different valences for this statement.

III.iv Family involvement

This statement when discussed in recent social worker
reports was associated with outcome. This statement did not quite reach significance but will be discussed as it supports previous research. It includes family involvement in Broadmoor and out of Broadmoor and tended to be positive for both outcomes being higher for discharged subjects. Family involvement particularly following discharge has been found to be an influential factor in discharge decisions by other researchers. Christ (1985), identified several reasons why a patient's discharge from a psychiatric setting might be delayed. She found that the family's unwillingness to manage the patient at home or to be available for discharge planning were factors that could hinder discharge. This research was conducted from a social worker's perspective, as it is normally the social worker's role to have contact with the family. It is therefore not surprising that this statement was related to outcome when discussed in the social workers report.

III.v Cooperation
This statement when discussed in recent social work reports was associated with an interaction between outcome and psychiatric classification. It was used positively for psychopathic disorder regardless of outcome but was highest for no discharge subjects. It was also positive for mental illness/discharge and negative for mental illness/no discharge. The finding that cooperation is influential is important has been reflected in other studies. The research by Christ (1985), discussed above also found that the patients refusal to accept discharge plans or undermining placement efforts can delay discharge. This does not however, explain the interaction effect. It is possible
that for mental illness subjects cooperation partly referred to cooperation with medication which would explain the different pattern of results for mental illness and psychopathic disorder subjects but there is no obvious explanation for the pattern obtained for psychopathic disorder.

III.vi Insight
This category when discussed in previous RMO reports was found to be associated with psychiatric classification being negative for both but considerably more so for mental illness subjects. This finding supports Fennel's (1977) finding that the influence of the concept of insight undermines the patient's credibility as an informant therefore tending to be a negative concept. This might explain why it tended to be used negatively in reports. The difference in the degree of negativity might be explained by Peay's (1989) finding that insight tended to be discussed more for mental illness patients. Although it was discussed for both classifications it seems to have been used differently for the two. The category includes insight into the illness and into the need for medication. It is likely that these statements were used mainly for mental illness subjects as they more frequently take medication and experience hallucinations and delusions that they do not recognise as part of their illness but rather view them as reality, providing more opportunity for negative discussion than for the general insight category was more likely to have been the main statement used when discussing psychopathic disorder subjects.
III.vii Control
This statement category when discussed in previous RMO reports was found to be associated with outcome being negative for discharge and positive for no discharge subjects. Significance was not quite reached but the findings will be discussed as it supports previous research. This category included statements about services and support out of Broadmoor and control over illness and medication. This finding supports previous research Carroll et al (1982) found that a good prognosis for supervision was associated with the granting of parole. The pattern of the results in this study are surprising as previous research would predict that positive use of this statement would be associated with discharge. However this finding was associated with the previous reports and is possible that the use of this statement changed in the recent reports. Future research in this area would need to compare each statement category for previous and recent reports to assess whether the use of statements does change.

III.viii Dangerousness
This statement category when used by the RMO in previous reports was found to be associated with an interaction between outcome and psychiatric classification. This finding did not quite reach significance but will be discussed as it supports previous research. It was used negatively for all four groups but was most negative for mental illness/discharge and for psychopathic disorder/no discharge. It is not surprising that it was negative for all subjects as at this point no subjects had been
discharged and previous research has shown that estimations of dangerousness are influential in discharge and that if thought to be dangerous discharge is unlikely. Hepworth (1983) found the concept of dangerousness to be extremely influential in Tribunal decisions. Carroll et al (1982) found that a rating of low risk for future dangerous crime was associated with being granted parole. There is no obvious explanation for the pattern of results but as suggested above it is possible that this pattern altered in recent reports that resulted in some Tribunal decisions for discharge.

III.ix Employment

This category statement when discussed by the RMO in recent reports was found to be associated with an interaction between outcome and psychiatric class being used negatively for psychopathic disorder/no discharge and mental illness/discharge subjects and positively for psychopathic disorder/discharge and mental illness/no discharge subjects. This finding lends some support to previous research Hepworth (1983) found that the prospects of the patient outside of the hospital were considered when determining whether continued detention was necessary. This statement also includes employment whilst in Broadmoor which is another measure of behaviour in Broadmoor which was found by this study and previous research (Hepworth 1983 and Carroll et al 1982) to be associated with outcome. The pattern of these findings was unexpected and cannot be explained by previous research. Again this statement was only significant in the previous reports and it is possible that the pattern changed in recent reports.
III.x Relationships

This statement category when discussed by the RMO in previous reports was found to be associated with outcome. It was used negatively for both groups but was considerably more so for no discharge subjects. This category includes relationships before Broadmoor, inside Broadmoor and in the future. Although previous research has not directly identified this as influencing outcome it is not a surprising result. If behaviour whilst in Broadmoor is seen as an indicator of potential behaviour outside the way in which patients behave in relationships could be an indicator of how they might behave in relationships outside of the hospital.

