The identification of the careers of mentally disordered offenders using cluster analysis in a complex realist framework

Dyer, Wendy A.

The Identification of the Careers of Mentally Disordered Offenders Using Cluster Analysis in a Complex Realist Framework

Wendy A Dyer

Ph.D

University of Durham

Centre for Applied Social Studies

Department of Sociology and Social Policy

2001

ABSTRACT

Custody diversion teams were introduced in order to divert mentally disordered offenders away from the criminal justice system and custody because of concerns about the growing prevalence of psychiatric disorder in prison populations.

This research explores the impact of one such team on the psychiatric and criminal careers of people referred to it. The framework provided by a complex realist approach, along with the technique cluster analysis, were used to identify and map the different institutional careers experienced by people referred to the Cleveland Diversion Team and the different paths their careers took as a consequence of the team's actions.

Five different types of career were identified. Careers One and Two describe experiences of medicalisation – violent offenders with no psychiatric history who were referred, assessed and diagnosed but had no health or social care needs identified and were not referred again. Careers Three and Four describe experiences of criminalisation – violent offenders with a psychiatric history half of whom (Career Three) were referred, assessed and diagnosed, had health or social care needs identified and were not referred again; the remainder (Career Four) were not assessed or diagnosed, nor did they have needs identified and consequently all were re-referred repeatedly. Career Five represents neither medicalisation or criminalisation – individuals referred for information and for whom little else is known.

The implications of these findings include re-focusing the diversion service on Careers Three and Four. This would avoid stigmatising Careers One and Two and achieve positive outcomes by assessing and meeting the needs of all those in Careers Three and Four. In addition there is the promising application of this methodology elsewhere in other research which involves the analysis of large and complex datasets describing social processes.

Acknowledgements

I would like to thank Professor John Carpenter for getting the supervision balance just right.

Thank you also to Dave Byrne, my adopted second supervisor, for his complex, emergent insights.

To the Cleveland Diversion Team, without which none of this would have been possible. In particular: Aileen Henderson, Di Reed, Heidi Fisher, Dianne Carr, Tommy Grant, Glenn Bargewell and David Porter.

Special thanks to Andrew for his continual support.

TABLE OF CONTENTS

FIGURES

TABLES

CHARTS

1. INTRODUCTION

The idea for this research grew from my original involvement with the Cleveland Diversion Team, a multiagency health, social services and probation team established in North East of England to implement the new government policy of custody diversion for mentally disordered offenders. The problem that dogged me for the three years I worked as researcher with the team was how could I properly evaluate the service provided? – in short, did the diversion of mentally disordered offenders work, did it do what it was intended to do?

Establishing an answer to this question was a problem because the aim of the policy of diversion was not straightforward. Originally, responding to reports about the prevalence of psychiatric disorder in sentenced and remand prison populations and concerns that this proportion may be increasing due to the two processes of transcarceration and/or criminalisation, the Government had proposed that:

> "Mentally disordered offenders, should, wherever appropriate, receive care and treatment from health and social services rather than in custodial care" (The Department of Health and Home Office, 1991a: Community Group para. 2.1).

However, in practise the aims of the policy of diversion evolved over time and what outcomes could or should be expected soon became uncertain.

The Cleveland Diversion Team adopted a broad definition of their client group (in order not to restrict access to the service they could provide) and offered a wide ranging service from arrest to sentence. This meant that referrals did not necessarily fit neatly with a diversion policy whose aim was to divert individuals away from the criminal justice system and custody, and into a psychiatric hospital. Many of those

referred did not have a severe mental disorder – a significant proportion were 'misusing drugs and/or alcohol' or had a 'mental health problem' – and did not require admission to hospital. Despite the fact that many were committing significant offences (violence against the person, burglary, theft etc) they were not at risk of a custodial sentence. A discontinuation of criminal proceedings was also not appropriate for most, being neither ill enough and committing fairly serious offences. In other words, there was not one type of person referred to the team but instead many different types of people with different psychiatric and criminal histories. There was no one single aim but instead many different aims including diverting people to health and social care whilst criminal charges were processed. There was not only one type of outcome but instead many variations on outcomes, including admission to hospital and for some a prison sentence. In short, the Cleveland Diversion Team were already beginning to 'tailor' their service to the needs of individual clients.

The framework provided by a complex realist approach, along with the technique of cluster analysis, enabled me finally to identify and map the different psychiatric and criminal careers experienced by people referred to the Cleveland Diversion Team and the different paths their careers took as a consequence of the team's actions. I was able to explore the processing of cases by the diversion team through time in terms of a series of classifications of the cases at stages in their 'career' within the system. The temporal dimension was not calendar time but rather a stage in the process. The Cleveland Diversion team, as other systems of this kind did 'process' cases and what was interesting and important for me was what difference the processing made to the outcome for the case. I was able to describe this using stage ordered classificatory procedures. I could distinguish categories of entry - i.e. distinctions among original cases; categories of processing - differences in what was done to individual cases; and categories of outcome - what happened to the cases at

the end of the process. I could map movement through the state space of the intervention process. It had become possible that by re-examining the internal characteristics of cases and processes in interaction I could determine what kind of complex causal processes produced good rather than bad outcomes. There was no suggestion that there was a single 'good treatment'. Instead it was possible there would be a variety of ways of arriving at a good as opposed to bad outcome, even for cases with inherently similar original characteristics, but I needed to distinguish good processes from bad. Moreover it was possible that I could relate original differentiation in cases to differentiation in outcomes as mediated through differentiation in processes. What worked for some probably wouldn't work for others and I needed to explore to see what this was.

The following chapters set out in detail the process involved in seeking an answer to the persistent question which arose from those initial years working with the Cleveland Diversion Team: from the reasons behind the introduction of the policy, through the activities of the Cleveland Diversion Team, to the results of my data exploration and identification of five mentally disordered offender careers.

Chapter 2 goes back to the beginning in order to set the scene by examining the context within which the policy of diversion for mentally disordered offenders originally developed. It begins with a discussion of deinstitutionalisation and the reasons proposed to explain this policy shift, and moves on to the development of 'care in the community' which occurred post deinstitutionalisation. Around about this time reports of problems began to emerge which were attributed to the failures of community care. They included concerns about the prevalence of psychiatric disorder in sentenced and remand prison populations, concerns that this proportion may have been increasing due to transcarceration and/or criminalisation of people

with a mental disorder, and public concern fuelled by media images and the outcomes of public inquiries.

Chapter 3 examines the Government's response to the problems detailed in Chapter 2, in particular the development of the policy and practice of custody diversion for mentally disordered offenders. It begins with a description of influential government publications, reflecting the development of this policy over time including: the Butler Report (1975), Home Office Circular 66/90 (1990a), the Health of the Nation White Paper (1992), the Reed Report (1992), Home Office Circular 12/95 (1995), and finally the National Service Framework for Mental Health (1999). The policy was implemented in two ways: the improved use of existing resources and the development of new and specific provisions for mentally disordered offenders – in particular the development of 'custody diversion schemes' across the country.

Chapter 4 examines the development of the Cleveland Diversion Team. Following publication of the Government's new policy of diversion, local agencies in Cleveland, in particular the Probation Service, Health Service and Social Services, responded by commissioning a number of research projects to identify the need for such a team in county. A well resourced multiagency team was eventually established and this chapter describes its development and activities, including the operational policy – who could be referred, when and how and what actions the diversion team might subsequently consider. The chapter then outlines how the team implemented this policy in practise. A brief summary of the types of people referred to the team, what actions the team took and with what outcomes, is followed by an introduction to the diversion team database, the source of data used in this thesis.

Chapter 5 provides an explanation of the specific questions and issues at the centre of this research. There were two related research questions. The first concerned the

need to understand or chart the careers of those individuals referred to the Cleveland Diversion Team for Mentally Disordered Offenders. This question could also have been entitled 'what evidence was there to support the criminalisation hypothesis?' The second research question concerned the impact of the Cleveland Diversion Team on the psychiatric and criminal careers of people referred to it. Where the aim of the first question was to examine what evidence there was to support the policy of diversion from the criminal justice system or custody for mentally disordered offenders, the second was to evaluate the effect of the policy – the former examining inputs (in the form of the psychiatric and criminal histories of individuals referred to the Cleveland Diversion Team) and the latter outputs (in the form of outcomes for clients of the service).

Chapter 6 provides a detailed description of the methodology used in this research. Critical Realism and Complexity Theory are presented as the framework for this evaluation. The research data which formed the basis of the evaluation was provided by the team's database. The section in this chapter on secondary analysis describes the issues in relation to the use of this kind of data collected for administrative purposes. The data was itself determined by the definition of the specific population for whom this service was made available, described in the section on research population. The following section on service modelling and complexity theory is a very important one. It describes how referrals were processed by the diversion team, introducing a temporal dimension and the idea of mapping careers over time. It presents the ideas of complexity theory, fundamental to the understanding of cause and change, e.g. what Cleveland Diversion Team actions caused what changes in the careers of mentally disordered offenders. Information was collected by the team, describing the each individual referred to them and how their case was processed, and was stored in a complex relational database. This is described in the following two sections on the team documentation and database. The complicated processes

needed to restructure the relational dataset into separate spreadsheets ready for analysis are described in the section on data management. The final sections describe the exploration of these spreadsheets using cluster technique and the identification of five separate career structures for mentally disordered offenders.

Chapter 7 presents the results of this evaluation of the Cleveland Diversion Team. Beginning with a summary of characteristics of the people referred and diversion team activities, it is followed by a description of the five mentally disordered offender careers identified. Some of these careers represented an experience of 'criminalisation' and others of 'medicalisation'. The interpretation of each career includes an exploration of the nature of the impact of different diversion team activity on the five types of people referred.

Chapter 8 presents a discussion of the two quite distinct but related themes which run through this thesis. The first examines issues relating to mentally disordered offenders, in particular what kind of psychiatric and criminal careers were experienced by individuals, what impact the team had on these careers and what this might mean for future developments of the service. The second explores the theory and methodology which makes the conceptualisation and identification of these careers possible, and considers where the application of the types of methodology suggested by this research might lead in future explorations of large and complex data sets.

2. MAD OR BAD? – THE SOCIAL CONTROL OF A DEVIANT POPULATION

The history of the treatment of mentally disordered individuals who offend is closely bound up with the history of more general provision for the care of the mentally ill. It has been suggested (Prins, 1995) that such care and control appears to have a cyclical pattern, "a kind of flavour of the month quality, often demonstrated more by passionate (and sometimes irrational) conviction than by objective appraisal of need." (p.43) As long ago as 1939, Penrose argued:

> "The development of services for the control of the anti-social elements of a population will depend not only upon the current social standards but also upon the financial resources of the state or district concerned." (p.1)

The most significant recent development to impact upon the care of the mentally ill, and therefore mentally disordered offenders is the policy of deinstitutionalisation. Three reasons have been advanced to explain this shift in policy: the first premises technological advances; the second economic determinism, or the 'financial resources of the state' (Penrose, 1939); and the third involves an undermining of belief in traditional psychiatry and the therapeutic value of institutions, or the 'current social standards' (Penrose, 1939).

This chapter examines the context within which policy has developed in more detail, beginning in Section 2.1 with deinstitutionalisation and the reasons proposed to explain this policy shift. Section 2.2 looks at the development of care in the community post deinstitutionalisation. Section 2.3 details the problems that have arisen following deinstitutionalisation and the move to community care, including: concerns about the prevalence of psychiatric disorder in sentenced and remand

prison populations; concerns that this proportion may be increasing due to transcarceration and/or criminalisation of people with a mental disorder ; and public concern fuelled by media images and the outcomes of public inquiries.

2.1. Closing the Asylum – the policy of deinstitutionalisation

During the past 40 years there have been radical changes in psychiatric care in Britain as a result of a policy of hospital run-down and closure, often referred to as deinstitutionalisation. There are various definitions of deinstitutionalisation depending to some extent on the author's degree of cynicism. The World Health Organisation (1999) define it in optimistic terms: "(1) avoiding mental hospital admissions through the provision of community treatment alternatives, (2) the release into the community of all institutionalised patients who have been given adequate preparation for such a change, and (3) the establishment and maintenance of community support systems for non-institutionalised people" (p.1). In 1954 there were 154,000 residents in British mental hospitals but by 1982 this had fallen to 100,000 (Pilgrim and Rogers, 1999). The reasons responsible for such a policy are multiple and contested, and implicate a complex set of interrelationships between the medical profession, public morality, the State and political economy. There are generally three accounts offered to explain deinstitutionalisation. Each viewpoint produces sharp focus on certain aspects of reality and blurred vision elsewhere. In other words each approach emphasises those things that fit best with their argument and ignore or gloss over those which contradict or introduce problems. The choices and assumptions adopted within each approach are neither arbitrary nor inevitable. I will briefly consider each one in turn.

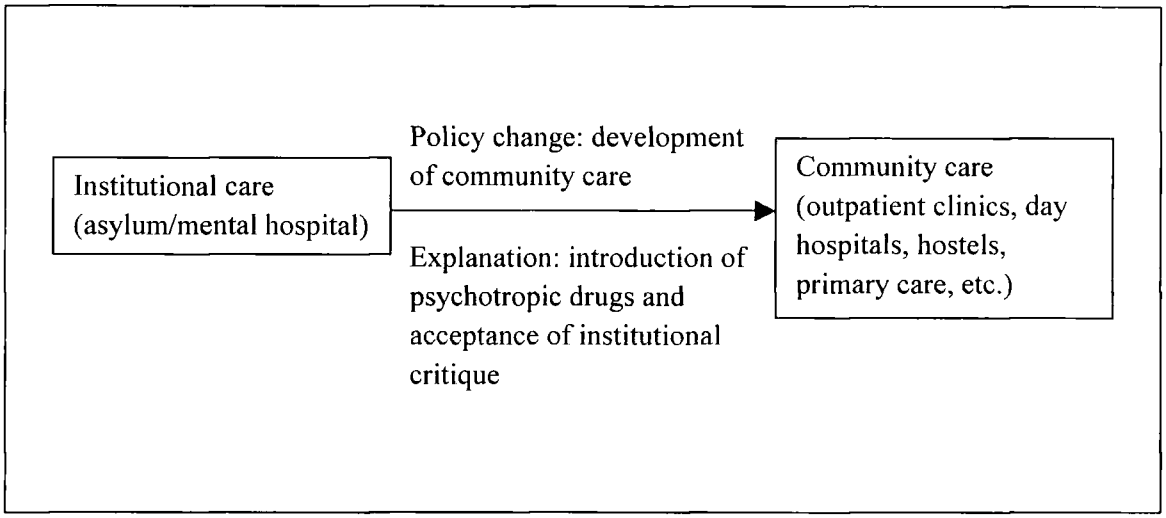
2.1.1 The 'pharmacological revolution'

This is the 'official' explanation of cause, or at least the one most often referred to or alluded to in government publications. For example the Percy Commission (Royal Commission on the Law Relating to Mental Illness and Mental Deficiency, 1957), which pointed the way to a new emphasis on community care, discerned that:

> "public opinion in general is moving towards a more enlightened attitude, which is fostered by the progress which has been made during the last 50 years in the understanding and treatment of mental disorders" (para.68).

The suggestion is that advances in the medical treatment of mental illness, in particular the introduction of major tranquillisers, which alleviated psychotic symptoms, allowed patients to be discharged from the asylums into the community in large numbers. Busfield (1993) summarised this simple account in the diagram shown in Figure 2.1.

Figure 2.1 : The Pharmacological Revolution (Busfield 1993, p.228)



However there is always a price to be paid for excessive preoccupation with one aspect of reality, and this account of deinstitutionalisation has a number of difficulties. For instance an increase in the number of discharges had already begun prior to the widespread use of the major tranquillisers[1]. Equally the rate of discharge did not increase once these drugs were in use. And why did deinstitutionalisation impact upon the learning disabled who could not benefit in the same way from such drug therapies? Scull (1977) argues that whilst psychotropic medication has helped manage deviance post-deinstitutionalisation (through the control rather than the permanent alleviation of symptoms), it was not responsible for the genesis of this policy.

2.1.2 Economic determinism

Scull (1977) related the '...State sponsored policy of closing down asylums' (also referred to as 'decarceration') to changes in social control mechanisms. Mental hospitals became expensive after the Second World War because unpaid patient labour was eliminated and the cost of employees increased with the unionisation of labour. Added to the emergence of the welfare state, segregative control mechanisms had become too costly and difficult to justify. Mental hospitals were closed because the maintenance of ex-patients on welfare benefits and the neglect of community care had become a more viable state policy. Scull argued however that the reality of community habitation for ex-inmates had been a disaster, with the inhumanity of the asylum replaced with the negligence of the community:

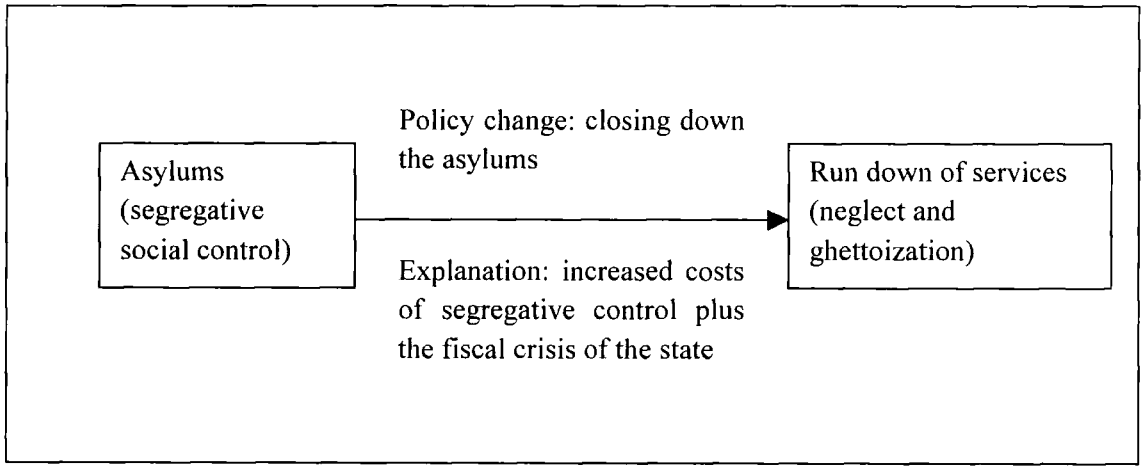
> "...the alternative to the institution has been to be herded into newly emerging 'deviant ghettos', sewers of human misery and which is conventionally defined as social pathology within which (largely

[1] Benzodiazepine prescriptions peaked in Britain in 1979 when some 30.7 million scripts were dispensed (Taylor, 1987).

hidden from outside inspection or even notice) society's refuse may be repressively tolerated." (Scull ibid, p.153)

Again Busfield (ibid) has summarised Scull's account very neatly with a simple diagram (Figure 2.2).

Figure 2.2 : Decarceration (Busfield 1993, p.229)



This hypothesis that deinstitutionalisation was the effect of new policies devised by capitalism in a phase of stagnant economy needing cuts in the cost of public services, offered a strong counter-position to the 'official' explanations. However as with all of these 'simple' accounts it is not without difficulty. Solivetti (1999) evaluating the situation in Italy points out:

"The story of de-institutionalisation in Italy rules out – as to the premise of the phenomenon – the hypothesis of a scheme devised by mature capitalism to cut welfare expenditures. The most advanced case of de-institutionalisation in the Western countries was by contrast the achievement of a movement led by radical, Marxist forces, during a period of increasing public expenditure, in one of the most rapidly expanding economies of the world." (p.189)

Similarly, Busfield (1986) examining the American experience points out that the State's fiscal crisis did not occur until the 1970s. During the 1950s when American deinstitutionalisation policies developed rapidly, the economic growth that accompanied increases in public expenditure meant that there was relatively little concern about cost. In the UK, the outcome of the 1951 general election was a Conservative victory (with Winston Churchill becoming Prime Minister). The Conservatives held on to power for 12 years (1951-1964), during which time tax reductions and industrial expansion pushed inflation into the background. Harold Macmillan fought the 1959 election on the theme of belief in an affluent society (using the slogan, "You've never had it so good", borrowed from an American campaign), and actually increased the Conservative majority.

2.1.3 The evolution of psychiatric discourse

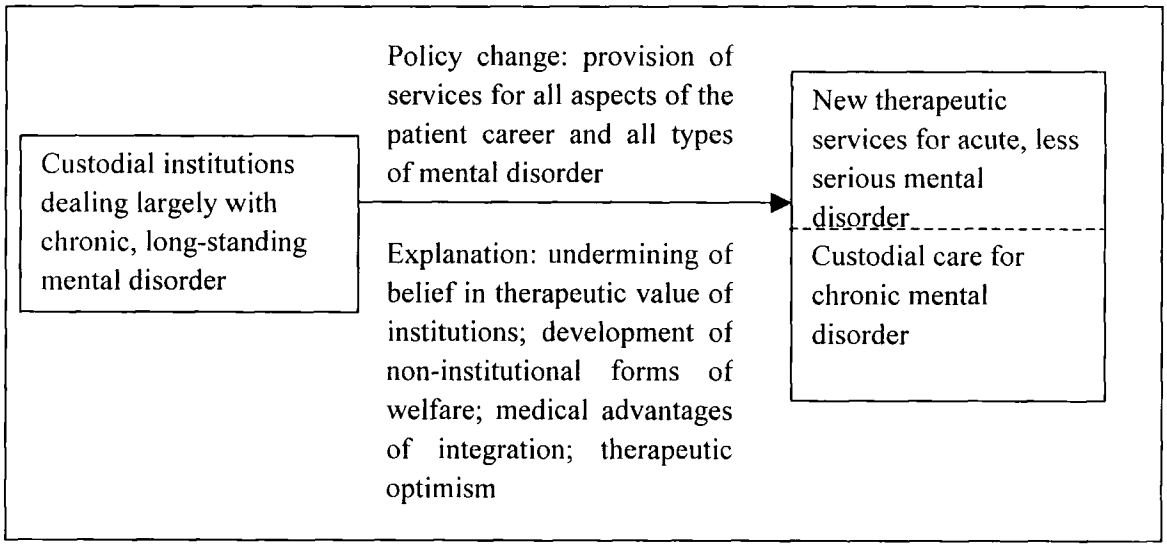
This final explanation for the cause of deinstitutionalisation premises 'current social standards'. The control of mental illness has undergone a drastic change over the last decades, as a consequence of the evolution of new theoretical approaches. Prior (1991) argues that the target of psychiatric practice changes over time and is accompanied by a different type of clinical practice and organisational setting. Therefore rather than attempting to identify simple causal mechanisms, such as the previous technological and economic determinism, the aim is to describe the object, ideology and organisational arrangements which constitute contemporary psychiatry. According to this approach then deinstitutionalisation took place within a specific context. For instance during the time in question the Asylum – conceived in order to give a therapeutic response to mental illness – ended up appearing as an institution perpetuating the patient's condition. Up to the second half of the 1950s when psychotropic drugs were introduced, treatment mainly consisted of electroconvulsive therapy and recourse to the straightjacket. Patients were kept in

conditions that deprived them of their self-esteem. Psychotherapy, social psychology and rehabilitation therapies were poorly developed. Most importantly, it was easy to be admitted to a mental hospital but difficult to be discharged. The people admitted were as a rule kept there for a very long time. The individual's progressive desocialisation often played a role as important as the illness itself. This situation became increasingly intolerable and institutionalisation, from being the solution became the problem. A particular opposition movement emerged at the beginning of the 1960s made up of psychiatrists, sociologists and other social scientists (for example: Laing 1959, 1961; Szasz 1961; and Cooper 1967). They mounted an attack on traditional psychiatry in particular aspects connected with the heritage of positivist psychiatry (the medicalisation and technicalisation of mental illness and the transformation of the breaking of moral and social norms into specific diseases). Another influencing movement involved the concept of deviance (not least psychiatric deviance) as the result of the building up of a precise social role through social interaction – the psychiatric syndromes were re-read as the effect of the psychiatrists' labelling (Goffman 1961; Becker 1963; Lemert 1967; Scheff 1967; Matza 1969).

To summarise, according to this position the policy of deinstitutionalisation was based on three tenets: 1) traditional psychiatry disguised the social nature of mental illness, i.e. the exclusion of marginal subjects; 2) the specialised total institutions treating mental illness were the tool for producing rather than curing it; 3) the mentally ill could be better treated in their own community, without loss of liberties and social links.

Busfield's (1993) own account of institutional change fitted this approach because it situated social change within a context and adopted a complex causal account[2]. She pointed to the rise in expenditure and development of mental health services outside of the hospital sector to explain deinstitutionalisation. There had, for example been large increases in psychiatric services in the area of primary care. The argument is that community care had brought with it a shift in orientation from the chronic long-term patient towards those with acute or less serious problems (Figure 2.3).

Figure 2.3 : Busfield's Account of Institutional Change (Busfield 1993, p.233)



2.2. Care in the Community

The first day hospital opened in 1948 – the same year the National Health Service was introduced. The Mental Health Act 1959 introduced community care principles by allowing patients to choose their place of treatment, provided this would not put anyone at risk. In 1961 the Conservative Secretary of State for Health, Enoch Powell, predicted the closure of mental hospitals in the next 15 years. In 1962 the

[2] In other words Busfield provides a complex realist account of change, which mirrors the framework provided by Ray Pawson and Nick Tilley (1997) Realistic Evaluation, Sage Publications – see chapter 6. Methodology pg.173.

Hospital Plan for England and Wales proposed small-scale psychiatric units (Ministry of Health 1962; Department of Health and Social Security 1972). A controversial large reduction in hospital beds was planned. It was anticipated that local authorities would provide home care by recruiting more social workers. In 1972 after years of consideration it was announced that the NHS would be administered by Health Authorities not Local Government (Department of Health and Social Security 1972). A further shift away from large mental hospitals was promoted in 1975 (Department of Health and Social Security 1975). Care for acutely mentally ill people was to be provided locally, mostly in district general hospitals. People with long-term illnesses were to receive asylum and rehabilitation in small-scale hostels and day centres in the community, funded by Local Authorities. However services remained limited and community care only really took off in the 1980s.

The number of hospital beds had gradually decreased since 1955 but this was not the result of co-ordinated discharge. Instead as patients died they were not replaced and, although some people were discharged to live on their own, few were transferred to residential care because of the cost implications for local authorities and health authorities. This changed however when it was decided that private residential homes could fund their places through social security payments in the form of supplementary benefit – meaning no money was required from the budgets of local authorities or health authorities. The private sector exploded. The Audit Commission (1986) pointed to this "perverse incentive" against community care – patients in residential homes were fully funded by social security but those in their own homes requiring community care depended upon the scarce resources of local authorities.

Rather than improving, from the late 1980s onward the community care situation became increasingly confused. *Community Care: Agenda for Action* (Griffiths, 1988) – which pointed to poor co-ordination between health and social services – was followed quickly by the publication of two White Papers, *Caring for People* (DoH, 1989a) – dealing with community care – and *Working for Patients* (DoH, 1989b) – proposing a substantial review of the NHS. '*Caring for People*' established an enabling role for social services departments in local authorities. Compulsory competition was introduced to create equality between service providers within local authorities and the private and voluntary sectors. Supplementary income support was abolished for residential care and money was transferred to local government who became responsible for purchasing services for dependant people based on individual need. A co-ordinated approach involving joint purchasing between health and social services was encouraged but not facilitated: social services was to be the lead agency for the community care of people with mental health problems (although they only spend about 5% of the total mental health budget); health authorities would remain responsible for the health care of all adults with mental health problems (re-emphasised in the Health and Community Care Act, 1990). However the idea of 'lead agency' and the distinction between health and social care was not clarified. Consequently, with resources shrinking and no one volunteering funding, the conflicts that arose affected the services people received. Attempts to improve co-ordination between health and social services at the beginning of the 1990s did not solve the problem. Care managers were introduced in social services. In the meantime key workers – who could be social workers as well as community psychiatric nurses – were introduced in mental health services as part of the Care Programme Approach (DoH, 1990). Both care managers and key workers (sometimes working within the same interdisciplinary team) were responsible for co-ordinating care, but care managers could have responsibility for a budget out of which they purchased care for a client, while key workers provided direct care. In

practice, Muijen (1996) argued "market principles have been adopted in an over-enthusiastic manner by managers, breaking up fragile alliances between the different services and sowing terrible confusion and duplicated effort" (p.148).

The care Programme Approach and Care Management were introduced by different sources. This has caused many problems and a great deal of confusion. Attempts to integrate these approaches whilst targeting people with severe mental illness have been variable (Schneider et al, 1999). In terms of the current situation the Department of Health has emphasised that "the CPA will be integrated with Care Management in all areas to form a single care co-ordination approach for adults of working age with mental health problems" (Modernising the Care Programme Approach, February 2000, p.6). This policy booklet offers a review of the Care Programme Approach, including confirmation of the Government's commitment to it as the framework for care co-ordination and an outline of the important changes to be made to it. Details on and reasons for the key changes are included, the first of which is 'achieving integration of the CPA and Care Management'.

2.3. The Problems

Since deinstitutionalisation and the move to care in the community, three issues can be identified which have had a major impact upon recent policy developments aimed at the mentally ill, and more specifically mentally disordered offenders. First the prevalence of psychiatric and psychological disorders in remand and sentenced prison populations. Second the possibility that this proportion may be growing as a result of transcarceration. Third a number of well-publicised incidents involving violence carried out by people in the community with a diagnosis of mental illness. These issues will now be examined in turn.

2.3.1 The prevalence of psychiatric disorder in sentenced and remand prison populations

Estimates of the prevalence of psychiatric morbidity in prison populations vary enormously depending upon the populations studied, the variations in methodology, and the different professional biases of the researchers involved. In the UK, Gunn and his colleagues have made substantial contributions to the topic. In 1972 they surveyed sentenced men in the South East prison region and reported that 31% had psychiatric disorders, 2% of whom were psychotic (Gunn et al, 1978). In a more recent study Gunn and colleagues selected a 5% sample of the male sentenced population (Gunn et al, 1991a and 1991b). In June 1988 the total number of all male sentenced prisoners in England and Wales consisted of 28,602 men and 8141 male young offenders (aged 17-21 years), therefore a 5% sample totalled 1769 inmates. Their conclusion that 37% of these sentenced prisoners had a psychiatric disorder, including 2% with psychosis, closely resembled those of their earlier results. Ten percent of prisoners had a severe personality disorder and 12% had alcoholism diagnosed (the author's point out that drug addiction is now equally common). They argue that the overall pattern of their findings, with a high level of disorder but a low level of psychosis, is similar to those of other studies of sentenced prisoners. By extrapolation:

> "Two percent of the sentenced prison population represents a large number of psychotic inmates: roughly 730 men at any one time, about 450 of who would have schizophrenia. Similarly by extrapolation about 1100 (95% confidence interval 776 to 1405) prisoners require hospital treatment for psychiatric disorders." (Gunn et al, 1991a, p.340)

Taylor (1986) reviewed life-sentenced men and women living in the community, under the supervision of probation officers in the Inner London Probation Service (total sample size 238, of whom only seven were women). She reported a 'high rate of psychiatric disorder': overall two-thirds had a psychiatric diagnosis, of which 10% had schizophrenia (a much higher rate than that reported by Gunn in his studies described above, perhaps as a product of the life sentence or the methodology employed here), 13% depression, 33% personality disorder and 33% alcoholism. A quarter had a history of previous psychiatric treatment. However, men and women do not experience mental disorder or contact with the psychiatric services in the same way or in the same proportion. It is therefore misleading to present them as one homogenous group.

Maden and his colleagues approached the issue of gender differences in the prevalence of psychiatric disorders within the prison population explicitly (Maden et al, 1994). They argued that the re-building of Holloway prison in the 1970s was based on the assumption that women in prison have high rates of psychiatric disorder. Criticism of Holloway was often directed at the unwarranted medicalisation of women's criminality and contemporary evidence provided only limited support for the notion that women in prison had higher levels of psychiatric disorder than men. Interpretation of research findings was difficult, the authors point out, because none of the studies applied the same methods to comparable groups of men and women in prison. Their study however was based on a cross-sectional sample comprising 25% (301 of 1,229) of all women serving a prison sentence in England and Wales, and a 5% sample of the male sentenced prison population for comparative purposes (taken from the Gunn et al, 1991a, study discussed above). They found 45% of women compared to 36% of men had a previous psychiatric history prior to the current period of imprisonment. The prevalence of psychosis was approximately 2% in both groups. Women had a higher prevalence of mental

handicap/learning difficulties (2.3% v 0.6%), personality disorder (18% v 10%), neurotic disorders (16% v 6%) and drug abuse/dependence (26% v 12%). Men had a higher prevalence of alcohol abuse/dependence (9% v 12%).

In the United States, Daniel and colleagues (Daniel et al, 1988) also reported a high six-month and lifetime prevalence of psychiatric disorders among 100 consecutively admitted female offenders to a prison. Of the 100 women studied, 90 received at least one diagnosis and 67% received more then one diagnosis. The major psychiatric morbidity was alcohol abuse and/or dependence (36%), followed by drug abuse disorders (26%), anti social personality disorder (29%), and schizophrenia (7%), major depression (19%) and bipolar disorder (2%). They went on to compare the lifetime prevalence of the female prisoners with that reported for females in the community from which the prison population was drawn. The authors reported that in every comparison in which the differences are significant, the female prisoners have a higher prevalence than females in the general population. This they argue is true not only for those disorders that may be closely related to illegal or criminal behaviour (e.g. substance misuse: 8% v 60%; or antisocial personality disorders: 1% v 29%) but also for the psychoses (e.g. schizophrenia: 1% v 7%; and major depression: 8% v 19%).

Daniel et al suggest that whether lifetime occurrence of psychiatric disorders is causally related to female criminality is debatable but instead their findings could be explained in part by the argument that women with a history of psychiatric hospitalisation are more likely to be arrested than are women in the general population (Rappeport and Lassen, 1966). However a number of different conclusions could be drawn from this research exploring the numbers of mentally disordered women in the criminal justice system. For example others have argued that it is evidence of the over-representation of women in the mental health system

(Chesler, 1972; Russell, 1995). This approach premises the idea of 'double deviance' and the notion that female offenders are more likely to be medicalised than their male counterparts. In other words, so few women commit criminal offences in comparison to men, that those that do are seen to have transgressed not only social norms but gender norms as well. This leads to 'excessive zeal' in their treatment, in remands for custody reports and in more medicalised interventions (Heidensohn, 1981, 1994; Edwards, 1984). Importantly however, Busfield (1996) cautions:

> "...the picture is far more complex, and the actual female predominance is far from monolithic...It is not so much that mental disorder overall is a female malady, but that some mental disorders appear to be more distinctively female, whilst others have a more masculine face, and yet others are more or less gender-neutral." (p.14)

The comparison with the general population undertaken in the study by Daniel et al (1988) is very important in terms of contextualising the debate. Over two decades ago Jacobs (1977) pointed out that "Prisons do not exist in a vacuum: they are part of a political, social, economic, and moral order" (p.89). In other words that prison walls are permeable and that many characteristics of, and changes in, the wider society (such as deinstitutionalisation) find their way into prison settings. Consequently the prison is not immune or isolated from health inequalities and trends in the wider society. Most prisoners come from lower socio-economic groups, thus the inverse relationship between health and income has important consequences for criminal justice organisations, especially prisons. Research in the U.S. and U.K. over the last several decades on the prison population consistently portrays its members to be poor, disproportionately non-White in the U.S. specifically,

uneducated, and inner-city dwellers. Offenders enter prison with health problems far in excess of those reported in the non-institutionalised population (Marquart et al, 1996).

These previous studies are based on sentenced prisoners. Birmingham et al (1996) examined the prevalence of mental disorder in the U.K. remand population. They begin by pointing out that while it is generally reported that approximately one third of sentenced prisoners have a mental disorder, the rates in remand prisoners are probably higher partly because mentally disordered people are often remanded in custody for psychiatric reports. They also note that evidence from North America suggests that mentally disordered people are more likely to be arrested than those who are not mentally disordered in similar circumstances, and factors such as homelessness and petty offences that are associated with mental disorder make remand more likely. The authors suggest that earlier British research which reported high rates of psychiatric morbidity in remand prisons (Taylor et al 1984; Coid 1988) may have underestimated the problem as they were retrospective case note studies which relied on diagnoses by prison medical staff. Birmingham and his colleagues themselves assessed all unconvicted men remanded to a local remand prison over a period of seven months (569 in total). Mental disorder was present in 148 (26%) of the 569 men included in this study. A further 22 men had a history of mental disorder but no current symptoms. Lifetime rates were 7% for psychosis and non-psychotic mood disorders (5% and 2% respectively). If diagnoses of substance abuse or dependency were included the number of men with a current mental disorder rose to 62% (and a lifetime prevalence of 71%). In addition to those with a diagnosis of personality disorder (7%), a further 12% were judged to have significant personality vulnerabilities. As well as assessment for the purposes of diagnosis, the authors assessed the treatment needs of those included in the survey. In all, they considered that 32% required some form of psychiatric input, and 9% needed urgent attention

(including 3% immediate transfer to an outside psychiatric hospital, 5% prison hospital placement, and 1% further assessment in the prison hospital).

Brooke and her colleagues (Brooke et al, 1996) undertook a similar survey with the objective of determining the prevalence of mental disorder among male remand prisoners in England and Wales, and to assess the treatment needs of this population. They interviewed 544 adult men (representing 9% of the adult male remand population) and 206 young offenders (10%) from 13 prisons and three young offenders' institutions. Psychiatric disorder was diagnosed in 63% of individuals. Drug or alcohol misuse formed the largest diagnostic group (38%). Neurotic illness was the next most prevalent (37%, including personality disorder 11%; adjustment disorder 8%; and neurotic disorder 18%). Psychosis accounted for 5% of diagnoses. In terms of treatment needs, they judged 55% to require immediate treatment. Most could be provided by health services within the prison. However 9% needed transfer to an outside psychiatric hospital.

As indicated earlier, research that employs alternative methodologies or professional biases, for example retrospective case note studies where the identification of a mental disorder does not involve the researcher, may underestimate the problem or at least return varied results. For example, Barnes and Keithley (1998) carried out studies for Northumbria Police Force and Northumbria Probation Service. The aim of these studies was to determine the extent and nature of health needs among prisoners/clients. The examination of a one-week sample of Police Custody Records (which are completed by Police Custody Sergeants) uncovered: intoxicated by or smelled of alcohol 30%; used illegal drugs 5%; and, on medication for or have mental health problems 9%. This much lower identification of mentally disordered suspects could, for example, be an effect of the new Police and Criminal Evidence Act (PACE) 1984 and its Codes of Practise. It has been suggested that police may,

for the first time, have good reasons for not considering a suspect to be mentally ill. Under the terms of PACE there are special provisions to protect categories of suspects, including the mentally ill or handicapped. PACE defines mental handicap but not mental illness, the Codes of Practise leave it to the judgement of the Custody Officer as to whether the offender is, or may be, mentally ill. If the offender is identified as mentally ill or mentally handicapped, an 'appropriate adult' (this could be a relative or a social worker for example) would then be asked to attend the station while the mentally ill/handicapped individual is questioned. Brown (1989) has argued:

> "The net effect of the custody officer's duties in relation to juveniles and the mentally ill or handicapped may be to entail more work, case for case, than for other prisoners, both in terms of more intensive supervision and in contacting appropriate persons. Special care may be needed in proceeding with investigation, particularly interrogation, with these detainees." (p.38)

In the police stations under study, Brown found that 1% of those detained were recorded as mentally ill or handicapped. The types of offences for which they were detained were different from those for which other suspects were held. The mentally ill and handicapped were less frequently arrested for crime; the largest single group (43%) had been reported as missing persons by relatives or institutions. Nearly a quarter (22%) were arrested as a result of offences of criminal damage.

Stephen (1988), in a review of police/social work interactions, argued that the police frequently complained that they were often unable to get a social worker to attend a police station quickly, especially if the request was made outside of normal office hours.

The study carried out by Barnes and Keithley (1999) for Northumbria Probation Service produced quite different figures compared with the Northumbria Police Force results described above. The health profile of Northumbria Probation Service clients was constructed by Probation Officers who completed questionnaires for individuals beginning a Probation Order over a one-month period. Respondents were asked by their Probation Officer whether they had any illnesses or problems with their health. In this case, mental health problems were most frequently cited: depression or anxiety 40%; other mental health problems 10%.

This brief review of the relevant research clearly demonstrates some confusion and variability in the proportion of prisoners reported with a mental disorder. Again, this is due to differences in the populations studied, variations in methodologies, and the different professional biases of the researchers involved. Despite this it appears that there is some agreement that figures are substantial. The level of mental disorder in the general population has been estimated at between 15%-17% (Gunn 1992) – suggesting that the level of identifiable disorder within the sentenced prison population is about twice the level (depending on which study is being used for comparison) that would be expected by chance. Whilst it has been argued that the majority of those with psychosis in prison are chronic cases (i.e. they had a mental disorder before entering prison), prison may exacerbate underlying psychiatric conditions or precipitate breakdown in vulnerable individuals so that they develop a mental disorder whilst serving a sentence (Gunn et al, 1991a). In other words 'people are sent to prison to damage them' (Peay, 1994). Certainly, of the 37 inmates recommended for hospital treatment by Gunn and his colleagues (1991a), they reported that 12 had developed their illness after imprisonment.

The question then clearly must be why are so many mentally disordered people in prison? Part if not most of this answer can perhaps be found in the observation by

Gunn et al (1991b) that most studies of sentenced prisoners report a high level of disorder but a low level of psychosis. In other words that the majority are diagnosed as misusing drugs and/or alcohol, or having have some vague 'mental health problem', or, some would argue, an equally vague 'personality disorder'. Either these diagnoses are being applied as part of a medicalisation process – which will be discussed later in this thesis – or the diagnoses are being justifiably applied and the issue is one of a lack of suitable treatment facilities or, in the case of personality disorder, disagreement among doctors about treatability.

The next Section builds on this issue concerning the numbers of mentally disordered people in prison by examining the concern that this proportion is increasing due to a process of criminalisation or, more directly, transcarceration.

2.3.2 Transcarceration

In a 1939 study of several European countries, Penrose concluded, "as a general rule, if the prison services are extensive, the asylum population is relatively small and the reverse also tends to be true" (p.3). He asserted that the population of every country contains a small number of people whose behaviour is so undesirable 'from the social point of view', that they needed to be confined, if necessary against their wishes, to safeguard the interests of the rest of the community. The development of services for the control of these antisocial elements depends not only upon the current social standards but also upon the financial resources of the state. There are, he wrote, two ways of segregating these undesirables: 1) imprison them, and 2) hospitalise them. For the first method to succeed society must wait for a crime to be committed, which then justifies retributive or deterrent action against the offender usually involving removal from society. The second method means the deviant is regarded as 'material for medical attention' and institutionalised. This may be considered the better of the two methods because the 'undesirable' person could be

recognised before he offends and, with treatment, be prevented from doing so. Penrose proceeded to record and compare the number of psychiatric inpatients and the number of prison inmates in each of 18 European countries[3]. He reported that the inverse ratio between number (per 1000 inhabitants) of psychiatric inpatients and prisoners in each country was not perfectly regular but it was very improbable that it could be due to chance (the product moment correlation[4] is –0.62, the gradient of the line is negative indicating an inverse relationship). Penrose reported that he found more striking results when he considered specific crimes of violence. He found the highest correlation was that which represented the inverse relationship between number of mental hospital inpatients and the number of deaths attributed to murder (r=-0.72). The yearly death rate attributable to murder is relatively small in most of the countries in which the mental health services are well developed and the rate may be increased tenfold in countries where mental health services are poorly developed. Penrose interpreted this to mean that in countries where violent crime is regarded as evidence of 'mental unsoundness', there will be a reluctance to encourage conviction for murder and this may influence the number of deaths attributed to crimes of this type. Alternatively in a country where violent criminals are subjected only to retributive treatment there would be less hesitation in ascribing fatalities to this cause.

Penrose also made some comparisons between European and non-European countries. He argued that inspection of the figures obtained from the Far East, as well as from eastern, central and north-western Europe strongly suggested that there was a continental gradient from east to west, and to some extent, from south to

[3] In a later article Penrose (1943) explored data from the United States and concluded "The United States data support the view, previously based upon European data only, that attention to mental hygiene and ascertainment of mental deficiency are important factors to the prevention of crime in the community." (p.466)

[4] The measure that is ascribed, the correlation coefficient, can vary in magnitude between zero, indicating no linear relationship between the points, and one, indicating the strongest possible linear correlation, where all the points lie exactly on the line.

north, which represented the evolution of mental health services. At the time when this research was performed, the fact that the prison population was relatively small in the Far East, although it was high in Eastern Europe, suggested to the author that the services that developed for the control of 'socially undesirable' members of the community evolved progressively in a certain way. It may be, Penrose elaborated in his paper, that the first attempt at controlling these people was to provide prisons with a view to punishing them in the hope that they would ultimately be made into good citizens. The community therefore first evolves a system of jurisdiction supported by prisons (deviance is criminalized). Later on the medico-psychological attitude towards crime develops and the people who earlier would have been confined in prison become subjects for medical investigation and treatment (deviance is medicalised).

Penrose does not ignore the issue of gender distribution, pointing out that in almost all countries the prison population is predominantly male (in England the then ratio of male to female prisoners was 5:1; in the then British India it was 20:1). On the other hand in Britain, France and Germany, the populations of psychiatric hospitals was more than half female. In countries outside Europe where the mental hospital population was small, for example South Africa, male patients outnumbered female patients. In the then British India and Japan, male mental hospital inpatients exceeded females by a ratio of 3 to 1. This led the author to conclude that at the early stages of development of mental health services the gender distribution of patients tends to resemble that of prison populations.

Penrose concludes by emphasising the incompatibility he uncovered between the development of mental health services and the need for accommodation in prisons, going so far as to suggest that:

> "...attention to mental health may help to prevent the occurrence of serious crimes, particularly deliberate homicide." (p.12)

Since Penrose published his findings the belief that the criminal justice and mental health systems are functionally interdependent has gained widespread acceptance among many commentators and researchers. This hypothesised interdependence is particularly invoked more recently in policy debates about the process of deinstitutionalisation and its impact on the prison population. Early in the history of the policy of deinstitutionalisation a major critique was published (Abramson, 1972). Although observations were based on events in California, the first state in the USA to vigorously deinstitutionalise its public mental hospitals, the argument proved to be very relevant to the situation in the UK. Abramson argued that a "criminalisation of mentally disordered behaviour" had occurred. His claim was that relatively minor, nuisance behaviours by ex-mental patients were resulting in criminal charges in order to confine persons who were being disruptive as a result of the mental disorder, but for whom no state hospital beds were available. Abramson's views represented a pervasive belief among both psychiatrists and prison administrators. These notions were based on the convictions that: 1) people in need of mental health care could not access it; and 2) the job of the prison administrator had become much more complicated through an influx of mentally ill persons who were highly disruptive in prison settings (Allodi et al, 1977).