A second explanation for this finding is that the index offences for some subjects involved members of their family or people with whom they were having a relationship. For these subjects it is not surprising that relationships are addressed in reports and considered important as future offending may follow a similar pattern to the index offence and involve victims that the subject has some relationship with. It therefore seems reasonable that this category should be one that is associated with outcome.

III.xi Family involvement

This statement category was found to be associated with outcome when included in previous social work reports being used negatively for no discharge and positively for discharged subjects. This statement was also found to be associated with outcome when in recent social work reports.
Neither of the results quite reached significance but as discussed above are similar to previous research findings indicating that they actually do have some influence on outcome.

In summary, a total of eleven statement categories were found to be associated with outcome or psychiatric classification and were spread across three of a possible six reports; recent and previous RMO reports and recent social worker reports. On the whole the findings support previous research indicating that they are not the result of a Type I error.

Overall the results offer some support to Peay's (1989) finding that the RMO's opinion influences outcome. Although the RMO's recommendation regarding discharge was not associated with outcome, the overall report did appear to be with eight of the eleven categories associated with outcome or classification were in reports by the RMO. The results also support previous findings about factors influencing Tribunal or parole outcome (Carroll 1982; Marra 1987, Christ 1985).

Some of the patterns found of the results were not as expected the reasons for this are not clear. Future research could investigate these patterns further in three ways. Firstly, the findings where the no discharge subjects had less negative or more positive means were all in previous reports. As mentioned above it is possible that the pattern changed in the recent reports for the Tribunals where discharge decisions actually took place. To assess this possibility each statement category for recent and
previous reports should be compared for any changes in pattern.

Secondly, each category should be broken down into individual statements and these should be analysed for relationship with outcome and classification as it is possible that particular statements in the category are influential. Thirdly, as discussed above, mental illness tends to be clearly recognised with clearly prescribed treatment regimes, whereas the psychopathic disorder is not clearly defined or treated. This may explain the clear difference between the valences for discharge and no discharge subjects classified as mental illness and the more confused pattern for psychopathic disorder.

IV Valence for extent to which reports promote discharge and for extent to which reports present subjects positively, with index offence and outcome

The analysis of variance's for the extent to which facts in reports promote discharge and opinions in reports promote discharge and the extent to which facts in reports present subjects positively, with outcome and index offence, all produced a similar pattern of results. Although some results did not quite reach significance they will be discussed as they are all in the same direction.

The results indicate an interaction between outcome and type of offence with 'murder/attempt murder' and 'GBH' having positive or less negative valences when discharged and negative when not discharged, with the positive valence for 'murder/attempt murder' being considerably higher. The
'sexual' category had this division for one of the analysis but not the other two. These results support Hepworth's (1983-2) finding that Tribunals perceive dangerousness in terms of direct physical violence with sexual assault being perceived as second in significance for men under review. It would therefore appear that when subjects who have committed index offences involving serious physical violence towards people are discharged, their reports tended to be more positive or less negative than those subjects in the same category who were not discharged.

The findings for the 'sexual' category where subjects were discharged who had more negative valences than those not discharged might be explained by the fact that this category is rather wide and includes 'flashers' and 'multiple rapists'. It is possible that for the more serious sexual offences a similar pattern might emerge as for the 'murder/attempt murder' and 'GBH' categories. Future research should break this category down to assess whether the nature of the sexual offence effects outcome.

In summary it would seem that both facts and opinions are influential when considering subjects with different types of index offence for discharge. Facts seem to have the most influence supporting the social combination theory. Also, it appears that on the whole positive or lower negative valences were achieved for discharge subjects in all categories, this supports the valence theory. It would also seem that the more serious the index offence the more positive the valence was compared to the other categories for discharged subjects. Finally it seems that both the way
in which the subject is presented, positively or negatively and the extent to which discharge is promoted have some influence upon outcome.

In addition to these formal analysis average lengths of stay were calculated showing that overall subjects classified as psychopathic disorder, and subjects whose index offence fell into the 'murder/attempted murder' category tended to spend the longest periods of time in hospital. Also, on average subjects who were being discharged had spent shorter periods of time in hospital indicating that factors other than length of stay influence Tribunal outcome.