The argument articulated by Abramson took on greater currency during the 1970s when it was generally agreed that more deviant behaviour was occurring in the community as a result of more mentally ill persons being at large, and that the only available community response was arrest and detention in the criminal justice system. Biles and Mulligan (1973), re-examining Penrose's thesis, explored data from six Australian states. Data analysis produced a zero order correlation of –0.78

between the average 1968 prison census and the number of mental hospital beds. They concluded that:

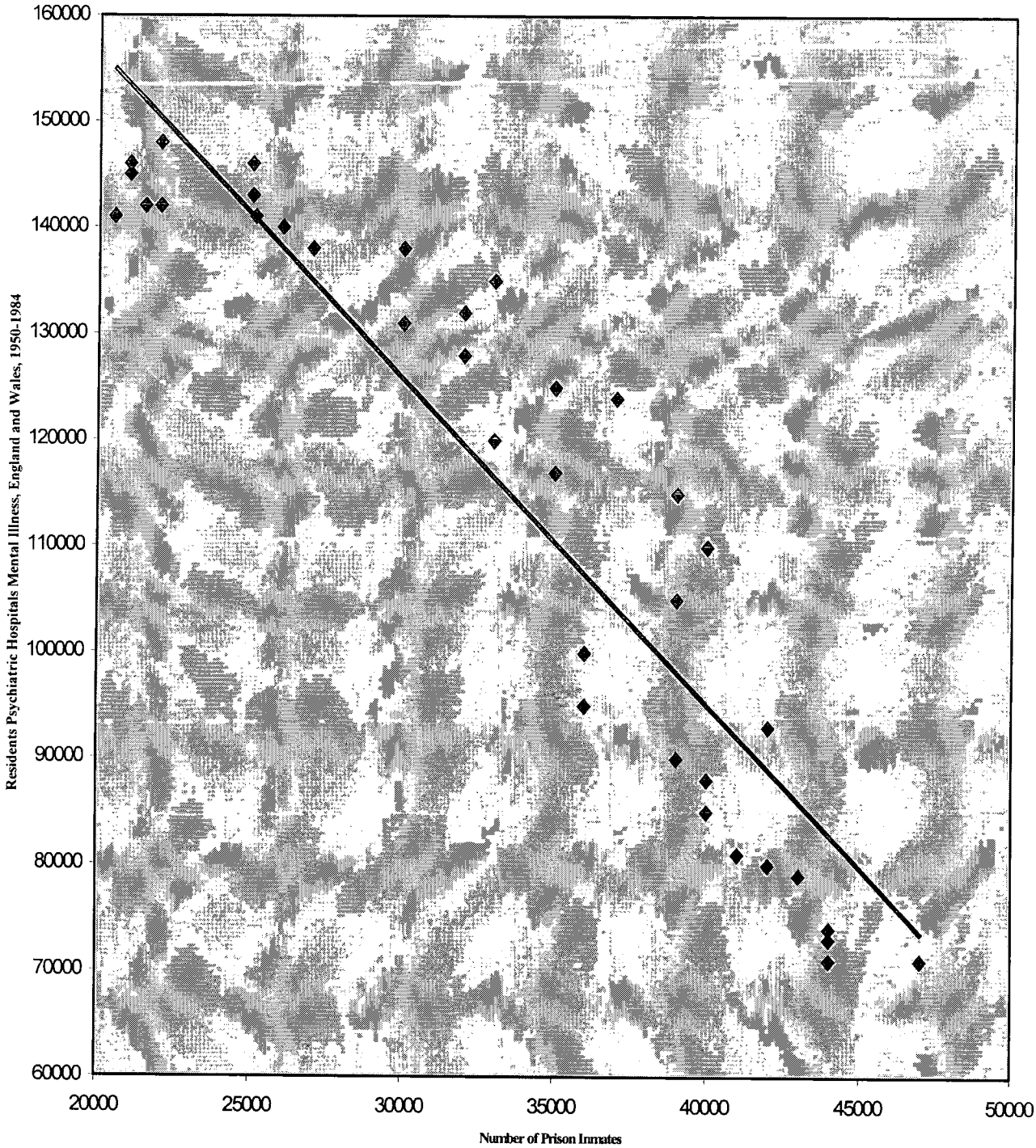
> "...the data are consistent with the view, also canvassed by Penrose, that the relative use of mental hospitals or prisons for the segregation of deviants reflects different styles of administration. In practice, either the police or the courts may make the decision that an offender is mad rather than bad and initiate his admission to a mental health hospital rather than to a prison. And, of course, this decision is facilitated if adequate mental hospital accommodation is available. Thus one way of reducing the numbers of people in prison, though by no means the only way, is to ensure that the mental hospital mode of disposition is clearly seen to be a viable alternative." (p.279)

Back in the United Kingdom, Weller and Weller (1988) asked, of the 75 000 patients discharged from long-stay beds in psychiatric hospitals, "[w]here have they all gone? – those are that are not dead, that is." They provide their answer by comparing the increase in the prison population (which they also note includes an increasing proportion of people with mental health problems), with the fall in the number of patients who occupy long-stay psychiatric beds for the period 1950-1985 (see Chart **2.1** p.32). The straight line is the best fit to the data points and the 'goodness of fit' can be measured statistically. In the data collected by Weller and Weller the correlation coefficient was 0.94 (it was actually –. 94 since the gradient of the line is negative, indicating an inverse relationship). The authors' claim that based on the large number of data points, the improbability of their result being a spurious finding (i.e. occurring by chance) is less than one in one thousand. Furthermore they continue that based on their findings, if they only knew the

psychiatric bed population over this period, they would be able to predict the prison population (only 11.64% of this population remain unaccounted for from this single for item of information). The authors acknowledge that an association does not establish a causal relationship. However, they argue, it is difficult to put forward convincing explanations for this exceedingly strong relationship except by postulating that there is some decanting from the psychiatric hospitals to the prisons (or a transcarceral effect).

More recently, Brinded and his colleagues (1995) examined all patients remanded by the British Columbia Courts for psychiatric assessment between November 1975 and December 1990 (a total of 3,501 individuals). They acknowledge that there are currently major concerns that the process of deinstitutionalisation together with changes in mental health legislation are leading to a criminalisation of the mentally ill. Indeed they point out it has been suggested that the development of forensic psychiatric services world wide is inexorably linked to the process of deinstitutionalisation. More mentally ill persons in the community, unable or unwilling to avail themselves of community treatment options, appear to be gravitating into the criminal justice system as their mental health deteriorates and their behaviour brings them into contact with the police. The authors go on to describe the problems the police have if they have concerns about the mental health of a person under arrest, the options available to them for obtaining a psychiatric assessment are limited. General psychiatric services may refuse to deal with people facing criminal charges or who are perceived as dangerous. One option they may use is to place the mentally ill individual before the court, which may then remand for a psychiatric assessment.

Chart 2.1 : A Comparison of the Inpatient Psychiatric Population and the Prison Population, 1950-1985 (Weller and Weller p.41)



Brinded and his colleagues found 9% of patients who were remanded pre-trial were certified under the Mental Health Act and the charges subsequently stayed by the Crown. This practice appeared to be increasing over the previous ten years, peaking in 1990. They also found what they describe as a 'worrying trend' involving increasing numbers of patients facing only minor charges being remanded for psychiatric assessment. This group was almost twice as likely to be 'certified' as the general remand population and their length of stay in hospital was also substantially longer. Patients who had charges stayed and were 'diverted' tended to be those with a serious mental illness and a previous in-patient psychiatric history who had committed only minor offences. The authors suggest that it is possible that such persons are being remanded to the Forensic Psychiatric Institute by the court with the hope that a mental health diversion will be activated, rather than the charges being pursued – and this they argue constitutes a criminalisation process. Although eventual diversion from the Criminal Justice System may occur, they found it was usually inappropriately into maximum security, alongside what the authors call the most dangerous mentally disordered offenders, when a general psychiatric setting would have been more appropriate. However the reader is informed that general facilities are unwilling to deal with such patients:

> "It therefore appears that a new 'vicious cycle' exists for psychiatric patients in the community who offend in a minor fashion, with general psychiatric facilities being unforthcoming at every stage from arrest to discharge, resulting in the criminalisation of the patient." (p.62)

Freeman and Roesch (1989) also described the risks facing the 'uninstitutionalised' (i.e. those people with a mental disorder who were not part of the Asylum system)

and the 'deinstitutionalised' (those who were), both groups being vulnerable to the criminalisation process.

These ideas about transcarceration and/or criminalisation are not universally shared however. In the USA Steadman and his colleagues (1984, 1987) pointed out that despite the frequency with which the correlation between prison and mental hospital populations and its implications for institutional composition has been invoked by commentators, attempts to verify it have been rare and partial. No study, they argued, has employed both a comparative framework (to simultaneously assess changes in prison and mental hospital size and composition) and a longitudinal one (to measure these changes over time) – until that is the study undertaken by Steadman himself and his co-researchers (1987). Based in America, details about the arrests, state imprisonments, and state mental hospitalisations were collected for 3900 prisoners and 2400 mental patients from six states for the years 1968 and 1978 (before and during the programme of deinstitutionalisation). The core question upon which they focused was 'to what extent did the proportion of prison inmates with prior mental hospitalisation change between 1968 and 1978 in each state?' If the deinstitutionalisation of the state hospitals impacted directly on prisons, then they hypothesised, the proportion of inmates coming into the system in 1978 with state hospitalisations should have increased over the 1968 baseline.

Steadman et al presented data that clearly indicated that considerable deinstitutionalisation of state mental hospitals occurred in all six study states. However they point out that although the census of state mental hospitals fell dramatically, the number of admissions declined only slightly. Drastically reduced lengths of stay account for this discrepancy between a sharply declining hospital census and a relatively stable admission rate. The authors conclude that it is inappropriate to depict deinstitutionalisation as a trend that terminated most

admissions to state hospitals. They point out that almost as many persons were admitted in 1978 as in 1968, they simply did not stay as long.

The demographic characteristics of those admitted to psychiatric hospital did however change. The mean age across the six states fell from 39 to 33 years, and the percentage of whites from 82% to 68%. The authors did not find this trend toward increased numbers of younger persons and nonwhites paralleled in the prisons. Across the six states the mean age of prison admittees was 29 in 1968 and 28 in 1978, and the percentage of whites 58% and 52% respectively. It would appear therefore that while the mental hospitals had begun serving a different clientele, the composition of the state prison population remained fairly constant, although there was a substantial increase in the overall number of prisoners.

In terms of the key question of the extent to which an increase in prison census is directly related to deinstitutionalisation, Steadman and colleagues presented the percentage of people admitted to prison in 1968 and 1978 with a history of at least one prior mental hospitalisation, and the actual versus the expected numbers with a prior history. Again, there was little consistency across the states in terms of percentage with a prior history. However because the size of the increases in three of the study states was so much larger than the size of the decreases in the other three, there was a significant overall increase in prisoners with a history of psychiatric hospitalisation from 8% in 1968 to 10% in 1978. Equally the comparisons between the actual numbers of people admitted to prison in 1978 who had previously been in a mental hospital and the number that would be expected from the application of the rate of change in the general admission figures, was not consistent across the six states – three were higher and three lower than expected. Even when considering the state of Texas, which had both the most dramatic increase in the number of new prisoners with prior hospitalisation and the largest difference between the expected

and actual numbers of such admissions, the authors argued that it was important to estimate the actual direct population shift between hospital and prison. Texas prison admissions increased by 5,873 between 1968 and 1978; there were 969 more prison receptions with prior hospitalisation in 1978 than would have been expected; therefore of the total increase in admissions to Texas state prisons between 1968 and 1978 only an estimated 16.5% was attributable to the admission of former mental patients who might previously have remained in hospital. In other words, the authors emphasised the evidence was weak that the rapid growth in state prison populations between 1968 and 1978 was attributable substantially to the shift of persons directly from state mental hospitals to state prisons.

The alternative situation explored by Steadman et al involves the criminal histories of patients admitted to state mental hospitals in 1968 and 1978. The strong trend indicated an increase in the proportion of male patients with prior arrests, but interestingly not imprisonment. In addition, the authors offered two other indicators of the increasing criminal nature of psychiatric patients: the proportion with multiple prior arrests; and with histories of serious, rather than minor crimes. Overall, measures showed an increase, although as with data concerning prisoners with a psychiatric history, individual study states produced different proportions, some higher, others lower.

So what did Steadman and his colleagues make of their findings? They found little support for the hypothesis that prisons and mental hospitals are functionally interdependent. The prison population in the U.S.A. increased during the same period that the population of psychiatric hospitals decreased. However there was little evidence of a shift of former mental patients to state prisons (transcarceration). Consequently it was proposed that the source of the 'explosion' in the U.S. prison

population must be found elsewhere than in the deinstitutionalisation of U.S. psychiatric in-patients. The researchers proposed a rival hypothesis:

> "...increases in the population at risk of committing crime (i.e. increases in the number of "baby boom" males reaching criminogenic age in the late 1960's and early 1970's) led to an increase in the rate of serious crimes punishable by imprisonment." (p.487)

Another possible factor they pointed to was the increasing average length of sentences in the U.S.A. associated with the elimination of parole, determinant sentencing and mandatory minimum sentences. As for the increased arrest rate of psychiatric patients (criminalisation), they suggested this might largely be a function of the younger average age and increased proportion of non-whites being served by state mental hospitals in 1978 (the relationship between these two demographic factors and arrest has been well established).

Steadman et al suggested that the finding that psychiatric patients were more likely to have been arrested but not imprisoned in 1978 than 1°968 provides an important insight to the overall theme of the functional interdependence between the mental health and criminal justice systems. It is suggested that these people would have spent at least some period in local jails before their hospitalisation. Perhaps then the criminal justice setting most likely to be functionally interdependent with mental hospitals in the USA is the local jail rather than the state or federal prison. Few state prisoners had experience in state mental hospitals and few state mental patients had experience in state prisons. But most 1978 state mental patients had been arrested and probably jailed for at least some period before being admitted to hospital. So it may be that a large group of patients/inmates are being exchanged between hospitals

and local jails. The authors point out that the local jail is locally financed and locally operated, it serves as the initial holding and booking site for all those arrested, and as a safe pre-trail detention centre for defendants who cannot make or are refused bail. Persons convicted of crimes with sentences less than one year (classed as 'misdemeanours' in the USA) serve their sentences in local jails. The local jail is the frontline site of carceral confinement through which all detained persons must pass, and many never pass beyond. The jail is the focal point for pre-trail detention (i.e. custodial remands) and for the minor offender. The authors then asked, 'is it not therefore logical if the mentally ill are now entering the criminal justice system rather than the state mental hospital system, that it is the local jail that hey will be most visible?'. They argued it is hard to get into USA prisons today because of overcrowding, and first-time offenders and minor criminals (the classes into which those unable to get into psychiatric hospital as a result of deinstitutionalisation would most often fall) cannot fit.

The most interesting and important discovery made by this particular study is that "there is...little evidence to support a straightforward inverse relationship between prison and mental hospital population levels (i.e. transcarceration as interpreted by Weller and Weller, 1988), but much evidence to indicate complex indirect interactions that are still little understood." (p.489) Clearly there is going to be some impact from a large-scale social change such as the deinstitutionalisation of psychiatric inpatients. The authors suggest that the released patients may cause an increased level of deviance that exceeds society's tolerance level, but instead of institutionalising the newly discharged patients, other groups previously in the community – in 'board' and care homes, community residences and men's shelters – are arrested and incarcerated. It is segments of such 'buffer' groups that are sent to state institutions, producing fairly constant levels of institutionalised populations.

Some of those deinstitutionalised end up being reinstitutionalised at state level, but this proportion is only a small segment of the entire increase in prison populations.

In England and Wales, Fowles (1993) also examined evidence for the transcarceration hypothesis provided by changes in institutional populations. He pointed out that the gross trends (for example that described earlier by Weller and Weller, 1988) conceal as much as they reveal. Instead he argues that there is little unequivocal evidence to support the transcarceration hypothesis: during the period 1962-1986, the number of remanded and sentenced prisoners increased by 268% and 30% respectively; during the same period the mental hospital and the mental handicap hospital populations declined by 52% by 41% respectively. The declines in hospital populations is not matched by the increase in sentenced prisoners, and in terms of the increased remand population, a large part is due to a greater proportion of 'either-way' offences being committed to Crown Court for trail[5]. Fowles points out that there is no evidence to support the suggestion that the increase in remands is due to an increase in the numbers remanded for psychiatric reports (one of the possibilities suggested by Brinded et al, 1995, described earlier in this chapter, p.31) – in 1960 6000 reports were prepared, the demand peaked in 1970 with 14,000, and then fell away progressively, with 8923 in 1983 and 7689 in 1985. He also points out that whilst the psychiatric hospital populations have declined, the number of admissions to hospital has in fact increased – during 1962-1986 the number admitted to mental handicap hospitals rose by 391% and to mental hospitals by 42%. This means that whereas the length of stay in prisons is getting longer, the average stay in hospitals is getting shorter (the same conclusions reported by Steadman et al, 1984, 1987).

[5] 'Either-way' offences can be tried either by the Magistrates or Crown Court. This category of offence includes the moderately serious offences such as burglary, assaults and thefts where magistrates may believe that their sentencing powers are not sufficient given the nature of the offences. Offences such as minor acts of criminal damage, benefit frauds and shoplifting are either entirely summary offences or are only rarely found in the Crown Courts.

Although he agrees with the substantive outcome, i.e. that there is no empirical evidence to support the transcarceration hypothesis, Fowles criticises the research carried out by Steadman et al (1984) described above. He points out that Steadman et al fail to mention the sex ratios of institutional populations despite the fact that one of the basic assumptions underlying British discussions of institutional populations is that women make up a small proportion of the prison population but they make up a much larger proportion, the majority, of the mental hospital population. Therefore he suggests that if the transcarceration hypothesis is correct then the relative increase of the female prison population should be greater than that for men as the number of women released from mental hospitals is so much greater. He found generally that there have been significant increases in the populations of female prisoners (both on remand and under sentence) and in the population of male prisoners on remand, but still no evidence to suggest a direct crossover of people from mental hospitals to prisons.

Fowles concludes by suggesting there are a number of good reasons for not being able to sustain the transcarceration hypothesis (p.71), summarised here as follows:

1. Psychiatric hospital residents were not of the age or sex normally associated with crime.

2. Some support for the transcarceration hypothesis might be given if more former psychiatric inpatients were being received leading to a change in age structure of the prisons. However, official statistical publications are only concerned with age insofar as it reflects the legal differences between youth custody and adult imprisonment.

3. Former psychiatric hospital residents may be defined officially as living in the community but that may only mean that they are in the wards of a privately

owned nursing home. The 'community' is any hospital/home not owned by the NHS.

4. The sentenced prison population is serving longer rather than shorter sentences. There does not seem to have been an influx of people convicted of minor, nuisance type offences which have been linked with the process of criminalizing the mentally disordered.

On the other hand, Fowles does however posit three mechanisms (for which he argues there is some evidence, a part of which is described earlier in this chapter, p.13) that might lead to the criminalisation of the mentally disordered (p.72), again summarised here as follows:

1. There may be more mentally disordered people in the community who are at risk of committing offences. These might include two separate groups – those who have previously been in mental hospitals but who have been discharged into the community; and those who, although mentally disordered, have never been in contact with the psychiatric services.

2. The police may be reluctant to process mentally ill offenders through the mental health services because of:

    a) previous difficulties with health and social services staff,
    b) inability/unwillingness to recognise that offenders may be mentally ill.

3. The courts may not recognise or accept that an offender is mentally ill. The court may not ask for reports to be prepared on the offender and may not accept their conclusions. The prison medical officer responsible for preparing the report

> may decide that the offender is not mentally ill, or alternatively he may diagnose mental illness, but may not be able to persuade a mental hospital to accept the offender on a hospital order. Some offenders remanded on bail have in the past been refused contact with psychiatrists who would not accept individuals whom they could not treat until the offender had been sentenced.

There are two separate but related arguments going on in this Section, the criminalisation process and the transcarceration model, which it is important to untangle. The first concerns the criminalisation process which, to recap, means that there are alternative methods of controlling deviancy: either medicalise and hospitalise or criminalise and imprison (put simply treatment versus punishment). This hypothesis maintains that we are currently going through a period of criminalisation involving people who were (or who would have been) previously medicalised but who are now ending up in the prison system for a variety of reasons.

Where the criminalisation hypothesis is applied to a wider population of the long-term and newly diagnosed, the transcarceration hypothesis – as understood by Weller and Weller (1988) – is concerned only with the very narrow population of ex-mental patients (in particular those discharged following the closure of psychiatric hospitals during deinstitutionalisation). Fowles (1993) suggests that, when stated at its bluntest, the transcarceration hypothesis is that as a result of the closure of mental hospitals there has been a shift of populations to prisons. In other words that one form of institutional setting has simply been substituted for another with many former mental hospital patients being reinstitutionalised from hospital to prison (the term 'transinstitutionalisation' is often used interchangeably with 'transcarceration'). In this, its narrowest sense, the transcarceration hypothesis is much more difficult to sustain than the criminalisation thesis. Indeed it is quite easily disproved as, for example, described by Fowles (1993) above.

However, the interpretation of transcarceration by Weller and Weller (1988) is very limited and as such studies that criticise their work are themselves very narrow (including to some extent the work of Steadman et al, 1984, 1987 and Fowles, 1993 described here in this chapter). A much more sophisticated understanding of a transcarceral model of social control has built on Foucault's argument that discipline and surveillance create a more extensive form of power (a 'carceral archipelago) in which the power to punish is inserted more deeply and more certainly into the social fabric (Rabinow, 1991). This approach deals with a peno-juridical, mental health, welfare and tutelage complex (Donzelot, 1979) in which power structures can be examined only by appreciating cross-institutional arrangements and dynamics. As Lowman et al (1987) observe, privatisation, decontrol, decentralisation and deinstitutionalisation and so on, have consequences for security, courts, prisons, probation, welfare and mental health. For delinquents, deviants and dependants, this means that their careers are likely to be characterised by institutional mobility, as they are pushed from one section of the help-control complex to another. For control agents, this means that 'control' will essentially have no locus and the control mandate will increasingly entail the fitting together of subsystems rather than the consolidation of one agency in isolation from its alternatives. This transcarceral approach to social control therefore incorporates criminalisation as only one method among many, including medicalisation – an alternative method or hypothesis which will be discussed later in this thesis. These are the processes by which people are moved around the health/social care and criminal justice systems. In other words, transcarceration is the model and criminalisation/medicalisation are the processes by which individuals end up in either the prison system or hospital. In this sense the transcarceral model of control and the criminalisation process are more easily sustained intellectually, and to some extent, empirically.

2.4. The public's attention

2.4.1 The Media

The mass media are a powerful factor in the construction of images about mental abnormality and consequently on how people with a mental disorder are seen in the public eye. According to Pilgrim and Rogers (1999) "[t]he mass media can act as conduits for interest groups" – for example, in 1997 a BBC Panorama programme took a lengthy account from a psychiatrist operating in an inner city mental health unit to highlight his professional concerns about resources. Therefore on the one hand the media can be a force for good, publicising the values and goals of interest groups, allowing them to argue and persuade in the presence of an audience who might normally be excluded from such debate. However on the other hand there is a bias to the perspectives represented by the mass media and the news is generally sold on the back of sensation, crisis, audience shock and intrigue. Positive images and more complex arguments can be perceived as boring, whereas negative images elicit a stronger audience reaction. Often the media construct stories in a series of themes with a connecting moral panic. At the centre is a hostile target, for example a social group that is being demonised, criticised or feared – for example, homosexuals, single mothers, people who carry HIV, or as in this case, psychiatric patients. News stories that pay such critical attention to mental health can be divided into two types. On the one hand they can be about services, staff or current or proposed policy. For example many headlines criticise community care in one way or another:

Figure 2.4 : Examples of Newspaper Headlines Criticising Care in the Community

The Guardian, *Care in the community is 'massively underfunded'*, Saturday May 18th 1996.

The Guardian, *Cash hit courts 'are not using' mental tests*, 11th July 1996.

The Guardian, *Care efforts 'hit by Nimby'*, Monday June 7th 1997.

The Guardian, *Spiralling cost of care in the community*, Tuesday July 1st 1997.

Daily Telegraph, *Care in the community is scrapped*, Saturday 17th January 1998.

The Guardian, *More mental hospitals set to close*, Wednesday 1st April 1998.

BBC News Online[6], *Mental illness 'rife' in prison*, Friday June 26th 1998.

BBC News Online, *Mentally ill offenders caught in vicious circle*, Thursday November 5th 1998.

BBC News Online, *Crisis in mental health*, Wednesday February 17th 1999.

BBC News Online, *Police on mental health frontline*, Thursday March 18th 1999.

BBC News Online, *Mental illness missed by co*urts, Friday March 26th 1999

BBC News Online, *Mentally ill 'denied crisis c*are', Friday April 16th 1999.

BBC News Online, *Black men 'failed' by mental health system*, Monday October 4th 1999.

BBC News Online, *Jails 'fail' mentally ill*, Thursday April 13th 2000.

These stories have in common the mentally disordered as victim...of the system, government policy or public attitude. However, this is much less common than the other type of mental health news storey that have at the centre sinister images of psychiatric patients:

[6] http://news2.thls.bbc.co.uk/

Figure 2.5 : Examples of Headlines Portraying Sinister Images of Psychiatric Patients

The Guardian, *Killings bring care in community row*, Saturday January 6th 1996.

The Guardian, *Mentally ill gunman had absconded twice in days*, Saturday January 6th 1996.

The Guardian, *Psychotic killer jailed for life as judge orders attack inquiry*, Saturday January 6th 1996.

The Guardian, *Schizophrenic freed to kill mother and brother*, March 7th 1996.

The Guardian, *No staff prosecution over 'predictable' killing*, March 11th 1996.

The Guardian, *Getting into the mind of a killer: Health workers 'must look closer at mentally ill before release'*, Thursday March 28th 1996.

The Guardian, *Mentally ill driver left free to kill*, Tuesday April 23rd 1996.

The Guardian, *Mother sent to psychiatric hospital for knifing child*, May 3rd 1996.

The Guardian, *Mentally ill killer sent to hospital after life terms quashed,* May 10th 1996.

The Guardian, *Social worker's warning on killer 'not passed on'*, Friday June 14th 1996.

The Guardian, *Care failures led to fatal stabbing*, June 28th 1996.

The Guardian, *Anger at inquiry into sick killer*, Friday October 25th 1996.

The Guardian, *'Mentally ill' man arrested after baby stabbed in pram*, January 1st 1997.

The Guardian, *Mother of schizophrenic killer hits out after damning report*, March 8th 1997.

The Guardian, *Mental patient fled hospital and knifed baby*, June 4th 1997.

The Guardian, *Schizophrenic 'lawfully killed' by police to save hostage*, June 28th 1997.

The Guardian, *Community care blamed for killings*, October 13th 1997.

BBC News Online, *Psychopathic killer appeals for freedom*, Monday October 12th 1998.

BBC News Online, *Scissors death report criticises health workers*, Friday November 13th 1998.

The Guardian Online[7], *Patient held after stabbing*, Tuesday March 9th 1999.

BBC News Online, *Killing of carer reveals gaps in law*, Wednesday July 14th 1999.

[7] http://www.guardianunlimited.co.uk/

It is clear from the distinction between the above two headline categories that there is a bifurcation of images presented by the media. On the one hand, the press has portrayed mental health service users as potentially dangerous, violent and unpredictable, and on the other, although to a somewhat lesser extent, as pathetic victims of their illness or 'the system' who should be pitied. Peay (1994) points out that there is a general confusion – in both policy and research, but reflected here in the typology of media stories – which arises because of the tensions inherent across both the continuum of ordered-disordered behaviour and that of law abiding-law breaking behaviour. Notions of care/treatment are seen as peculiarly appropriate for the seriously disordered, provided such condition does not arise in conjunction with offending of a worrying nature. Similarly notions of protection/punishment are traditionally confined to serious offenders, again assuming an absence of obvious disorder. Yet these tensions are confounded where disorder and offending exist side-by-side in one individual or, worse still, interact. In these circumstances the media has cultivated an impression of widespread, random and irrational danger.

Link and Cullen (1986) argue that in the absence of direct contact with the mentally ill, the public is influenced by cultural stereotypes conveyed through jokes, newspaper accounts and television dramatisations. Since the mentally ill are often portrayed as dangerous and unpredictable, members of the public who have had little contact are thus influenced by these stereotypes and perceive the mentally ill to be relatively dangerous. The authors' own research found a statistically significant inverse association between contact with mental patients and perceptions of how dangerous they are. Therefore they suggest when individuals are exposed to former mental patients there is a significant tendency to revise their beliefs, not only toward the particular individual contacted, but toward former mental patients in general. In the absence of such widespread direct individual contact, media accounts remain a dominant influence. As a consequence of these impressions, and even though it has

been established that people with a mental disorder make a minimal contribution to violence in society, the issue of dangerousness became a major political issue in the context of wider concerns about the legitimacy of community care legislation, policy and practice.

2.4.2 The Inquiries

This preoccupation, as described in the previous Section, with images of violence has served to distort the process of evaluating the effectiveness of the mental health system in supporting service users in the community. A variety of reports into the care and treatment of those mental health service users involved in homicides has pointed to inadequacies in the mental health system. For example, the inquiry most often referred to is that which involves Christopher Clunis (Ritchie et al, 1994). Christopher Clunis' storey is typical of those that went before and have occurred since. Briefly, the Christopher Clunis story can be summarised as follows:

On the 17th December 1992, Christopher Clunis, a 31 year old London born Afro-Caribbean stabbed to death Jonathan Zito. In the following inquiry it transpired that Clunis had been shunted between authorities and services in the absence of adequate follow-up procedures. A known paranoid schizophrenic patient, Clunis had avoided taking his medication and had become increasingly disturbed, manifesting violent behaviour. For many reasons including the avoidance of stigmatising a person from an ethnic minority and the lack of resources, the system failed to support either Clunis himself or his family. His condition deteriorated and he murdered a complete stranger.

In the ensuing report the central themes to emerge were concerned with Section 117 of the Mental Health Act referring to aftercare of hospitalised mentally ill; Health Circular (90) 23/LASS Letter 90/11 requiring Health and Social Services to

establish the Care Programme Approach (CPA); Supervised Discharge orders announced by the Secretary of State for Health in August 1993; and the introduction of Supervision Registers (NHS Management Executive, 1994). This 'flurry' of government will can be seen as a direct response to public outcry over what was being perceived, in response to media reports, as a failed government initiative. Mason and Mercer (1999) describe society was outraged and the media horrified as the community care programme was supposed to effectively manage psychiatric patients in the community. This politically driven impetus for care in the community was heavily criticised on the grounds of being under resourced. However the structural deficiencies described in this and other inquiries have been overshadowed by the media's amplification of the threat of violence. According to Coppock and Hopton (2000) such negative stereotyping has served to fuel a moral panic around the perceived dangerousness of individuals with a mental disorder in the community.

2.5. Discussion

The aim of this chapter has been to explore the context out of which emerged current government policy for the care and treatment of mentally disordered offenders which is discussed in detail in the following chapter four. By context I mean the particular local, historical or institutional environment or framework within which actions and structures have meaning. As Pawson and Tilley (1997) explain, social context should not simply be understood as the spatial, geographical or institutional location into which programs are embedded, instead 'it is the prior set of social rules, norms, values and interrelationships gathered in these places which sets limits on the efficacy of program mechanisms'.

Why is it important to recognise context? Pawson and Tilley, in their description of what a realist evaluation of social programs would look like, argue that 'all social

programs wrestle with prevailing contextual conditions'. Programs, they contend, are always introduced into (although I would suggest they also emerge from) pre-existing social structures and these prevailing conditions are crucial when it comes to explaining their success or failure. Therefore context is important because 'the relationship between causal mechanisms and their effects is not fixed, but *contingent*' (my emphasis), in other words it is the 'contextual conditioning of causal mechanisms which turns (or fails to turn) causal potential into a causal outcome'.

What do I mean by contingency? In brief, I mean dependent or reliant upon, conditional or subject to context. This contrasts with 'constant conjunction' which 'presupposes that the system within which causal relations are observed is isolated from extraneous influences (Outhwaite, 1987). Gould (1991) explains:

> "I am not speaking of randomness...but of a central principle of all history – *contingency* [original emphasis]. A historical explanation does not rest on direct deductions from laws of nature, but on an unpredictable set of antecedent states, where any major change in any step of the sequence would have altered the final result. This final result is therefore dependant on, contingent on, everything that came before – the uneraseable and determining signature of history." (283).

Gould cites Capra's superb old film '*It's a Wonderful Life*', – "Each man's life touches so many other lives, and when he isn't around he leaves an awful hole" – (see Figure 2.6), as an example of contingency and the related ideas of 'bifurcation' and 'sensitivity to initial conditions'.

Figure 2.6 : Poster Advertising the Film 'It's a Wonderful

Byrne (1998) explains: the interesting phenomenon is the decent, humane, co-operatively founded Bedford Falls on the one hand, and the rentier-induced urban horror of Pottersville on the other, are exactly the two side of bifurcation – the two wings of the butterfly attractor. The difference (or the determining perturbation as Byrne describes it) is the 'wonderful life' of George Bailey. Clarence the angel has to show George *what* he has done, but Byrne reminds us that George was shown *how* to do it long before and well understood what was to be done.

He was imitating the actions of his father and took over responsibility for the Savings and Loan when his father died, precisely because he had the same combination of moral values and general competence. George Bailey well understood his own actions and was always conscious of the reasons why he acted the way he acted. However, what he didn't see until shown by Clarence was the non-linear product of those small perturbations in the locality of the bifurcation.

What has this got to do with the development of current approaches to mentally disordered offenders? What were the differences or 'determining perturbations' that have lead to the development of current government policy and without which a different situation could be envisaged? This chapter has shown that the emergence and application of the policy of diversion from custody for mentally disordered offenders was 'dependant', 'reliant', 'conditional', 'subject' to the initial policy change involving deinstitutionalisation or the closure of the Asylums, followed by failures of care in the community, a transcarceral mode of social control and public attitudes towards deviancy. All of which led, via the process of criminalisation, to the creation of significant numbers of mentally disordered offenders (in particular to mentally disordered people in the prison and remand systems).

Pawson and Tilley (1997) assert that:

> "The basic task of social enquiry is to explain interesting, puzzling, socially significant regularities (R). Explanation takes the form of positing some underlying mechanism (M) which generates the regularity...Within realist investigation there is also investigation of how the workings of such mechanisms are contingent and conditional, and thus only fired in particular local, historical or institutional contexts (C)." (p.71)

Pawson and Tilley recommend the following formula:

regularity = mechanism + context

...amended by Byrne (1999) as follows:

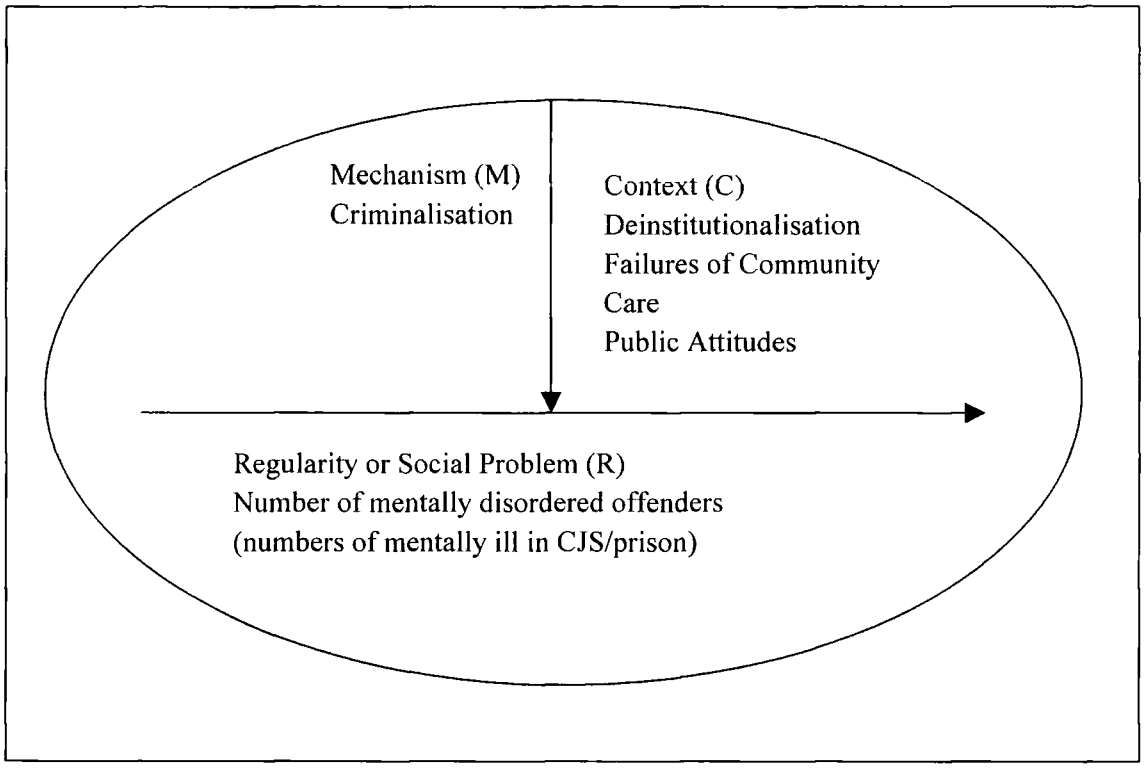
mechanism & context ⟶ regularity

...which can be translated as follows:

criminalisation & (deinstitutionalisation & failures of community care & public attitudes & transcarceral social control) ⟶ numbers of mentally disordered offenders

...or as a diagram using the format provided by Pawson and Tilley (Figure 2.7):

Figure 2.7 : Realistic Social Explanation of the Problem of Mentally Disordered Offenders



The following chapter three describes the development and implementation of the policy of diversion from custody of mentally disordered offenders, an alternative mechanism (M2) developed to counteract the process of criminalisation.

3. A HISTORY OF THE GOVERNMENT'S RESPONSE TO THE SOCIAL CONTROL OF A DEVIANT POPULATION

The previous chapter, chapter three, describes the complex context that comprised the issues concerned with the treatment of mentally disordered offenders. The Government needed to respond to a situation which included deinstitutionalisation and the failures of community care policy; concerns about the prevalence of psychiatric disorder in sentenced and remand prison populations; concerns that this proportion may be increasing due to transcarceration and/or criminalisation of people with a mental disorder; and public concern fuelled by media images and the outcomes of public inquiries. A point had been reached in the development of mental health policy when bifurcation or change was inevitable. The new direction would depend upon decisions taken by the government within the given complex social and political context. Yet despite this complexity, Peay (1994) argued that initial Government policy was disarmingly straightforward:

> "Mentally disordered offenders, should, wherever appropriate, receive care and treatment from health and social services rather than in custodial care" (The Department of Health and Home Office, 1991a: Community Group para. 2.1).

Put simply, Government responded to the situation by developing a policy of diversion and discontinuance whereby mentally disordered offenders would be diverted away from the criminal justice system to the health and social care systems. Too many mentally disordered prisoners? Then it seemed the solution was straightforward – take them out of the 'inappropriate' system (the criminal justice system) and put them in the 'appropriate' one (the health and social care system). The benefits of this action seemed equally obvious both for the mentally disordered offender and the community. For instance, according to the National Association for

the Care and Resettlement of Offenders (NACRO, 1993) diversion is better because it tends to lead to more positive outcomes which not only deal with the alleged offence itself but which also respond to the mental health needs of the offender. They go on to argue that:

> "Such a response is most likely to reduce the chances of further offending. Dealing with an offender's mental health problems appropriately, and at the earliest possible opportunity, also means that the overall demand on professional time and resources is likely to be minimised. Other professionals in the criminal justice process can often spend long periods of time trying to deal with such offenders, often to little effect." (p.12)

This initial policy of diversion away from the criminal justice system mirrored a humanitarian view widely held since the introduction of the Mental Health Act 1959 and underlined by the Butler Report (Department of Health and Social Security, 1975) namely that "In making a Hospital Order the court is placing the patient in the hands of the doctor, foregoing any question of punishment and relinquishing from then onwards its own controls over them" (para. 14.8). Where mentally disordered people offended, punishment and protection were not over-riding criteria, nor even relevant ones. However, the tensions described in chapter three between care/treatment on the one hand and protection/punishment on the other, remained and found expression in for instance, the Report on Mentally Disturbed Offenders in the Prison System (Home Office/DHSS, 1987). In the context of transferring prisoners to hospital for treatment, this report cautioned that, "the response to the needs of individual mentally disturbed offenders has to take account of the legitimate expectation of the public that government will take appropriate measures for its protection" (para. 3.6). Indeed the policy of diversion was not without its

critics who argued that diverting mentally disordered offenders away from prosecution and/or custody was not always appropriate. One objection was based on the argument that prosecution and a court disposal was necessary in some cases in order that a restriction order could be made, providing some control, in terms of public safety, over the person's progress through the hospital system and back into the community. Another argument was that it was important from a therapeutic perspective that a mentally disordered offender was given the chance to 'face up to' the fact and significance of his or her offending. NACRO (1993) also argued that it was a person's right to have the allegation against them and the supporting evidence tested in a court of law, particularly where the alleged offender denied it. Further difficulties emerged because of the difference between an offence committed as a direct consequence of a mental disorder and an offence that was not directly related in this way but where it was subsequently recognised that the offender was mentally disturbed (i.e. mental illness as a cause of the offence Vs mental illness caused afterwards by the nature of the offence or court sentence).

However, despite these difficulties, arguments in favour of diverting mentally disordered offenders from prosecution have proved, on balance, more persuasive than those against. NACRO (1993) pointed out that the principle of diversion became well established across the criminal justice system for a number of groups of offenders:

> "The argument about how best to meet the need of mentally disordered offenders, while at the same time ensuring that the interests of the wider community are served, firmly locates mentally disturbed offenders as one of these groups." (p.13)

This chapter examines the development of the policy and practice of diversion for mentally disordered offenders. The first part, Section 3.1, describes those government publications that have been most influential and which reflect the development of this policy over time including: the Butler Report (1975), Home Office Circular 66/90 (1990), the Health of the Nation White Paper (1992), the Reed Report (1992), Home Office Circular 12/95 (1995), and finally the National Service Framework for Mental Health (1999). Section 3.2 goes on to examine the twofold implementation of this policy, including the improved use of existing resources and the development of new and specific provisions for mentally disordered offenders – in particular the development of 'diversion schemes' across the country.

3.1. Government Publications

There have been a number of official publications concerned with the care and treatment of mentally disordered offenders issued by various government departments - besides the relevant laws described in Acts of Parliament, the Home Office and the Department of Health have released a variety of reports, guidelines, consultation documents, white papers, circulars, green papers, letters, documents and command papers. This Section describes those that have been considered most important.

3.1.1 The Butler Report (1975)

The specific needs of mentally disordered offenders were examined in 1972-1975 by the Butler Committee (Department of Health and Social Security, 1975). The Committee concluded that:

> "The overriding need is to provide the best possible treatment for the patient's mental disorder and he should have full access to

> treatment in the best location that will suit his needs. Ultimately in individual cases this must depend on clinical judgement, but in general policy we hope that humane counsels will prevail, and that considerations of a patient's background will not be allowed to obscure that basic principle" (para. 1.10).

This was also the first report to recommend that mentally disordered offenders should be dealt with other than through the courts:

> "Where any apparent offender is clearly in urgent need of psychiatric treatment and there is no risk to members of the public the question should always be asked whether any useful public purpose would be served by prosecution...these remarks apply in cases of homicide or attempted homicide or grave bodily harm as in less serious cases" (para. 2.66).

Butler went on to recommend the provision of 2,000 places in secure hospital units below the levels of security obtaining in the Special Hospitals. In parallel, the Glancy working party (Report of the Working Party on NHS Psychiatric Hospitals, DHSS, 1974), which addressed the needs of those already in hospital, proposed 1,000 such places. Between them these recommendations gave rise to the medium (or Regional) secure unit programme.

3.1.2 Home Office Circular 66/90

The 1990s marked a watershed in approaches to mentally disordered offenders beginning in September when the Home Office supported by the Department of Health issued Circular 66/90, Provision For Mentally Disordered Offenders (Home Office 1990a). The intention of Circular 66/90 was twofold: first, to draw to the

attention of criminal justice agencies those legal powers relevant to the mentally disordered; second, to reinforce the desirability of ensuring the best use of resources and to ensure that the mentally disordered were not prosecuted where this was not required by the public interest. Diversion and discontinuance mechanisms were promoted as means of ensuring that mentally disordered offenders did not get caught up needlessly in the criminal justice system. Paragraph 2 stated:

> "It is government policy that, wherever possible, mentally disordered persons should receive care and treatment from the health and social services. Where there is sufficient evidence...to show that a mentally disordered person has committed an offence, careful consideration should be given to whether prosecution is required by the public interest."

The circular went on to recommend that alternatives to prosecution should be considered first before deciding that prosecution is necessary. Recognition was given to the fact that this policy could only be effective if the courts and criminal justice agencies had access to 'alternatives' from the health and social services. This would require consultation and co-operation between the agencies and the second part of the circular provided guidance on the establishment of a working relationship between the courts, criminal justice agencies and health and social services.

A summary of main points made in Home Office Circular 66/90 were provided as follows:

1. Chief Officers of Police are asked to ensure, taking account of the public interest, consideration is always given to alternatives to prosecuting mentally disordered offenders, including taking no further action where appropriate, and that effective arrangements are established with local health and social services

authorities to ensure their speedy involvement when mentally disordered persons are taken into police custody;

2. Courts are asked to ensure that alternatives to custody are considered for all mentally disordered persons, including bail before sentence, and that persons who are in need of medical treatment are not sent to prison. The attention of court clerks is drawn, in particular, to the desirability of establishing arrangements in co-operation with the probation service and local health and social services authorities, for speedy access to professional advice for the court to assist it in its decision making;

3. Chief Probation Officers are asked to ensure that effective arrangements are established to provide courts with information and advice to enable them to make use of alternatives to imprisonment in dealing with mentally disordered offenders. Attention is drawn to the need to co-operate with local health and social services authorities to provide professional advice to courts and to facilitate a wider use of treatment and non-custodial disposals, including remands on bail before sentence and psychiatric probation orders and guardianship orders, where appropriate, after conviction; and

4. Prison medical officers are asked to ensure that action is taken to arrange for transfer to hospital under the provisions of Section 48 of the Mental Health Act 1983 in respect of any mentally ill or severely mentally impaired person remanded in custody who appears to require urgent treatment in hospital, and to consider advising the courts of the suitability of any other mentally disordered person on remand for treatment as part of a non-custodial disposal, such as a psychiatric probation order or guardianship order, after conviction. Prison medical officers are asked to ensure that action is taken to arrange the transfer to

hospital under the provisions of Section 47 of the mental Health Act 1983 of any sentenced prisoner who appears to require treatment in hospital for mental disorder.