Conclusions
Overall it would seem that the social combination theory of group problem-solving is able to offer some explanation about the way Tribunals use the reports provided. Factual information seems to be influential when reports are discussing patients positively or negatively. This may be because society in general has fairly clear norms regarding acceptable and positive traits and non-acceptable and negative traits. Therefore Tribunal members can use the facts to determine whether the patient has behaved in a way that is considered to be positive or negative by society in general. Opinions seem to have the most influence when reports are promoting or against discharge. This may be because there is no clear evidence that can be called upon that indicates whether patients are suitable for discharge, or are likely to re-offend if discharged. Therefore Tribunal members are faced with a problem that does not have a clearly correct solution and thus are reliant upon their
own past experience and the opinions of 'experts'.

The valence theory also, seems to explain some of the way in which Tribunals make use of reports. Nearly all of the results indicate that more positive valences are associated with discharge. In some cases the valence was negative for both outcome but was least negative for the discharge group. This may be because these decisions are risky and report writers have an obligation to protect society, resulting in reports that are generally negative even if a patient is suitable for discharge. The RMO tended not to formally recommend discharge and statements referring to suitability for discharge were mainly negative. However, the valence for statements presenting subjects positively or negatively and for some statement categories was positive. Therefore, Tribunal members are presented with some positive and some negative valences and must combine this information to reach a decision. The report writer may generally be against discharge but if the statements and report as a whole presents the patient in a positive light then a discharge might occur.

The valence's for outcome for the two psychiatric classifications differed offering some support for Peay's (1989) finding. The difference in the valence of the report as a whole and for some statement categories, between discharged and no discharge mentally ill subjects was quite clear. Discharged subjects tended to have a positive valence and no discharge a negative valence. The difference between discharge and no discharge for psychopathic disorder was not clear. As discussed above this may reflect the
difficulty in defining psychopathic disorder and factors indicating improvement. This may result in psychopathic disorder patients needing to have positive valences for Tribunal reports over a longer period of time so that Tribunals can be sure a positive change really has occurred. With regard to the statement categories this pattern tended to be found in previous reports, it is possible that the pattern changed in the recent reports.

The valences for the different types of index offence and outcome also differed indicating that murder, manslaughter and attempt murder having higher valences than the other categories when discharged. These higher valences were found for both types of statement and were mostly associated with facts. For the categories involving physical violence against others, discharged subjects always had higher valences than no discharge subjects. The sexual category only had this difference for one set of results. This may be because the category is too wide including minor and serious offences. Future research should break this category down as this may effect the pattern of results. These findings indicate that the more serious the offence the more positive and more promoting discharge the reports must be for a discharge to occur.

Finally the results indicate that the reports as a whole are important and that only a few statements from each individual report seem to have an association with outcome. Those statement categories that were associated with outcome were mainly written by the RMO indicating that the RMO's report is the most influential. This supports Peay's (1981)
findings.

There are some changes in this study that might provide clearer information. Firstly, as mentioned the 'sexual' index offence category should be broken down so that it does not include minor and serious offences. Secondly, the statement categories should be broken down so that more specific issues associated with outcome and psychiatric classification can be identified. Thirdly, the statement categories for recent and previous Tribunals should be compared for each subject so that any changes in the use of the statement that result in a discharge or continued detention can be identified.

Future research in this area should include the other two Special hospitals as a larger sample would allow more variables to be included in the study. Previous offences and previous hospitalisation may be some of the factors that influence Tribunal decision making could be explored to future studies. The use of mock Tribunals may help to explain how Tribunals use these reports and whether valence theory and the social combination theory are able to explain some of the processes that occur during the decision process. This technique has been widely used in the study of decision making by juries (Hastie et al 1983). Ideally actual Tribunal hearings and their use of reports should be explored, however such access is not easily or quickly achieved and researchers must make use of what is available.
# APPENDIX 1

| PSYCHOPATHIC DISORDER                                                                                                           |
| Adam: Effectiveness of treatment.  
2. Treatment needed.  
3. Engagement in therapy.  
4. Attitude towards therapy.  
5. Passage of time.  
6. Dangerousness.  
7. Services out of Broadmoor.  
8. Accommodation out of Broadmoor.  
10. Control of patient out of Broadmoor.  
Parental & sibling involvement  
11. - in Broadmoor.  
12. - out of Broadmoor.  
Wife & child's involvement  
13. - in Broadmoor.  
14. - out of Broadmoor.  
15. Personality.  
16. Trustworthiness.  
17. Aggression.  
MENTAL ILLNESS  
20. Insight  
21. Into the offence.  
22. Into the illness.  
23. Into the need for medication.  
25. Attitude towards medication outside of hospital.  
27. Effectiveness of medication.  
28. The patient does not take medication.  
29. Control over illness out of hospital.  
30. Improvement of illness.  
31. Deterioration of illness.  
32. Stability of symptoms.  
33. Hallucinations and delusions.  
34. The role of the illness in the pattern of offending.  
35. Expression of remorse.  
36. Alcohol/drug abuse.  