As well as encouraging increased access to existing provision, Circular 66/90 was credited with stimulating the development of new and specific provisions for mentally disordered offenders, particularly dedicated inter-agency schemes whose aim was the identification and diversion of mentally disordered offenders from the criminal justice system. Annex B described innovative psychiatric liaison schemes to magistrate's courts as examples of good practice. Support for such initiatives was picked up later in Home Office Circular 12/95 described in this chapter on page 67.

3.1.3 The Health of the Nation White Paper

Published in 1992, the *Health of the Nation* strategy was the central plank of health policy in England and formed the context for the planning of services provided by the NHS. Its importance lay in the fact that it represented the first explicit attempt by government to provide a strategic approach to improving the overall health of the population. The strategy focused on five key areas: coronary heart disease and stroke; cancer; HIV/AIDS and sexual health; accidents; and finally mental illness. Each had a statement of main objectives attached to it, together with 27 targets across the areas.

In the case of mental illness and more specifically, mentally disordered offenders, it drew attention to:

1. the need for close cooperation between the various health, personal social services, and criminal justice agencies, given the complex links between the

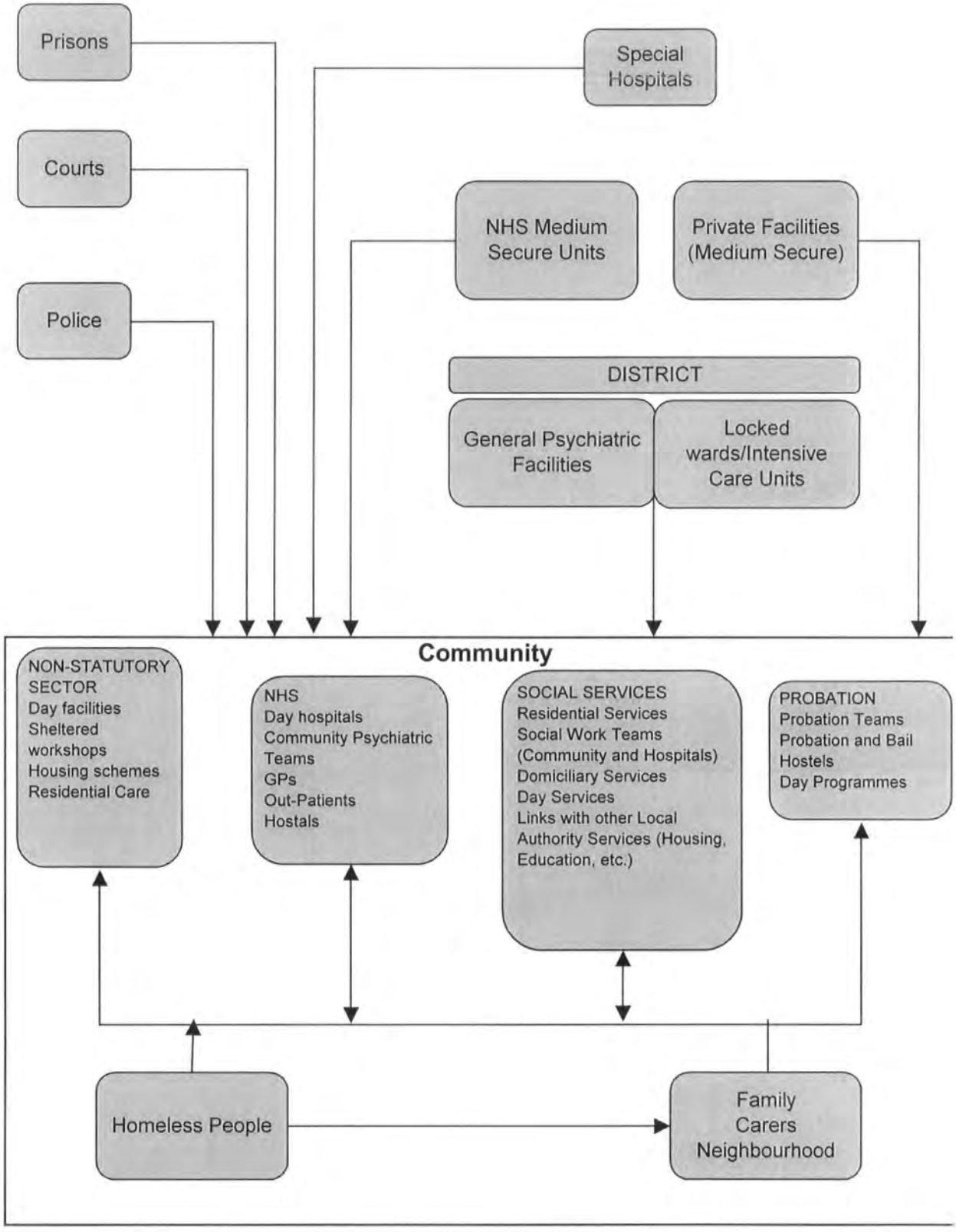
various components – the strategy provided a diagram describing this complexity (see Figure 3.1, p.64);

2. the importance of diverting offenders from the criminal justice system to health and social care as early as possible;

3. the need for authorities to include in their strategic and purchasing plans the necessary range of health and social services to enable them to respond to people's special needs.

This was seen as the essential compliment to the diversion and discontinuance arrangements promoted in Circular 66/90. Emphasis was also given to the ('net-widening') position that services for mentally disordered offenders should be concerned not only with those to whom the provisions of the Mental Health Act 1983 apply, but other mentally disordered people who come into contact with the criminal justice system, as well as suspected offenders. This was highly relevant to the concern about the care of the wide range of mentally disordered people who were considered vulnerable or potentially violent.

Figure 3.1 : Mentally Disordered Offenders: Sources of discharge or release into the community (Health of the Nation, 1992, p.4)



3.1.4 The Reed Report

The Review of Health and Social Services for Mentally Disordered Offenders and Others Requiring Similar Services (otherwise known as the Reed Report) was established in 1990 and published its final summary report in 1992. The review explicitly acknowledged the 'inheritance', including the Butler Report, Circular 66/90, as well as current government policy:

> "...that mentally disordered offenders needing care and treatment should receive it from the health and personal social services rather than in custodial care." (p. 7 para. 3.1)

Despite this inheritance and explicit policy, however, it was recognised in the report that 'practice all too often falls a long way short of what is desirable'. In other words the policy of diversion from custody was not being translated into practice so that there continued to be significant numbers of mentally disordered people in prison. How to meet these shortfalls in both practice and provision was the reason behind the Reed review. In particular, emphasis was placed on the following issues (p.7):

1. the level and range of provision that needs to be in place to enable mentally disordered offenders...to receive care and treatment in the most suitable location;

2. the mechanism that will:

    a) estimate the numbers needing specialised services;
    b) identify and assess the needs of those who should be diverted before entry into the criminal justice system;

c) ensure effective joint working between the range of agencies locally (a process already strongly promoted by Home Office Circular 66/90) and Government departments nationally; and

d) make the most of available resources and ensure that there are no disincentives or unnecessary obstacles to providing the most effective care.

The review proposed five, often quoted, guiding principles for service provision (p.7). These were that patients should be cared for:

1. with regard to the quality of care and proper attention to the needs of individuals;

2. as far as possible, in the community, rather than in institutional settings;

3. under conditions of no greater security than is justified by the degree of danger thy present to themselves or others;

4. in such a way as to maximise rehabilitation and their chances of sustaining an independent life;

5. as near as possible to their own homes or families if they have them.

Over the two years during which this review was undertaken, 10 advisory group reports and a number of discussion papers were published, offering a total of 270 recommendations covering: service needs; finance, staffing and training; the academic and research base; and special issues and differing needs. Clearly this is not the place to re-produce each and every one of these separate recommendations, however there were two sets of proposals that are of particular interest and relevance. These include those covering 'diversion and discontinuance' (Report of

the Community Advisory Group, 1991a) and 'diversion and transfer from prison' (Report of the Prison Advisory Group, 1991b). Diversion, discontinuance and transfer are offered because they are mechanisms that could potentially counteract the effects of criminalisation. Diversion in these reports means re-routing an individual away from the criminal justice system to the health and social services. Discontinuance refers to the decision available to the police, Crown Prosecution Service and the courts to terminate criminal charges. Transfer refers specifically to transfer from prison to health and social services for those who slip through the earlier diversion or discontinuance 'net'.

Haynes and Henfrey (1995) argue that the Reed Review and sections of Health of the Nation (described earlier) have important common themes, including: encouraging a more clear and consistent partnership between criminal justice agencies and health and social care agencies; the need for generic mental health services to adapt to allow for the delivery of services to offenders; and a development of some new specialist services to compensate for specific areas of need where generic services do not suffice (which re-emphasises the governments dual approach adopted at the outset in Home Office Circular 66/90: better use of existing resources; and specialist or specific provision where required).

3.1.5 Home Office Circular 12/95

Where Home Office Circular 66/90 provided advice about the provision for mentally disordered offenders within the criminal justice system and the health and social services (setting out existing powers and encouraging inter-agency co-operation), the purpose of Circular 12/95, was to describe central government initiatives and local practical initiatives undertaken in the intervening period.

The key central government initiatives included in this Circular were the 'Reed Report' (1992) and the Health of the Nation White Paper (1992) – both described earlier in this chapter. Each of these reports is described as emphasising the need for close co-operation between all agencies concerned so that mentally disordered offenders who needed specialist health and social care received it as soon as possible. The importance of such inter-agency working formed a central feature of Circular 12/95, as it had with those previously described. Emphasis was given to the 'full and timely sharing of information by all agencies having contact with mentally disordered offenders'. Such collaboration was described as essential if each agency was to 'discharge its responsibilities effectively and to take sound decisions where *health, liberty and the safety of the public are all at stake*' (my emphasis).

Previously, following publication of Circular 66/90, the Home Office and Department of Health had sought to encourage the development of specialist local initiatives by making additional funding available for practical schemes. Circular 12/95 reported a proliferation of such local inter-agency schemes: from education and dissemination of information up to full-blown multi-agency mental health assessment schemes.

Bearing in mind events since the issue of Circular 66/90 (including a number of well publicised inquiries into homicides committed by individuals with a mentally disorder and an increasing emphasis in the media on violent images of mental illness, described previously in Section 2.4 'The public's attention'), this Circular placed much more emphasis on issues of public protection:

> "[Recipients of the circular are asked to] look again at existing local arrangements for responding to mentally disordered people who offend to decide what further action should be taken, in co-

> operation with other agencies, to ensure that the health and social care needs of individuals are met while *having proper regard for public safety* (my emphasis)." (para.18)

A major section of Circular 12/95 provided advice on when to charge and prosecute, continuing the emphasis on the protection of the public:

> "Provided sufficient evidence exists, the decision whether to charge must be guided by *what is in the public interest* (my emphasis). The existence of mental disorder should never be the only factor considered and the police must not feel inhibited from charging where other factors indicate prosecution is *necessary in the public interest* (my emphasis)." (para.12)

and:

> "...But it is important for the decision of the CPS to be taken in context. The needs of the defendant must be balanced against *the needs of society* (my emphasis); if the offence is serious, it remains likely that a prosecution will be *needed in the public interest* (my emphasis)." (para.14)

and:

> "Inter-agency arrangements should therefore aim to ensure that where offences have allegedly been committed by mentally disordered people, the *question of public safety* (my emphasis) and any relevant information about the person's history are taken fully into account when deciding whether to charge..." (para.16)

Since the publication of Circular 66/90, much of the emphasis concerning mentally disordered offenders had been on their care and treatment, and in particular, on diversion away from the criminal justice system and prison as a response to concerns about criminalisation and the reported numbers of mentally disordered prisoners. This it seemed was interpreted ultimately to mean non-prosecution of any offence committed by a mentally disordered individual. One of the criticisms to come out of the spate of early public inquiries, particularly of the Ritchie Report (1994), was the absence of any record of the increasingly serious or 'worrying' nature of the offences committed prior to the index offence at the centre of the inquiry. Such a record it was claimed may have drawn someone's attention to the increasing risk or threat posed to the public, or at least would have informed an assessment of risk. Circular 12/95 stressed much more of a balance:

> "In cases of any seriousness, a prosecution will usually take place unless there are public interest factors tending against prosecution which clearly outweigh those in favour...The needs of the defendant must be balanced against the needs of society; if the offence is serious, it remains likely that a prosecution will be needed in the public interest." (para.14)

Home Office circular 12/95 reflected an important change in the emphasis of government policy. Initial government statements published in Circular 66/90 concerning the diversion of mentally disordered offenders from prosecution had been criticised as too simplistic by some and as 'risky' by others. By the time Circular 12/95 was published emphasis had moved from 'diversion from prosecution and custody' to 'diversion to care and treatment by health and social services whilst supporting the individual, systems and services during the necessary process of prosecution by the criminal justice system'. It was also at this point that

the term 'custody diversion' stopped being used in the titles of many of the initiatives set up in response to Circular 66/90 (e.g. Custody Diversion Team for Mentally Disordered Offenders became Psychiatric Liaison Team).

Whilst this variation on the theme of diversion recognised much more the complexity of the context within which it was to be applied and the corresponding variability of approaches appropriate to individual cases, it made the evaluation of this policy, and the practical schemes whose aim was to implement it, much more difficult. Previously, success or failure could be measured against the numbers diverted – from prosecution, from custody, from the criminal justice system generally (although in reality it was never as simple as this because not all mentally disordered offenders faced a custodial sentence or indeed prosecution). Now however the aim was not diversion from anything but diversion to 'appropriate' forms of care and treatment. There was much more of a case-led focus – how should this be evaluated? It seemed to me during this time that the only way to properly evaluate such a complex process was to explore the careers of those who come into contact with those initiatives seeking to implement the policy. I explore this in greater detail in a later chapter.

3.1.6 National Service Framework for Mental Health

The next government publication described in this Section is the National Service Framework for Mental Health (1999). The programme of national service frameworks was part of the government's agenda to improve quality and reduce variations in health and social services by setting standards and monitoring performance. The National Service Framework for Mental Health One was one of the first frameworks to be published. Expressly founded on 'knowledge-based practice and partnership between those who use and those who provide services', the National Service Framework for Mental Health addressed the mental health needs of

working age adults up to 65. Standards were set in five areas including: mental health promotion; primary care and access to services; effective services for people with severe mental illness; individuals who care for people with mental health problems; and action necessary to achieve the target to reduce suicides. Mentally disordered offenders were alluded to throughout the report.

Standard one, in the area of 'mental health promotion', stated that health and social services should promote mental health and social inclusion, and combat discrimination. Mental disorder, it was argued, could both be caused by the 'adverse factors' associated with social exclusion and also be a cause of social exclusion. One of the examples provided describes the high number of mental health problems in the prison population. Standard one would be achieved by inter-agency health improvement programmes and local mental health strategies aimed at whole populations, vulnerable groups (including 'those in prison') and individuals at risk. Performance would be assessed by measuring the long-term improvement in the psychological health of the population using the National Psychiatric Morbidity Survey; a reduction in suicide rates; and proof of the existence of health improvement programmes working with schools, workplaces and neighbourhoods, vulnerable groups and individuals at risk.

Standards two and three dealt with primary care and access to services. The framework asserted that the primary care team provided the majority of all health care, and that whilst this should also be the case for the majority of mental health needs there also needed to be the capacity to refer for specialist advice, assessment and care.

The Section dealing with effective services for people with severe mental illness included standard four, which described the use of the Care Programme Approach

(CPA) and standard five, which covered people needing inpatient or respite care. It was acknowledged that some individuals had behavioural and other types of problems and could pose a risk to themselves and/or others. The use of the CPA for people with severe mental illness should help prevent or anticipate crisis, reduce risk and deal with emergencies. Along with this, any inpatient care needed should be 'in the least restrictive environment' consistent with the need to protect the service user and the public, and it should be as close to their home as possible. There should also be a post-discharge plan covering care, rehabilitation and strategy in a crisis.

In order to achieve these standards local health and social services were directed to integrate CPA and care management and implement the new arrangements for standard and enhanced CPA. Emphasis was placed on implementing arrangements for the "*assessment and care of people who are detained by the police, brought before a court or are in prison*" (my emphasis). The report goes on to state that staff should be able to assess and manage risk of violence or self-harm and to deal with violent individuals. Local protocols for the care of people with severe mental illness should include a protocol for sharing information. Assertive outreach and 'effective medication' should be used with those service users at risk if they lose contact with services. Arrangements to prevent and manage crisis should be integrated and include access to services around the clock. There should be a balanced variety of accommodation types available to ensure access and enable effective use of resources. Finally, local health and social services were directed to establish 'explicit and consistent' arrangements for access to services around the clock (which includes people detained by the police). Achievement of these standards would be measured against a number of indicators including the long-term improvement in the psychological health of the population; access to a variety of 24-hour services; and reduction in the suicide rate.

Standard six relates to the fourth area 'Caring about carers' and specified that carers should have their own needs assessed yearly and described in a care plan. It recognised the vital role that carers play and the support they need to continue doing it. Performance would be assessed by, amongst other things, improved satisfaction and confidence among carers about local services.

Finally the last area to be considered in this framework was preventing suicide. Standard seven stated that local health and social services should prevent suicides by implementing the previous six standards, as well as 'supporting local prison staff in preventing suicides among prisoners'; ensuring staff were able to assess the risk of suicide; and learning from previous suicides.

This report is aimed at people who have mental health problems generally rather than specifically at mentally disordered offenders. However it does make a number of references to the services (both existing and specialised) expected to avoid problems and meet the needs of mentally disordered offenders, or those who are violent or who pose a threat. It is explicit about what measurements will be used to evaluate the overall implementation of this programme, including the long-term improvement in the psychological health of the population using the National Psychiatric Morbidity Survey; a reduction in suicide rates; and the provision of a wide range of 24 hour services. However such a programme of evaluation adopts a 'broad brush' approach, part of which involves smoothing away the complexities in order to provide an overview. Whereas it is the complexities that are of interest in terms of mentally disordered offenders and the impact of the policy of diversion.

3.1.7 A Review of the Mental Health Act

A White Paper has been published (Reforming The Mental Health Act, 2000) which sets out the Government's proposals for improving and modernising services for

people with mental health problems. This will be achieved through new legislative powers, new resources and new national standards for care and treatment in the Mental Health National Service Framework (discussed above). The White Paper argues that while in the vast majority of cases those people pose no threat, in a minority of cases people with mental health problems may pose a serious threat to the safety of others.

Public protection is described as one of the Government's highest priorities. While part one of the White paper sets out proposals for changes to the Mental Health Act, part two (Reforming the Mental Health Act - Part II - High Risk Patients, 2000) shows how these changes will operate for the 'high risk group' within the context of extra resources for improved specialist services. In particular it identifies 'patients who pose a significant risk of harm to others' including:

> "...a number of individuals whose risk is a result of a severe personality disorder. A narrow interpretation of the 'treatability' provision in the 1983 Act, together with a lack of dedicated provision within existing services, means that current arrangements for this group are inadequate both to protect the public and to provide the individuals themselves with the high quality services they need." (Section 4).

The new criteria for compulsory treatment under the Act will deal separately with those who need treatment in their own best interests and those who need treatment because of the risk they pose to others.

In addition the White Paper acknowledges the various ways in which individuals come to the attention of the statutory agencies, including the probation service and police. Powers in the Criminal Justice and Court Services Act 2000 mean that the

police and probation services are under a new statutory duty to assess and manage relevant sexual or violent offenders.

The Home Secretary will be given the power to direct those already serving a prison sentence for assessment. There will also be a single power for the Courts to remand those before them for assessment and treatment. In terms of sentence, the Court will also have available a care and treatment order which will authorise the care and treatment specified in a care plan recommended by the clinical team. It states:

> "This must be designed to give therapeutic benefit to the patient or to manage behaviour associated with mental disorder that might lead to serious harm to other people". (Section 10)

The Paper emphasised services for the 'dangerous seriously personality disordered (DSPD)', individuals who had caused increasing concern. In this instance it is argued, new powers must be backed up by a programme of service development providing the capacity and specialist approaches to treatment and assessment. The Government is to begin to build a secure evidence base for these services by piloting a series of projects to test out new approaches.

It is clear from this stroll through recent relevant publications that Government policy concerning the care and treatment of mentally disordered offenders has developed over time, from a simple initial response to a more complex approach. In the beginning it seemed straightforward and Government proposed two alternative means by which the policy should be implemented.. The following Section describes each of these methods in turn, along with the problems and complexities which would eventually require a policy evolution.

3.2. Implementing Policy

The two policy implementation methods promoted first in Home Office Circular 66/90 and again in each of the following government publications were based on 1) better use of existing resources and 2) the creation of specialist services. The first, involving better use of existing resources, included improved inter-agency co-operation and sharing information and resources, and better, more informed use of existing powers provided under for example the Mental Health Act 1983. The second involved the establishment of new, specific, specialist mentally disordered offender services, for example custody diversion teams whose aim would be the identification and diversion of mentally disordered offenders away from the criminal justice system to care and treatment by the health and social services.

3.2.1 Better Use of Existing Resources

The government sought to ensure that existing resources were used to their greatest effect by reminding those involved of the powers already available to them and providing guidance on the establishment of a working relationship between the courts, criminal justice agencies and health and social services (see the government publications described in the previous Section 3.1). However, three problems faced those existing resources seeking to implement government policy. The first was who or what were mentally disordered offenders; the second was what was meant by diversion; and the third was when could diversion happen? The following three Sections describes each of these difficulties in turn:

3.2.2 Mentally Disordered Offenders – A definition?

Adoption of the term 'mentally disordered offender' by the Reed Report (1992) encouraged its usage by a variety of agencies with inevitable variation in interpretation. Even the Reed Report itself offered a number of different

explanations, for example: the Reed Report, Prison Advisory Group (1991b, para. 2.1) recognised three groups of disordered offenders, first those meeting the four narrow classifications under the Mental Health Act 1983 and needing in-patient treatment; second those falling within ICD9 (World Health Organisation, 1978) but not meeting Mental Health Act criteria or requiring in-patient treatment; and third, those who asked for the help of caring agencies within the prison system. The Reed Report glossary (1991c: Overview) specified the mentally disordered offender as 'a mentally disordered person who has broken the law...In identifying broad service needs this term is loosely used to include mentally disordered people who are alleged to have broken the law.' However even this definition was less helpful than it seemed; it excluded those deemed not guilty by reason of insanity and was unclear as to whether it applied only to the most recently caught and convicted or whether the label constituted a lifelong attribution. The Reed Report, Community Advisory Group (1991a, para. 1.6) recognised three categories: first, alleged offenders to be diverted into the health and social services and away from the criminal justice system; second mentally disordered offenders discharged or diverted from hospital or prison; and third, non-offenders in the community who were vulnerable and who may need assistance to prevent their offending. This third category would have permitted intervention for non-offenders predicted as likely to offend.

NACRO (1993) provided a broad definition of the term 'mentally disordered offender' as follows:

> "Those offenders who may be acutely or chronically mentally ill; those with neuroses, behavioural and/or personality disorders, those with learning difficulties; some who, as a function of alcohol and/or substance misuse, have a mental health problem; and any who are suspected of falling into one or other of these groups. It also

> includes those offenders where a degree of mental disturbance is recognised even though that may not be severe enough to bring it within the criteria laid down by the Mental Health Act 1983. It also applies to those offenders who, even though they do not easily fall within this definition – for example, some sex offenders and some abnormally aggressive offenders – may benefit from psychological treatments." (p.5)

NACRO argued that the use of this wider definition reflected the concern not just to concentrate on a narrow group of mentally disordered offenders whose mental 'disorder' could be assessed as falling within the criteria laid down by the Mental Health Act 1983. Instead they felt it was important to address the wider range of problems associated with people who had some degree of mental disturbance and who needed a range of care and support as well as, in some cases, treatment.

Issues arising from the use of a narrow definition of mental disorder were demonstrated in the study by Gunn et al (1991a), described earlier in chapter 3. The study of 2,042 sentenced prisoners claimed to demonstrate that mental disorder was endemic in the prison population, with 37% of men and 56% of women serving over six months having some form of mental disorder. However the breakdown by diagnosis revealed a very varied group of people, who would evoke quite different responses under mental health law and psychiatric practice. The Mental Health Act 1983 s.1(2) defines mental disorder as 'mental illness, arrested or incomplete development of mind, psychopathic disorder and any other disorder or disability of mind'. Section 1(3) makes it clear that a person may not be dealt with under the Act as suffering from mental disorder 'by reason only of promiscuity or other immoral conduct, sexual deviancy or dependence on alcohol or drugs'. Almost two-thirds of the 37% of men received a diagnosis of substance-related disorder, which would

exclude them from the scope of the Act, as would the 5% described as sexual deviants. The 20% described as personality disordered (whom many psychiatrists would define as 'untreatable') are also excluded. The Act establishes two tiers of mental disorder: first mental illness and severe mental impairment; second psychopathic disorder and mental impairment. To invoke many of the Sections of the 1983 Act in respect of this second tier it is necessary to satisfy an additional criterion that medical treatment in hospital be 'likely to alleviate or prevent deterioration' of the individual's condition (sometimes referred to as the 'treatability clause'). Only 4% (amounting to 2% of the sentenced prison population) of mentally disordered prisoners were diagnosed as psychotic – most commonly involving schizophrenia.

The opportunity for 'diversion' using formal Sections of the Mental Health Act 1983 are therefore limited. Such restrictions could cause problems because, as Peay (1994) asserts, 'mentally disordered offenders...are not a single, easily identifiable group'. She goes on to suggest that to argue for the existence of a discrete group of mentally *disordered* offenders presupposes a category of mentally *ordered* offenders, which does not deny the mental element in all crimes, but assumes that some are rational and some unacceptable. Such a clear-cut division is clearly problematic. Also, the philosophy of 'once ill, always ill' is strikingly at odds with a criminal justice approach that deals with offenders on the basis of what they have done, rather than who they are. Mental disorder is not a once-and-for-all classification; some disorders can come and go, and seem to do so at inconvenient points in an offender's history. Consequently, Peay argues, agencies must be sufficiently flexible to accommodate a broad variety of people – reflected by the NACRO definition and summarised in Table 3.1 below.

Table 3.1 : A Summary of the Definition of Mentally Disordered Offenders

Psychiatric	Criminal
Acutely ill (no previous history)	non-offenders (at risk of offending)
chronically ill (have a history of illness)	alleged offenders (not convicted)
severely ill (come under the Mental Health Act 1983)	convicted offenders
more vaguely ill (do not come under the Mental Health Act 1983)	
not ill in the traditional sense, for example: drug/alcohol misusers sex offenders abnormally aggressive offenders	

Table 3.1 summarises the possible definitions of the term 'mentally disordered offender'. Each category in the first column can be cross-tabulated with each category in the second column (and some categories can be cross-tabulated within column, for example 'acutely ill and severely ill1). It is clear therefore that there is no 'pure' form of mentally disordered offender. To assume that there is would be misleading. Instead what is needed is flexibility within the mental health and criminal justice agencies.

3.2.3 Diversion

The use and understanding of the term 'diversion', and the practice to which it refers, is as varied as the many definitions of 'mentally disordered offender'. NACRO (1993) suggest that the term diversion is used to describe a process of decision making which results in certain offenders not being prosecuted but being responded to differently. In the case of mentally disordered offenders they argued

that diversion would be to either the health or social services. However they also maintained that diversion from the criminal justice system would be possible even where health and social services did not take over responsibility for dealing with the offender. In other words, any prosecution would be discontinued and the individual directed away from the criminal justice system altogether. This approach reflects initial government policy published in Home Office Circular 66/90.

Joseph (1991) however, describes two forms of 'diversion from the criminal justice system': first, diversion altogether as described above; and second, diversion from custody. Where prosecution was necessary, Home Office Circular 66/90 stressed the importance of finding non-penal disposals. To these two forms of diversion I would add a third, summed up by James (1996a, 1996b) who states that 'diversion...refer[s] to those activities designed to secure the referral of individuals to services best suited to meet their need'. She goes on to acknowledge that the term diversion is not fully descriptive of the activity involved in that it assumes diversion is a deviation from normal processes rather than a process in itself designed to secure the discharge of normal and appropriate services. Originally, she concedes, the term was used to refer to diversion of individuals from the criminal justice system to health and social services (as above) but now it is increasingly perceived as one way of surfacing need and accessing services. In other words, 'diversion' refers to diversion to appropriate forms of care and treatment, without necessarily requiring diversion from prosecution or even custody (a more sophisticated understanding of diversion which evolved later in the career of this policy and is expressed in Home Office Circular 12/95).

3.2.4 When Can Diversion Happen?

NACRO (who understand diversion to mean diversion away from the criminal justice system; the cessation of prosecution) argued that there were many

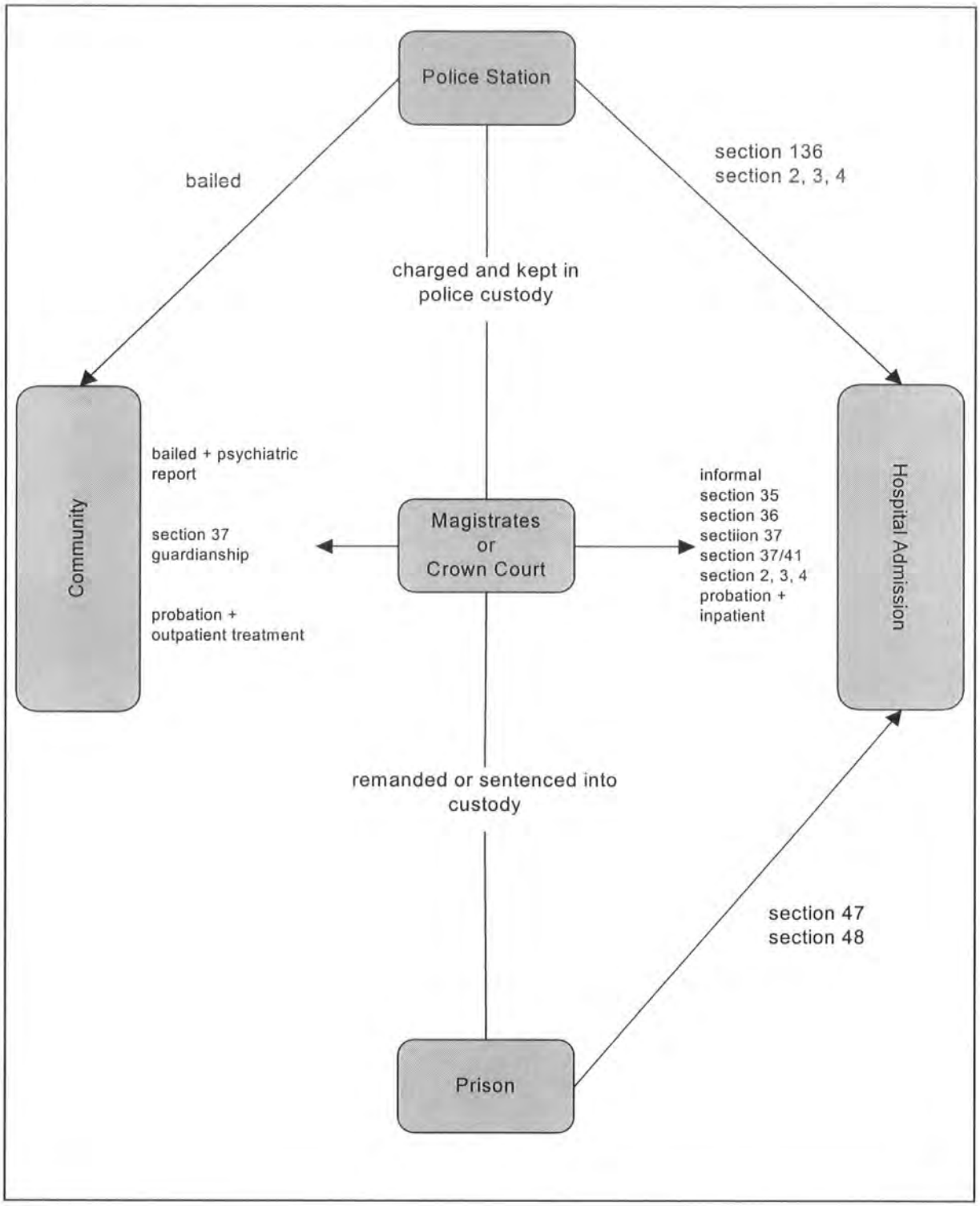
opportunities for diverting offenders from prosecution at different stages of the criminal justice process (1993). The most appropriate and effective ways varied according to the circumstances of the offender, the nature and degree of their mental disorder and seriousness of their alleged offence or offences. Mentally disordered offenders, they argued, were not a homogenous group and so responses to them varied. Some offenders had mental health problems of a nature and degree which brought them within the criteria of the Mental Health Act 1983 – thereby providing a clear set of powers, duties and options for a number of relevant agencies – while others did not come within these criteria and had mental health problems which had to be responded to outside of any statutory framework. Joseph (1991; who understood diversion to mean diversion away from the criminal justice system and/or custody) depicted some of the many and varied opportunities for diversion from the criminal justice system in the following diagram (Figure 3.2, p.85). It is this diversity that many argued provided one important explanation why progress towards increasing the diversion of mentally disordered offenders had been 'patchy' despite the clear intention of government policy and legislation. Burney and Pearson (1995) suggested that, in addition to the problem of diversity, given the relatively small numbers of mentally disordered offenders a major problem of existing resources and specialist diversion schemes was a logistical one of the 'needle in the haystack'. In other words that mentally disordered offenders made up a small proportion of the total number of people involved with the criminal justice system at every stage. The problem was one of the identification of mentally disordered offenders from within a vast crowd of other offenders. The stages of the criminal justice system are summarised in Table 3.2 below.

Table 3.2 : A Summary of the Stages Involved in the Criminal Justice System and the Decision Makers Involved at Each Juncture

Criminal Justice System Stage	Decision Maker (s)
Prior to arrest	Police Officer
At the point of arrest	Police Officer
During arrest and whilst in police custody	Police Officer Custody Sergeant Forensic Medical Examiner Psychiatrist Approved Social Worker
After charge and at the point of a bail decision	Police Officer and/or Custody Sergeant
At the point of decision to prosecute	Crown Prosecution Service
During trial and at the point of a remand decision	Magistrate or Judge
Sentencing	Magistrate or Judge
During a sentence, particularly custodial	Psychiatrist

Each one of these stages in the criminal justice system, described in Figure 3.2 and again in Table 3.2, are points in the system where change or a phase shift in the careers or trajectories of individual mentally disordered offenders can occur (multifurcation points). Important 'decision makers' within each of these stages could influence the outcome and cause the career of a mentally disordered offender to follow one route or another. The government concentrated effort on educating or reminding those involved with relevant existing services about the current policy of diversion (initially diversion from the criminal justice system and later diversion to health and social care whilst the offence continued to be prosecuted) and how they could implement it by co-operating with one-another and by using powers already available to them.

Figure 3.2 : Diversion to psychiatric care from the criminal justice system (Joseph 1991, p.134)



In brief then the implementation of government policy by existing services was complicated by the problems of definition: who or what is a mentally disordered offender; what do we mean by diversion and when can it be applied? Specialist schemes for mentally disordered offenders, specifically custody diversion teams, were introduced as complimentary services expected to overcome the problems faced by existing resources. However, as Burney and Pearson (1995) point out, in reality schemes of this sort could not escape the issues, although they were perhaps in a better position to recognise and debate them, and make explicit from the outset what approach would be adopted.

3.2.5 Custody Diversion Schemes

Stimulated initially by Home Office Circular 66/90 and additional funding from the Home Office and Department of Health – and supported subsequently by the Health of the Nation White Paper (1992), the Reed Report (1992), Home Office Circular 12/95 and the National Service Framework for Mental Health (1999) – specialist practical initiatives with the aim of diversion from custody and/or from prosecution proliferated from the outset.

Annex B to Home Office Circular 66/90 (Home Office 1990a) described innovative psychiatric liaison schemes to magistrate's courts as examples of good practice. The adoption of such schemes was recommended in other reports (Home Office 1990b) and was officially encouraged by government ministers. The Reed Report (Department of Health and home Office 1991a) recommended that 'there should be nationwide provision of court psychiatrist or similar schemes for assessment and diversion of mentally disordered offenders. In the most recent national survey of the provision of specialist schemes for the diversion of mentally disordered offenders, the National Schizophrenia Fellowship (NSF) identified 130 services across England and Wales (1999b). Despite their general promotion, no guidelines were published

to assist those seeking to establish such initiatives. Instead, as the Social Services Inspectorate (SSI, 1997) discovered, local variations developed according to local perceptions of need and the availability of dedicated resources. James and Hamilton (1992) provide an account of their own experience of establishing and running a 'liaison service' to one inner London magistrate's court, arguing:

> "The prerequisites for the establishment of a court liaison scheme are the availability of psychiatrists willing to take on the work and agreement of the court in question to host such a service...but the nature of the psychiatric commitment required will not become apparent until the needs of the court are studied... the demand for psychiatric assessments at court will vary from area to area." (p.168)

The authors suggest that a survey could be carried out to establish amount of demand for psychiatric assessments at court. On the other hand, rather than simply differences in the size of demand, the SSI reported that arrangements for diversion also varied in type of provision in two principle ways:

1. the membership of the diversion team – which often contained Community Psychiatric Nurses, Approved Social Workers and/or Probation Officers; and,

2. the focus of the scheme at different stages of the criminal justice process– for example at point of arrest, or following arrest but before court appearance, or after court appearance but before sentencing.

Another way in which diversion services differ from area to area is in the service model or arrangement adopted. There are a variety of models as follows:

1. The most common type of formal diversion scheme established to date would appear to be those involving court-based psychiatric assessment teams. These tend to be multi-agency, led by a psychiatrist and including a community psychiatric nurse, probation officer and approved social worker, and sometimes but rarely, a psychologist. They are often a dedicated team, i.e. focused solely on the task of diverting mentally disordered offenders, which makes this an expensive model although Burney and Pearson (1995) argue that they have demonstrable value for some of the most worrying cases 'such as the small minority of obviously psychotic defendants who in the past would have spent seeks in custody awaiting psychiatric reports'. The availability of on-the-spot assessment in court can make dramatic reductions in the length of remand sentences by reducing the time needed for psychiatric reports from weeks to a few days (James and Hamilton 1991; Joseph 1992; Joseph and Potter 1993). Such schemes are therefore not difficult to justify in humanitarian terms, however in terms of the financial burden, whilst it can be argued that they are cost effective in terms of avoided or reduced prison remands, the problem common to multi-agency work is that the potential savings are made in one part of the system whereas the cost of assessment and hospitalisation are picked up elsewhere.

2. Some areas avoid this problem by using a single practitioner model so that the diversion service consists of one full-time person, usually a community psychiatric nurse, who has access to other professionals as part of the already existing services.

3. Another solution is a part-time or on-call service. The Clerkenwell scheme described by James and Hamilton (1992) above, is one such scheme where two psychiatrists and an approved social worker regularly attend the magistrates'

court on fixed days, and are 'on call' whilst carrying on their existing 'normal' duties for the remainder of the time.

4. Panel Assessment Schemes or inter-agency panels offer a different model. Panels meet at regular intervals to consider cases referred to them – although in some areas they do not meet but liaise by telephone, and in others it is combined with the duty psychiatrist arrangements (Gordon and Hedderman 1993). They provide a multi-disciplinary assessment team that considers the options and makes a recommendation to the court. They can also provide information for bail risk assessment. Burney and Pearson (1995) argue that one distinct advantage is that multi-agency panels involve from the start representatives of those agencies and interest groups who will implement the plan to be recommended for the individual concerned. There has also been the suggestion that panel schemes handle a wider range of mentally disordered defendants than court based assessment schemes. For instance, in a Home Office evaluation (Hedderman 1993) 13% of panel cases involved 'mental impairment', whereas generally those people with learning disabilities are generally rarely referred to psychiatric-led assessment schemes. Joseph and Potter (1993) found that only 2% of people referred to two such schemes in London were diagnosed as learning disabled as opposed to mental illness.

Finally schemes can differ from one another by adopting either a proactive or a reactive approach. In other words, some services actively seek to identify mentally disordered offenders by for example a daily inspection of the custody records completed for each arrest at the local police station. Others rely on the skills of various agencies to identify and refer people to them. Initially there was some concern that reliance on other agencies, such as the police, would mean that a number of mentally disordered offenders would not be picked up and instead 'slip

through the net'. However instead evidence suggests that contact between the police and mentally disordered offenders occurs frequently (Walker, 1992) and that the police are skilled in the recognition of mental disorder when they encounter it (Burney and Pearson, 1995; Fahy, 1989). Indeed it appears that a high number of police referrals suffer from chronic serious mental illness (Fahy et al, 1987; Rogers and Faulkner, 1987) and frequently require emergency psychiatric admission (Lim, 1983). Joseph however warns that the lack of false positives in police referrals may be due to the numbers of individuals with a mental disorder who the police miss or do not refer.

Although diversion schemes vary in practice, the NSF (1999, p.24) found they do generally have some or all of the following objectives:

1. to divert mentally disordered offenders from prosecution by assessing them:

    a) in police custody,
    b) on remand in prison or
    c) on bail;

2. to provide information to the Crown Prosecution Service on the nature and severity of the mental disorder to enable the CPS to exercise its right not to prosecute or discontinue proceedings on the grounds of public interest;

3. to reduce the number of mentally disordered offenders remanded to prison for psychiatric assessment and reports by:

    a) liaising with local mental health services to obtain a psychiatric assessment prior to their first court appearance,
    b) arranging psychiatric assessment on an outpatient basis,

c) liaising with social services, the probation service and housing providers to provide suitable accommodation for this assessment,

d) liaising with mental health services for formal admission to hospital;

4. to reduce the number of mentally disordered offenders serving a custodial sentence by:

a) liaising with the probation service on non-custodial sentences where appropriate e.g. on an order with the condition that the mentally disordered offender receives psychiatric treatment,

b) liaising with the local psychiatric hospital, medium secure unit or special hospitals to enable a hospital order to be made at the time of sentencing,

c) liaising with mental health services to enable a transfer from prison to hospital;

5. on release from prison to seek to prevent reoffending by liaising with mental health services, social services and the probation service through the provision of a suitable package of care.

The SSI (1997) reported that many of the diversion schemes in operation had been independently evaluated. Here are a few examples:

1. Purchase et al (1996) evaluated the psychiatric court liaison scheme based at Tottenham Magistrates Court in North London:

a) the number of referrals totalled 104 individuals over a period of 18 months, average 6/month;

b) the offences [allegedly] committed by those referred included violence against the person (includes sex offences) 44%, arson 9%, public order offence 23% and property/driving offence 23%;

c) the diagnoses given to those referred included schizophrenia (34%), followed by the affective disorders (26%), alcohol misuse (15%), neurosis (9%), and learning difficulties (2%), no mental illness (17%);

d) Fifty four (52%) individuals referred to the initiative were formally admitted to hospital and a further 17 (16%) were given outpatient appointments for the local services.

2. Joseph and Potter (1993) evaluated the scheme covering two inner London magistrates' courts, Bow Street and Marlborough Street:

a) the service consisted of two psychiatrists and an approved social worker that attended the courts on a regular part-time basis. Criterion for referral were those defendants who were thought to require a psychiatric assessment who might be, or already had been, remanded into custody for a medical report. Those defendants who were granted bail were specifically excluded as they could obtain psychiatric assessment without a remand in custody. Referrals would be accepted from the magistrates, duty solicitors, probation and social services, and gaolers at the courts;

b) two hundred and one referrals were made to the scheme over a period of 18 months (average 11/month, range 5-22);

c) the offences [allegedly] committed by those referred included theft (31%), public order (28%), violence against the person (18%);

d) the diagnoses given to those referred included schizophrenia (72 (39%), affective disorders 39 (21%), alcohol and/or drug dependence 20 (11%),

neurosis/personality disorder 28 (15%), learning disability 4 (2%), uncertain/no diagnosis 22 (12%);

e) overall 65 (32%) of those referred to the initiative were admitted to hospital. All except one were admitted to general psychiatric beds. The exception was admitted to a Regional Secure Unit. The majority were admitted informally or under civil Sections of the Mental Health Act 1983. Seventy-six (26%) were recommended for outpatient treatment and no recommendation was made in 52 (26%) of cases.

3. Holloway and Shaw (1992) evaluated a pilot diversion scheme based at a Manchester magistrate's court:

a) one of two psychiatrists was on site each day in the magistrate's court. Referrals were accepted from the police, probations officers, duty solicitors or the magistrates. Criterion for referral was those cases where the referrer felt that a psychiatric opinion would help the court deal with the case more appropriately;

b) thirty-eight individuals were referred (average 6/week) over a period of six weeks;

c) the offences [allegedly] committed by those referred included violence against the person 23%, public order offence 25% and theft 21%, and other 20%;

d) the diagnoses given to those referred included mental illness (psychosis/neurosis) 32%, drug/alcohol 30%, and personality disorder 30% learning disabled 8%, uncertain/no diagnosis 13% (6 people had multiple diagnoses);

e) eight people (21%) referred to the initiative were admitted to hospital and nine (24%) referred for outpatient care. No recommendation was made to the court in 18 cases (47%).

4. Greenhalgh et al (1996) evaluated a mental health assessment and diversion scheme at Leeds Magistrates Court:

a) prisoners held in police custody were assessed prior to their appearance at the magistrate's court. Each assessment was performed by one of four psychiatrists who attended the Bridewell on three mornings a week on a rota basis. Prisoners for assessment were identified from the custody records and by discussion with a member of the Bail Information service, the custody sergeant and the defence solicitors. Criterion for assessment were any evidence suggestive of past or present psychiatric disorder or a history of drug or alcohol misuse;

b) fifty-seven individuals were assessed (average 19/month);

c) the offences [allegedly] committed by those referred included violence against the person 38%, and theft 35%;

d) the diagnoses given to those referred included psychosis 14%, drug/alcohol 48%, neuroses/personality disorder 12%, learning disabled 4%, uncertain/no diagnosis 23%

e) eight people (21%) referred to the initiative were admitted to hospital and nine (24%) referred for outpatient care. No recommendation was made to the court in 18 cases (47%).