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### Intellectual abilities.

#### Employment
38. -before Broadmoor.
39. -at Broadmoor.
40. -after Broadmoor.

#### Relationships
41. -before Broadmoor.
42. -in Broadmoor.
43. -after Broadmoor.

#### Future contact with victim.

### Family background

- 45. Parents and siblings.
- 46. Wife and family.
- 47. Childhood.

#### Previous offences.
48. History of aggression.
50. History of illness.
51. Precipitants to offence.

### Family's opinion

- 52. Parents & siblings.
- 53. Wife and children.
- 54. Patients opinion.
- 55. Willingness to cooperate.

#### Other professions opinion.

56. Querie over diagnosis.

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THE R.M.O.'S OPINION (ver batim).

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OUTCOME.
APPENDIX 2

CODES FOR USING THE CHECKLIST

1. Confidence (Conf, 1 2 3)
A rating from 1-3 indicating the level of confidence the rater has that a passage in the report has the same meaning as a particular statement in the checklist.

i = Certainty (1). The wording in the passage is very similar to the statement, leaving you with no doubt that the passage in the report has the same meaning as the statement.

ii = Reasonably certain (2). The wording in the passage is different from the statement, but it is still clear that they have the same meaning.

iii = Fairly certain (3). The wording in the passage is different from the statement. You believe them to have the same meaning but are not completely confident certain.

2. Discharge/No discharge (D/NoD, +1 0 -1)
A rating from 1-3 that indicates the extent to which statements were used to promote discharge or continued detainment.

i = Discharge (D). The passage is used as evidence that the patient is suitable discharge.

ii = Neutral (0). The passage does not refer to suitability for discharge.

iii = No Discharge (NoD). The passage is used as evidence that the patient is not suitable for discharge.
3. Positive/negative (+ve/-ve)

A rating from 1-3 that indicates the extent to which a passage presents the patient in a positive or negative light.

i = Positive (+ve). The passage highlights the patients progress or traits they have that are socially acceptable.

ii = Neutral (0). The passage is neither positive or negative and discusses the patient in a bland, unemotive manner.

iii = Negative (-ve). The passage highlights the patients lack of progress and their socially unacceptable traits.

4. Facts (FT)

This is any passage in the report that is factual. This includes information that the patient has reported that is an emotion, opinion or thought.

5. Opinions (OP)

This is any passage in the report that is the report writers opinion. This includes opinions about factual events.
APPENDIX 3

The statements on the checklist were collapsed into sixteen statement categories for analysis. Each statement category included the following statements:

1. Improvement of illness
   27. Effectiveness of medication.
   28. The patient does not take medication.
   30. Improvement of illness.
   32. Deterioration of illness.

2. Insight
   20. Insight.
   22. Insight into offence.
   23. Insight into the illness.
   24. Insight into the need for medication.
   35. Expression of remorse.

3. Control
   7. Services out of Broadmoor.
   8. Accommodation out of Broadmoor.
  10. Control of patient out of Broadmoor.
  25. Attitude towards medication out of Broadmoor.
  29. Control over illness out of hospital.

4. Family Involvement
   11. Parental and sibling involvement in Broadmoor.
   12. Parental and family involvement out of Broadmoor.
14 Wife and child's involvement out of Broadmoor.
52 Parents and siblings opinion.
53 Wife and child's opinion.

5. Behaviour in Broadmoor
15 Personality.
16 Trustworthiness.
17 Aggression.
18 Sensitivity.
19 Behaviour in Broadmoor.

6. Role of illness in offending.
34 The role of the illness in the pattern of offending.

7. Dangerousness
6 Dangerousness.

8. Passage of time.
5 Passage of time.

9. Engagement in therapy.
3 Engagement in therapy.
4 Attitude towards therapy.

10. Treatment needed
2 Treatment needed.

11. Employment
37 Intellectual abilities.
38 Employment before Broadmoor.
39 Employment in Broadmoor.
40 Employment after Broadmoor.
12. Relationships
41 Relationships before Broadmoor.
42 Relationships in Broadmoor.
43 Relationships after Broadmoor.
44 Future contact with victim.

13. Family background
45 Parents and siblings.
46 Wife and child(ren).
47 Childhood.

14. History
48 Previous offences.
49 History of aggression.
50 History of illness.

15. Cooperation
54 Patients opinion.
55 Willingness to cooperate.

16. Precipitants to offence
51 Precipitants to offence.
36 Alcohol and drug use.
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