The details of the results of evaluations of specialist initiatives with the aim of diverting mentally disordered offenders (from prosecution/custody and/or to care

and treatment by the health and social services) varied according to the geographical location and model of scheme in operation as demonstrated above.

The demographic characteristics of the populations however remained similar, commonly reflecting that of the general criminal population (rather than the mentally disordered population). In other words, regardless of variation in approaches, people seen by diversion schemes were young, male, single and unemployed. Accommodation status, where it was reported, was varied. Purchase et al (1996), in the Tottenham evaluation, reported that although they expected that most of those seen by the diversion scheme would be homeless or in temporary accommodation, in fact few were homeless and most were owner-occupiers or tenants. In comparison, Joseph (1992), in his evaluation of the inner London scheme, described:

> "The majority of defendants were of no fixed abode and socially isolated. At the time of their arrest 68 (37%) were living on the streets and a further 52 (28%) were living in unsettled accommodation, namely night shelters, hostels, bed and breakfasts or 'squats'." (p.11)

Coid (1988) argued that a large proportion of the offences committed by mentally disordered offenders were relatively minor and reflected a need for food or shelter which may have arisen because of an underlying mental disturbance or lack of care and support. In such circumstances there may be an argument that it is not in the public or the offender's interest for a prosecution to be pursued and diversion into hospital may appear a desirable alternative. However, if most mentally disordered offenders are neither very seriously ill nor dangerous, how much intervention is justified – particularly when, as Campbell and Heginbotham (1991) argued,

'special' provision manifests itself as special discrimination? Diversion to psychiatric care may mean that an offender is compulsorily detained under the mental Health Act 1983 for longer than they would have been in police or prison custody. It may also be perceived as less desirable (and ultimately more stigmatising) than custody by the offender. Despite these reservations however, and as discussed at the beginning of this chapter, arguments in favour of diverting mentally disordered offenders from prosecution have proved, on balance, more persuasive than those against.

3.3. Summary

The Government responded to reports of problems involving:

1. deinstitutionalisation and the failures of community care policy

2. concerns about the prevalence of psychiatric disorder in sentenced and remand prison populations;

3. concerns that this proportion may be increasing due to transcarceration and/or criminalisation of people with a mental disorder

4. public concern fuelled by media images and the outcomes of public inquiries

by introducing a policy aimed at diverting mentally disordered offenders away from the criminal justice system and prison. This policy was established in a number of official publications which reflect its development over time including: the Butler Report (1975), Home Office Circular 66/90 (1990), the Health of the Nation White Paper (1992), the Reed Report (1992), Home Office Circular 12/95 (1995), the National Service Framework for Mental Health (1999) and The Review of The Mental Health Act 2000.

The policy was implemented in two ways: the improved use of existing resources and the development of new and specific provisions for mentally disordered offenders – in particular the development of 'custody diversion schemes' across the country. However a number of complications soon emerged including: what is the definition of a 'mentally disordered offender'?; what is meant by 'diversion'?; when can or should 'diversion' happen? Each uncertainty had implications for the development of different types of custody diversion team and the aims and objectives they acted upon. The next chapter explores the development of one particular team, the Cleveland Diversion Team.

4. THE DEVELOPMENT OF THE CLEVELAND DIVERSION TEAM

This chapter describes the development of the Cleveland Diversion Team. A large, well resourced multiagency service, the diversion team adopted a broad definition of their client group (in order not to restrict access to the service they could provide) and offered a wide ranging service from arrest to sentence.

The chapter begins with a description of the local area of Cleveland in Section 4.1, before turning in Section 4.2 to a description of the Northern Region Health Authorities response to the developments in Government policy. The description of the local response in Cleveland in Section 4.3 is broken down into two parts: Section 4.3.1 describes the research carried out locally to establish the need for a custody diversion team; Section 4.3.2 describes the process involved in developing a custody diversion team in Cleveland. Section 4.4 explores the practise of the Cleveland Diversion Team, including: in Section 4.4.1 the Operational Policy describing for whom the service is available and what that service might be; and in Section 4.4.2 a description of how the team actually operated; Section 4.4.3 provides a summary of the types of people referred to the team, what actions the team undertook, with what results; and finally Section 4.4.4 ends with a brief introduction the diversion teams database, which provided the information forming the basis of this research.

4.1. The Area

Cleveland, formerly known as Teesside, is a county of northeast England. It is industrially oriented around the Lower Tees Valley and estuary, and is bounded by Durham to the northwest, North Yorkshire to the south, and the North Sea to the east (see Figure 4.1 p.100). Cleveland covers an area of 59,000 hectares. The resident

population is currently 559,160 most of who live in the towns. There is a high population density: 9.4 people per hectare compared with a national average of 3.4. There are a number of areas of social disadvantage within Cleveland which has been measured using, along with other indicators, levels of unemployment – Cleveland has a high level of unemployment: 9.7% of the population compared with a national average of 5.7%; and a high proportion of households with no one in employment: 40.8% compared with a national average of 35.6% (c.f. Research and Intelligence Unit, 1994). The local economy is still dominated by heavy industry: petrochemicals, steel, and chemicals. In addition, there is a nuclear power station at Hartlepool and a potash mine at Boulby. The Port of Tees and Hartlepool is one of the largest and busiest in the UK.

The structure of local government within Cleveland has developed and changed over time. In 1968 all of the then four local councils were assimilated into the County Borough of Teesside. Then in 1974, a new two-tier system of counties and districts saw Cleveland County Council created with the four boroughs of Hartlepool, Stockton, Middlesborough and Langbaurgh. The most recent changes followed a nationwide review by the Local Government Commission which, after lengthy consultation, concluded that the two-tier system should give way to a single council providing all local services (i.e. back to the beginning). So, from April 1st 1996, Cleveland County Council vanished and four new councils were created (as had existed in 1968): Hartlepool Borough Council, Stockton-on-Tees Borough Council, Middlesborough Borough Council and Langbaurgh Borough Council (now known as the borough of Redcar and Cleveland).

Figure 4.1 : Maps showing the location of Middlesbrough, Hartlepool, Stockton-on-Tees and Redcar which together constitute the county of Cleveland

From the beginning of the 1990s to 1999, mental health services in Cleveland were variously developed and delivered by three Health Trusts. Hartlepool and East Durham NHS Trust, North Tees Health Care NHS Trust and South Tees Community and Mental Health NHS Trust each had community and in-patient facilities and, in addition, the local Medium Secure Unit and associated forensic services were located in South Tees. In April 1999 the three Trusts merged to form a 'super Trust' known as Tees and North East Yorkshire NHS Trust, providing mental health services for the people of Middlesbrough, Redcar & Cleveland, Stockton, Hartlepool, North East Yorkshire and Easington (a total population of 800,000). The Health Authority responsible for the purchase of services for the population of Cleveland is Tees Health Authority.

Of the remaining services, Teesside Probation Service has consistently operated across the four unitary authorities, and Social Services are provided by the four individual authorities, including Hartlepool, Stockton-on-Tees, Middlesborough, and Langbaurgh (now known as Redcar and Cleveland) Borough Councils.

The response of these local organisations; Health, Probation and Social Services, to the renewed debate, described earlier in chapters 3 and 4, about the care and treatment of mentally disordered offenders at both Government and Northern Region Health Authority level at the beginning of the 1990s, was both positive and immediate. The will of a number of key people in each of the Health, Probation and Social Services to effect change was such (within a climate aiming for increased inter-agency cooperation and multi-agency working) that they were able to begin to take steps jointly towards developing a service for mentally disordered offenders in line with the strategy emerging from Government and Region. This chapter will explore the development in particular of the 'custody diversion team' element of the overall strategy for services for mentally disordered offenders across Cleveland,

beginning in Section 4.2 with a brief description of the Northern Regions response. Section 4.3 looks specifically at Cleveland's response, including the research carried out to identify the need for a Custody Diversion Team in Cleveland and the development of the service. Finally, Section 4.4 explores the custody diversion scheme established to divert mentally disordered offenders in Cleveland.

4.2. The Region's Response

The Northern Region's (an area including Newcastle across to Cumbria and down as far as Leeds) response to the developments in Government policy concerning mentally disordered offenders began around the beginning of the 1990s. In 1993 the Northern Regional Health Authority published its strategy to improve the quality of services and accommodation for mentally disordered offenders in response to the Reed Report's (1992) recommendation that these clients should receive care from health and social services instead of through the criminal justice system. A number of services were proposed at various levels including:

1. at district level – Court Diversion Schemes providing pre-court assessment and offering access to care and treatment by health and social services; Community Forensic Teams providing advice in the care of offenders with mental health problems and learning disabilities; and a variety of accommodation and day care services;

2. at sub-regional level – the establishment and maintenance of local secure facilities for difficult to manage and forensic patients;

3. at regional level – Special Hospitals would continue to provide high secure care, but there should be a resettlement programme for those inappropriately placed in them.

4.3. The Local Response

Cleveland's response to the developments in Government and Regional policy concerning mentally disordered offenders also began in the early 1990s. The official publications released around this time, including Home Office Circular 66/90 (1990), the Health of the Nation (1992) and the Reed Report (1992) (each described in chapter 3), had concentrated on concerns about the numbers of people with a mental disorder becoming involved with the criminal justice system and the need to divert them to care and treatment by the health and social services. Research was carried out locally to determine the need for such a diversion scheme.

4.3.1 Establishing Need

Cleveland Probation Service.

Cleveland Probation Service carried out a survey to "identify how many defendants appearing in court were mentally disordered offenders, the difficulties they faced and the difficulties such cases posed for the criminal justice system" (Toyne, 1992 p.1). Thirty-eight defendants were identified by the study based on the premise that they were already receiving psychiatric treatment of one sort or another. Concern was expressed that many more mentally disordered offenders were being discharged by the courts without any probation service involvement and in some cases were being remanded into custody:

> "They are most unsuited to custodial remand conditions, although this is seen by the courts as one way of 'obtaining help' for them and can be an effective hospital admission route." (p.2)

The report concluded that mentally disordered offenders caused the criminal justice system three types of problems. First the amount of court time taken in 'attempting

to deal with them fairly' was disproportionate given that much of their offending was petty and repetitive. Second was a lack of suitable bail accommodation – the survey found that mentally disordered offenders posed problems within bail hostels and were often not accepted by other residents. Third the higher than average incidence of violent and unpredictable behaviour – of the 38 mentally disordered offenders identified, 34% had committed a violent offence compared with 9% of all offenders, and 18% had committed a sex offence compared with 2% of all offenders. Based on these findings the report recommended the establishment of a diversion scheme to 'create links giving speedy access to advice and assistance fro m mental health workers'.

The Hutton Centre.

The Services for Adults working group[8] identified three points at which a mentally disordered person could be diverted from the criminal justice system: at police stations; at court; and at prison reception. They commissioned a survey of mentally disordered offenders, examining those remanded in custody overnight to appear at Teesside Magistrate's court. The report was undertaken and published by the Hutton Unit (the medium security inpatient centre for the Northern Regional Health Authority Forensic Service, who in addition had the contract to provide psychiatric services to the local prisons), and concluded that 'there is not a real need for a court diversion scheme' (Pederson, 1993), or in other words a service aimed solely at the point of court appearance. Using a brief structured interview they determined that the majority of those with mental health problems were already attending GPs or psychiatric outpatient clinics. Most did not expect to receive a custodial remand or sentence and would therefore be able to continue such treatments. The report suggests that even those who did receive a custodial remand or sentence would be

[8] See section 5.3.2 Developing a Service, for an explanation of the various Action Groups set up in Cleveland to tackle the challenge of developing and delivering a service for mentally disordered offenders

'picked up' by the prison system. This situation was considered appropriate by the forensic nurse researchers involved (although somewhat alone in this conclusion), who argued that the local prisons had well-established health care units and could also refer to 'outside' psychiatric services for extra support. In addition, forensic psychiatric specialists were reported to attend on a sessional basis described as 'adequate to cover their current needs'. The report did however recommend that, rather than simply providing a court-based scheme, there was a need to target services (such as a psychiatric liaison scheme) at local police stations in order to establish links with the police who know the local population and are aware of those individuals who have mental health problems.

The University of Durham.

The Cleveland Inter-Agency Steering Group for Mentally Disordered Offenders (see footnote 1) commissioned a survey to identify the number of Cleveland residents classified as 'mentally disordered offenders', by age, gender, ethnicity, diagnosis and offence type. The University of Durham was approached to undertake the survey. This was the start of my interest and involvement with mentally disordered offenders and the Cleveland Diversion Team as I was awarded the contract as Research Assistant by the Department of Sociology. Approaching this survey my initial problem was the one which has plagued this topic from the outset, that of definition. The Cleveland Steering Group and the Adult Service Working Group had already adopted a definition published in a strategy document:

> "We therefore define Mentally Disordered Offenders as those offenders who suffer from 'mental illness, arrested or incomplete development of mind, psychopathic disorder and other disorder or disability of mind'. Beyond this we seek to include those offenders where a degree of mental disorder is recognised even though that

> may not be severe enough to bring it within the Mental Health Act 1983, and finally those who as a function of alcohol and/or substance misuse have a mental illness or learning disability. This wider definition is not a catch all for every self-defeating offender. It reflects the aspiration to develop resource systems and motivators to support and assist those offenders within the wider definition who in the end are amenable to support and eventually demonstrate a capacity for change". (Morrison, 1994 p.4)

However this definition, whilst overcoming the problems of the narrow definition included in the Mental Health Act 1983, retained some of its inherent problems. For instance it retained its own version of the 'treatability' clause by including the statement 'amenable to support and eventually demonstrate a capacity for change'. In addition, the Cleveland definition failed to define the term 'offender'. Dr K. Fraser, a Forensic Psychiatrist working in Cleveland, argued:

> "The definition given by the Steering Group appears to be incomplete as there is no discussion of what is meant by an 'offender'. By this I mean that some might assume that an individual must be convicted of an offence to come into this category, whereas others would argue that to have committed an act, which could conceivably result in a conviction, should be considered in this way." (Fraser, 1994).

The effect that the adoption of a particular definition would have on the number of mentally disordered offenders reported by the survey was clear. Dr. N. Land, a Forensic Learning Disability Psychiatrist working in Cleveland, explained when reporting the number of learning disabled offenders:

> "Clearly these are a very substantial underestimate of the numbers of offenders with a learning disability in South Tees...[as]...there are a number of levels of offending which at present do not reach the courts." (Land, 1994)

The four levels of offending described by Dr Land were:

1. The very substantial number of people with a learning disability who commit offences such as theft, assault and indecent assault, but who, because they are in institutional settings, e.g. Adult Training Centres, hostels etc., are never reported to the police.

2. The substantial number of people with a learning disability who do commit regular offences in the community, which are reported to the police, but whom the police do not feel it is in the public interest to prosecute.

3. Those people who commit a substantial number of minor offences which result in non-custodial disposals by the Magistrates Court, but which sometimes escalates into...

4. Those individuals who commit several offences and end up in prison or a secure hospital system.

Notwithstanding these issues, the definition formally adopted by the Cleveland Inter-Agency Steering Group for Mentally Disordered Offenders was the definition applied in the survey. Other defining features included a strict geographical boundary that, at the time, was the County of Cleveland and included Hartlepool, Stockton, Middlesbrough and Langbaurgh. No restrictions were placed on age of client or type of offence. The survey was to run for three months during which time

all relevant statutory agencies (including health and social services, the Regional Secure Unit, the probation service and the Special Hospitals) would be contacted and asked to submit information (initials, date of birth, gender, ethnicity, accommodation, diagnosis, offence and Section of the Mental Health Act 1983) about any of their clients whom they considered met the criteria set out in the definition of mentally disordered offender supplied by the Cleveland Steering Group.

The results suggested that 232 individuals, known to those statutory agencies that took part in the survey (not everyone contacted responded with information), met the criteria set out in the definition of 'mentally disordered offender' supplied. Table 4.1 provides a breakdown of those clients by gender, diagnosis and age.

Table 4.1 : The Gender and Diagnosis by Age of the Mentally Disordered Offenders Known to the Cleveland Statutory Agencies. (Dyer 1995, p.51)

		Gender		Diagnosis[9]							
Age	Total No.	Male	Female	MI	PD	IMP	SIMP	A/D	OBD	N	N/K
>60	7	7	0	4	2	1	0	0	0	0	0
41-60	48	44	4	24	9	6	0	3	3	1	2
25-40	124	111	13	62	18	19	2	6	2	2	13
<25	44	35	9	13	8	7	0	3	0	1	12
N/K	9	9	0	3	1	4	0	0	1	0	0
Total	**232**	**206**	**26**	**106**	**38**	**37**	**2**	**12**	**6**	**4**	**27**

The peak age group was clearly 25-40 years, accounting for 54% of these clients. This is significantly older when compared with all offenders in England and Wales

[9] Where the abbreviations for the diagnosis categories used were: MI – mental illness; PD – personality disorder; IMP – mental impairment; SIMP – severe mental impairment; A/D – alcohol and /or drug misuse; OBD – organic brain disorder; N – neurosis; N/K

where 71% of those found guilty or cautioned in 1997 were aged between 10-17 years (Home Office, 2000). The picture is more complicated however in terms of the identification of an age trend within the general psychiatric patient population. In the report of the prevalence of psychiatric morbidity among adults living in private households (Meltzer et al for the Office of Population Censuses and Surveys, 1995), the diagnosis 'neuroses' (including here: depressive disorders, phobias, obsessive compulsive disorder, panic disorder, anxiety disorder, other neurotic disorders) offers a mixed pattern for individual disorders but overall it appeared that rates were lowest at the extreme end of the age distribution i.e. 16-19 year old and 60-64 year old categories, and highest in the centre of the distribution, i.e. the middle ages. The prevalence of functional psychoses (schizophrenia, manic depressive psychosis and schizo-affective disorder) peaked for women in the 30-34 year old age group and for men between the ages of 55-64 years. Generally then the 'older' peak age reported for Cleveland's mentally disordered offenders reflected the overall trend in psychiatric morbidity rather than the criminal population - although the psychiatric survey reported, not unexpectedly, the highest prevalence of alcohol and drug dependence among young adults aged 16-24 years (particularly young men aged 20-24 years).

Men outnumbered women in the Cleveland survey by 8:1 (or 89% compared with 11%). This gender divide compares similarly with the proportions of men and women across England and Wales found guilty or cautioned for offences in 1997, in particular 80% men and 20% women (Home Office, 2000). Again a more complex picture in terms of psychiatric morbidity (Meltzer et al for the Office of Population Censuses and Surveys, 1995) where women outnumbered men in the category 'neurosis', but the same proportion of men and women suffered a 'functional psychosis', and finally men were three times more likely than women to have alcohol dependence and twice as likely to be drug dependant.

Table 4.2 provides a breakdown by age and offence type, describing the 368 offences committed by the 232 individuals identified by the survey (an average of 1.6 crimes/person, although the under 25s had the highest multiple crime rate with an average of 2 offences/person). The ratio of sex to violent to property non-violent offences was 1:2:3. In other words for every three property or non-violent offences committed, one sex and two violent offences were committed. This compares with figures for England and Wales reported for 1991, which gives a ratio of 1:5:176 (Home Office, 2000). In other words for every 176 property or non-violent offences committed, one sex and five violent offences were committed.

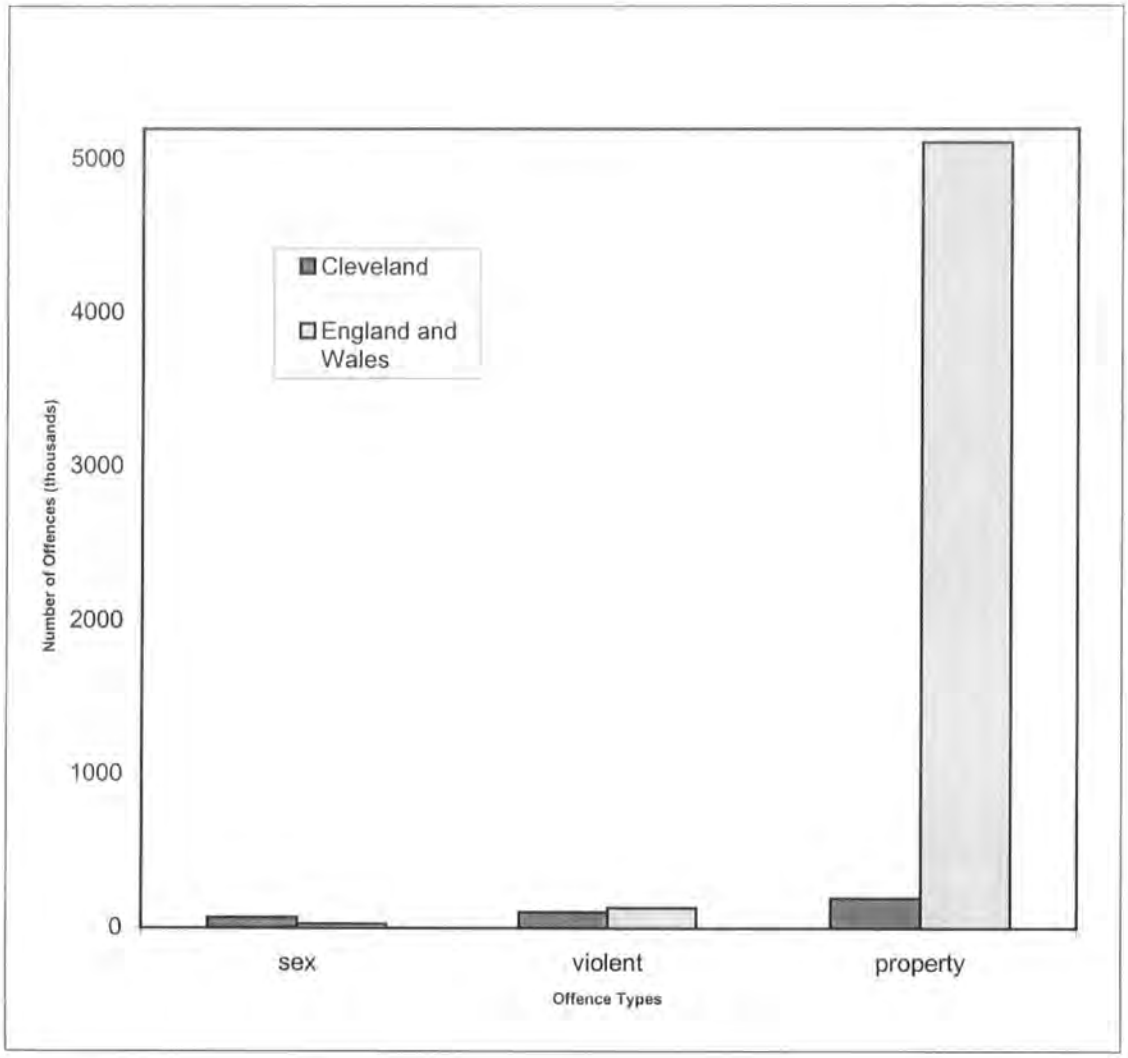
Table 4.2 : The Types of Offence by Age Committed by Mentally Disordered Offenders Known to the Cleveland Statutory Agencies. (Dyer 1995, p.53)

	Offence[10]											
Age	**V**	**S**	**B**	**R**	**T**	**F**	**C**	**D**	**O**	**M**	**N/K**	**Total**
>60	5	1	0	0	0	0	2	0	0	0	0	**8**
41-60	24	13	2	2	2	2	7	2	6	2	1	**63**
25-40	48	39	12	8	22	3	23	2	19	11	5	**192**
<25	9	11	9	3	13	1	20	1	12	5	2	**86**
N/K	4	4	2	1	4	0	3	0	1	0	0	**19**
Total	**90**	**68**	**25**	**14**	**41**	**6**	**55**	**5**	**38**	**18**	**8**	**368**

This comparison is displayed quite dramatically in Chart 4.1 (p.111). The mentally disordered offenders reported to the survey were very much more likely to have committed a sex or violent offence than offenders generally.

[10] Where the abbreviations for offence type are: V – violence; S – sex; B – burglary; R – robbery;

Chart 4.1 : A Comparison of the Types of Offence Committed by Mentally Disordered Offenders in Cleveland with All Offenders in England and Wales



The characteristics portrayed by Cleveland's mentally disordered offenders demonstrated the complex mechanisms at play, involving both the criminal justice and mental health systems. Cleveland's mentally disordered offenders conformed to neither the overall description of offenders or psychiatric patients but instead to parts of each. So for instance, the age of Cleveland's mentally disordered offenders compared with that of psychiatric patients generally but in terms of gender distribution they were more similar to offenders, being overwhelmingly male. It was difficult to make comparisons involving diagnoses because the Cleveland survey

used simple categories based broadly around those described in the mental Health Act 1983, namely: mental illness, learning disability, personality disorder; whilst the OPCS 1995 report uses ICD-10 classifications to derive nine diagnostic classes under three headings namely: neurotic disorders, functional psychoses and alcohol and drug dependence. However, a high level of psychosis was reported in Cleveland's mentally disordered offenders where almost half (46%) had a diagnosis of mental illness. Finally, in terms of offences committed, Cleveland's mentally disordered offenders when compared with offenders generally were very much more likely to have committed a sex or violent offence.

To summarise, Cleveland's mentally disordered offenders were reported to be in the main middle aged, male, with a diagnosis of mental illness and just as likely to commit a violent as a non-violent offence. Whereas offenders generally are overwhelmingly young, male and committing non-violent offences and psychiatric patients are generally middle aged and male or female depending on illness.

These three pieces of research informed the development of the Cleveland Diversion Team by identifying a complex situation which would require an elaborate custody diversion strategy, where 'diversion' would become an option considered throughout the criminal justice process for a very wide variety of types of people.

4.3.2 Developing a Service

Senior representatives of Cleveland's Health Service purchasers and providers, Social Services, Probation Service, the Prison Service, Police Service and Crown Prosecution began meeting in September 1993 in order to discuss implementation of the Regional Strategy for mentally disordered offenders (Cleveland Steering Group Services for Mentally Disordered Offenders 1993-1994; Services for mentally Disordered Offenders Working Group (Services for Adults) 1993-1994). A multi-

agency Steering Group and three working groups were established to plan the development of services for adults, adolescents and those with learning disabilities. In the end the only working group to 'get off the ground' was the 'Services for Adults', which had the benefit of a full and comprehensive multi-agency membership from the outset, as well as a core group of dedicated, influential personnel. The tasks given to this group included planning the establishment of a court diversion scheme, planning and advising Tees Health (purchasers) on the appropriate size, staffing and function of a local semi secure unit, planning and advising on the number of medium secure beds required for the population of Cleveland, and ensuring the mechanisms were in place to regularly review the needs of Cleveland residents in the Special Hospitals.

A draft strategy (Morrison 1994) was produced to inform discussion and help the Working Group reach agreement about the type of diversion scheme(s) which should be established in Cleveland. This document proposed a full and comprehensive strategy on services for mentally disordered offenders in Cleveland, covering a number of issues from the 'central dilemma' of punishment versus treatment, through the confusion surrounding the definition of 'mentally disordered offender', as well as government policy, the aims of diversion and the various diversion schemes, identification of key players such as the police and crown prosecution service, and potential service outcomes or court sentences including custodial. The draft was 'warmly received', although each agency represented offered their own suggestions for amendments. The definition of 'mentally disordered offender' was an issue from the outset. The Crown Prosecution Service requested changes to the initial definition discussed which they felt was too broad being based on the definition supplied by NACRO (1993). The Working Group agreed instead to adopt the one presented in Home Office Circular 66/90. A consensus was reached that the term should be applied beyond those who would

solely meet the criteria of the Mental Health Act 1983. It was however equally recognised that a definition of mentally disordered offender must have at its core the definition of mental disorder as provided by the Act in order that all of the agencies involved could meet their statutory responsibilities under the Act and the later requirements of Section 4 of the Criminal Justice Act 1991, and other legislation. The definition agreed upon by the Services for Adults Working Group and the Steering Group was published in the revised Strategy on Services for Mentally Disordered Offenders.

The adoption of this definition was described as a reflection of the acceptance that to concentrate on those offenders whose mental disorder could be assessed as falling within the criteria of the Mental Health Act 1983 would be too narrow and would exclude many of the very complex types people who had some degree of mental disturbance and who needed a range of care and support as well as, in some cases, treatment.

.

Importantly, whilst the above definition implied a critical role for psychiatry and psychiatrists, it also indicated that in the case of mentally disordered offenders, a range of professional disciplines should be involved. Indeed the first of the three objectives, which together constituted the core of the draft strategy, was the provision of an effective multi-agency Diversion Scheme. The plan, that each of the key agencies; Health, Probation and Social Services, would fund posts within the team was an important commitment from the outset.

These three objectives, which describe the strategy adopted in Cleveland in 1994, were published in the strategy document as follows (p13-17):

Objective One

The provision of an effective Diversion Team in regard to mentally disordered offenders.

1. To establish, by 1st November 1994, a Diversion Team.

   a) Core composition: Clinical Psychologist
   Approved Social Worker
   Community Psychiatric Nurse
   Probation Officer
   Action Research Worker
   Administrative Staff
   Attached – Consultant Psychiatrist

   b) Task – To provide a rapid response Diversion Scheme which can:

      i) provide timely intervention in response to referrals from the Police, Social Workers, CPNs, Probation Officers, Bail Information Officers, local Courts, Prisons, Low Secure and Medium Secure Units and Team members;

      ii) carry out joint multi-disciplinary and short term work;

      iii) produce written assessment reports, response plans and supply information for Police, the Crown Prosecution Service and Courts, as appropriate;

      iv) provide a service which is available to Teesside, Hartlepool and Guisborough Courts and all Police Stations throughout Cleveland;

v) provide a service which works towards integration into mainstream provision and which is based on the principle of the care programme approach – that is, assessment, care planning, monitoring and the review of care packages according to individual need.

2. To establish, by 1st November 1994, a co-ordinated group of trained volunteers to act as appropriate adults, escorts and carers.

3. To establish, by 1st November 1994, a pool of retained accommodation to be used in the assessment and response plan process.

Objective Two

The provision of a range of effective community based disposals for convicted mentally disordered offenders.

1. To establish, by 1st November 1994, a Diversion Team (as Objective One).

   a) To accept referrals for assessment from Probation Officers and Social Workers when prosecution is known to be occurring in the Public Interest.
   b) For each constituent member to activate service networks, including liaison with the Voluntary Sector, in the development of case management plans.

2. To establish, by 1st November 1994, an identified Consultant Psychiatrist as consultant to the Team and as the key provider of the psychiatric reports for the Courts.

Objective Three

The provision of effective aftercare for those mentally disordered offenders discharged from prison or hospital care.

1. To establish, by 1st November 1994, an Accommodation and Resource Officer at H.M. Prison Holme House.

    a) To establish a pool of accommodation for discharged mentally disordered offenders.
    b) To retain beds prior to release.
    c) To link with other accommodation pools.
    d) To liase with Health and Department of Social Security prior to release.
    e) To accept referrals from Prison Officers, Medical Officers and Probation Officers.

2. To establish within a Diversion Team a liaison role with the Regional Secure Unit for the Team Probation Officer.

    a) To undertake post release supervision and advance liaison in all cases where the Probation Service is deemed to be the appropriate agency for community supervision.

These were ambitious objectives, going beyond the establishment of a simple diversion scheme to provide services for the wide variety of mentally disordered offenders including those not diverted and those receiving either a non-custodial or a custodial sentence.

Towards the end of October 1994 a new 'Special Care Unit and Diversion Scheme Project Group' took over from the earlier 'Services for Adults' mentally disordered offenders working group, although group membership remained similar, apart from an invitation for a Housing Department representative to join the meetings. The core purpose of this project group was to ensure that the diversion scheme and a special care unit (local semi secure unit) were established in the agreed timescales in keeping with Tees Health's mental health strategy. They began to prepare job descriptions, planning to complete recruitment for the diversion scheme by 1st February 1995.

It was considered imperative that Chief Officers of all relevant agencies acknowledged a commitment to the service and that the Special Care Unit and Diversion Scheme Project Group continued to meet regularly to keep under review a number of key issues including: joint practice protocols which had been established between the various agencies to clarify roles, responsibilities, points of contact and procedure for accessing the service; information sharing between the agencies, including access to Supervision Registers; and issues surrounding housing.

In particular, housing quickly became acknowledged as an area of concern. The Housing Department representative reported to the project group at the beginning of 1995 that the current situation concerning the availability of accommodation for mentally ill residents was very difficult and was not likely to improve either because of the 'Rosie Palmer case' which had generated a lot of adverse public opinion. The case can be summarised as follows:

Shaun Armstrong, who had been sexually abused as a child and had a history of psychiatric problems, was admitted to Hartlepool General Hospital after attempting suicide five times between 1992 and 1993. He also had a drink and drugs problem

and had been accused of sexual abuse. He told staff he had sexual feelings towards children and warned that he would kill a child on his release. He was discharged from the hospital in 1993 and housed near the Palmer family in Hartlepool. Rosie Palmer (aged three years) was seized by Armstrong after she bought an ice-lolly from an ice cream van outside her home in June 1994. Police searched for her for three days before they found her mutilated body. Armstrong, aged 37, was jailed for life for Rosie's murder.

This would inevitably make it even more difficult to obtain suitable accommodation for offenders being diverted from the criminal justice system – where suitable accommodation was acknowledged as a fundamental requirement for the success of a diversion scheme.

By April 1995 all of the diversion scheme staff had been recruited and had attended training sessions aimed at team building as well the more practical issues involved with diverting mentally disordered offenders. Inter-agency protocols had been agreed with all relevant agencies (with the exception of the Prisons where complicating factors included the existing contract between the local prison and Regional Secure Unit). The next stage of evolution for the overall management of the service would involve the establishment of a Diversion Committee made up of Chief Officers from the various agencies whose main role would be with regard to public relations and receiving an annual report. This would take over from the Special Care Unit and Diversion Scheme Project Group. A Management Group chaired by the Diversion Schemes' Psychiatrist and consisting of Diversion Team personnel line managers, would be responsible on a daily basis and act as liaison between the team and the Committee.

4.4. The Cleveland Diversion Team

The Cleveland Custody Diversion Team (as it was called at the outset) was up and running from April 1995. The final team line-up was quite an impressive show, including an Approved Social Worker, three Community Psychiatric Nurses (one of whom had co-ordinator responsibilities), a Probation Officer, a Psychologist, an Administrator, an Action Research Worker (me) and a Psychiatrist (who was also responsible for the low secure in-patient unit). The service was launched in a blaze of publicity, supported by all agencies – Health, Social Services, Probation, Police, the Courts and Crown Prosecution Service, voluntary agencies and so on – and got off to a flying start, receiving over 50 referrals in the first six weeks.

4.4.1 Operational Policy

Referrals to the Custody Diversion Team were restricted to those meeting the definition of mentally disordered offender adopted by the Steering Group and published in the Operational Policy (Cleveland Diversion Team, 1995) and also to those residing within the geographical boundary of Cleveland. The aim of the service, described in the Operational Policy document and in line with Government policy at the time, was to divert mentally disordered offenders away from the criminal justice system except when public interest required prosecution. They would achieve this by:

1. providing a rapid response service to Teesside, Hartlepool and Gusiborough Courts and all police stations throughout Cleveland;

2. providing specialist advice and initial screening on clients who may be diverted from the criminal justice system and are suffering from a mental disorder;

3. producing written assessment reports and response plans for the police, Crown Prosecution Service and the Courts;

4. undertaking short term work in partnership with other agencies and formulate care plans in compliance with the Care Programme Approach and Supervision Registers;

5. working towards maintaining and developing access to a range of community based disposals for mentally disordered offenders;

6. working towards establishing an aftercare service for those mentally disordered offenders discharged from prison or hospital care;

7. acting as a focus within the community and providing effective co-ordination and communication between local courts, prisons, police, probation service, social services, the medium secure unit, special care units, forensic learning disabilities team and local psychiatric services;

8. acting as a specialist resource in the training and education of inter-agency staff at all levels and providing advice in the planning and development of the service;

9. providing support and advice to main carers and managers in the overall acre of mentally disordered offenders operating within the Care Programme Approach;

10. collating and analysing information and producing regular reports to evaluate the service provided by the Custody Diversion Team.

The service model was both reactive and proactive. Reactive because the team encouraged "written referrals for all clients who were thought to have a mental

disorder, residing in the County of Cleveland" or in emergencies by telephone or fax (the service operated during office hours, 8am-5pm, Monday to Friday). The responsibility to identify and refer the suspected mentally disordered offender was placed on the referrer. In their Operational Policy document the Team identified possible referrers as:

Police

Crown Prosecution Service

Probation Service

Defence Lawyers

Bail Information Officers

Self/Carer

Clerk to the Magistrates

Prisons

Social Services

Health Services

General Practitioners

There was concern from the outset that agencies such as the police might not have the skills necessary to identify mentally disordered offenders and as such some offenders who may have benefited from referral to the Diversion Team would 'fall through the net'. However, as previously discussed, evidence appears to support the case that the police are skilled in the identification of people with a mental disorder when they come into contact with them (Burney and Pearson, 1995; Fahy 1989), with a high number of police referral suffering chronic serious mental illness (Fahy et al 1989; Rogers and Faulkner 1987) and frequently requiring emergency psychiatric admission (Lim, 1983).

To assist the police with the identification of a detained person with a mental illness, the Custody Diversion Team developed a checklist (Figure 4.2), whereby if a person scored 5 or above, referral would be indicated. In addition, the Team also developed a training programme, concentrating initially on Police Custody Sergeants and later ran a proactive pilot scheme for six months where two team members attended four police stations on a regular basis in order to examine the potential effects of any 'gate keeping' (Dyer 1996a). No evidence was uncovered to support such a position, although the physical presence of team members appeared to have raised the profile of the service and thereby indirectly lead to an increase in the referral rate from those police stations involved long after the pilot scheme had finished.

This type of proactive approach was adopted more generally to compliment the reactive referral process. Two members of the team attended a variety of locations on a regular basis, including magistrates courts, probation offices, and police stations. The aim was to raise awareness and encourage referral by making the process easier with the direct presence of team members.

These various approaches seemed to pay off even if measured simply by the number of referrals received by the Custody Diversion Team. In the first three months the referral rate compared favourably with that of other similar services nationally and even internationally. This rate of referral continued as described in Report 6: A Summary of Referrals (Dyer, 1996), where over 18 months of activity the Custody Diversion Team received 807 referrals (an average of 42 referrals/month) – although only 626 individuals were actually referred, the discrepancy due to the increasing number of people re-referred to the service following discharge.

Figure 4.2 : The Checklist Developed by the Cleveland Custody Diversion Team to Assist Cleveland Constabulary wit the Identification of Mentally Disordered Offenders

CHECKLIST	YES	NO	WEIGHTING
Evidence of self neglect			2
Evidence of drug/solvent abuse			1
Evidence of suicidal intent			3
Talks to self			2
Responds to unseen person			3
Expresses bizarre ideas			2
Tries to harm self			3
Talks about harming self			2
Talks of harming others			2
Says everything seems hopeless			3
Overactive			2
Rapid speech			2
Refuses food or drink			2
Unusually suspicious			2
Feels under threat			2
Disinhibited sexually			1
Over familiar			1
Talk jumps from topic to topic			1
History of psychiatric treatment			3
On medication for mental condition			3
Isolated/withdrawn			3

Contrary to initial concerns, Cleveland Constabulary became one of the two biggest referrers to the Diversion Team, contributing 38% of the referrals received during the first 18 months (the other main referrer was the Probation Service with 37%). In addition, only 6% of those referred by the police were assessed not to be suffering from a mental Disorder by the Custody Diversion Team. Twenty Custody Sergeants across Cleveland took part in a survey to evaluate the service a year after it first

started (Dyer 1996b). Responses from the Police Sergeants were overwhelmingly positive:

> "Prior to the introduction of the scheme I have been involved with many cases which could have been dealt with by diversion. On these occasions the only option available was to insist on court appearance and an application being made to the bench that the accused receives help and treatment" (p.6)

> "An adult arrested for a Breach of the Peace was successfully diverted when the Custody Diversion Team managed to liase with a Dr **** and obtain a case history, which enabled the prisoner to be released unconditionally when it was deemed it was safe" (p.7)

Most respondents felt they knew who and how to refer but not necessarily what would happen following referral. The main problem concerned delays in response to referrals caused by the need to liase with others and lack of availability of the service at evenings and weekends, leading to prolonged time spent in police cells:

> "My most recent involvement involved a boy who was arrested to prevent a Breach of the Peace at about 11pm at night and because of this he should have appeared at court the next day in the morning. The case was referred to the Custody Diversion Team who were helpful but had to liase with Youth Justice who in turn were helpful but who in turn had to liase with Social Services. This went on into the afternoon and the court deadline was passed. The boy's detention was now unlawful! However we were still stuck with him. He spent a period of two hours (at least) being unlawfully detained when prior to the Custody Diversion Team we would have put him

> straight to court and the matter would have had to be dealt with there." (p.6)

Which makes a final observation, made by one of the participating Custody Sergeants commenting on the name of the service, all the more relevant:

> "The term Custody Diversion is wrong. The same enquiries have to be made and until they are the person remains in custody. The reference should be made to 'process' rather than custody." (p.9)

This issue did not go unnoticed and by 1997 the Cleveland Custody Diversion Team for Mentally Disordered Offenders had changed its name, dropping the 'custody' element so that it became simply the Cleveland Diversion Team. This it was argued would better reflect the aims and objectives of the service. For some time concerns had been raised regarding the potentially misleading implication of the original title suggesting that referrers and those referred could assume diversion from the criminal justice system and a custodial sentence was inevitable. Such a misapprehension had been blaimed for the dissatisfaction and confusion felt by some on discovering that whilst the aim of the team was to divert individuals into health and social care services where appropriate, in cases of 'public interest' offences, continued prosecution would be expected. The importance of prosecution in the public interest had been included in the original Operational Policy, although a much heavier emphasis had been placed upon the aim of 'diversion from the criminal justice system'. As the service developed and the debate matured, the two factors – the need for support and treatment, and the need to prosecute the offender – were no longer seen as diametrically opposed.

4.4.2 Practice

Almost from the outset, individuals were referred to the Custody Diversion Team by a variety of referrers for a variety of reasons. For example, whereas during the discussion surrounding the development of the service it had seemed clear to some, particularly to the Psychiatrist involved, that those who would benefit would be people with a severe mental disorder committing minor or nuisance type offences i.e. Abramson's (1972) argument that a "criminalisation of mentally disordered behaviour" had occurred whereby relatively minor, nuisance behaviours by ex-mental patients were resulting in criminal charges in order to confine persons who were being disruptive as a result of the mental disorder, but for whom no state hospital beds were available. Instead however, the referral picture quickly became much more complex (as had been suggested by the research carried out locally), involving people who were not so obviously in need of, or indeed perhaps should not be considered for, diversion from the criminal justice system and whose mental disorder was more vague or involved primarily drugs or alcohol misuse.

This more complex situation impacted upon the variety of responses which could be expected from the Team. If diversion from prosecution was not an option for someone, then other possible appropriate outcomes had to be recommended to the Court and these alternatives had to be researched to ensure availability and compliance. If a client was unknown to the psychiatric services then assessment had to be arranged and, depending on diagnosis, alternative support negotiated e.g. from the drug and alcohol services or voluntary agencies.

The Team identified four broad categories of types of referral they might expect to receive based on an examination of the first referrals they had received, as well as a discussion concerning all possible hypothetical reasons for referral. These 'types' of referral were intended to provide a better measure of the complexity of demand for

the service than that simply provided by the number of referrals received. The categories of referral were based on the response provided by the Team rather than a classification of the types of people referred. In other words classification was used to order and measure the activity of the Diversion Team. The Team hypothesised that two people might appear to be of a similar 'type' i.e. have the same diagnosis, have committed the same types of offences, have similar histories etc., but at the point of referral to the Diversion Team be in fact very different because they had reached a point in their 'careers' when they each needed very different things. Diversion Team response therefore would have to be based on an individual assessment of need. An individual referred to the Team could have expected one of four broad responses as follows:

- Advice Only — Referrer was provided with advice or information.
- Advice Plus — Referrer was provided with advice or information, liaison undertaken with others, reports provided to Court, client interviewed, Mental Health Act assessment arranged, Appropriate Adult arranged or referral made to other agency, etc.
- Initial Assessment Only — Client was assessed but then no further action was taken or required.
- Initial Assessment Plus — Client was assessed and Referrer was provided with advice or information, liaison undertaken with others, reports provided to Court, referral to other agencies, Diversion Team support/treatments etc.

The Diversion Team member in receipt of the referral (as the Team operated a duty rotor this would usually be the person 'on duty' that day) would decide which of these responses to take given the circumstances and following discussion with the referrer. Broadly speaking the decision was 'to assess or not to assess'. It would be quite clear very early in the discussion if the referrer was asking for and simply needed information or advice from the Diversion Team. However, for those less

obvious cases, there were no instructions as such directing who should be assessed and who need not. Instead it was left to the individual discretion of each Diversion Team member to make a decision, although it was generally acknowledged for example that if someone was already known to a Consultant Psychiatrist and in regular contact the Team might not undertake an additional assessment to determine evidence of mental disorder as all such information would already be on file. In these circumstances any meeting with the client would be called an interview and the referral category recorded as Advice Plus. There was also a weekly Custody Diversion Team clinical meeting providing an opportunity to discuss all referrals and related activity with colleagues, but few decisions were overturned once a response had been decided.

The type of response provided had important implications on the amount of information collected and recorded about an individual. The Diversion Team had developed a set of documents to record details about individual referrals: a Referral Form, an Assessment Form, and a Referral Outcomes Form (Appendix 1), each of which would be used to record important information at key points in the referral process (see Chapter Six for a more detailed discussion of these documents). Which of these three forms were completed depended upon the category of referral as shown in Table 4.3:

Table 4.3 : Cleveland Custody Diversion Team Documentation by Referral Category

Referral Category	Documentation		
	Referral Form	Assessment Form	Referral Outcomes Form
Advice Only	X		
Advice Plus	X		X
Initial Assessment Only	X	X	X
Initial Assessment Plus	X	X	X

This clearly has important implications for any research involving the people referred to the Custody Diversion Team because not everyone referred to the Team had the same level of information recorded. The Referral Form was the only document completed for all referrals. At the time a referral was received, this form was used to record basic information known to the Referrer, including their reason for referral and basic details about the individual they were referring such as: age, gender, ethnicity, as well as any current alleged offences and presenting behaviour or diagnosis if one was known. For the Advice Only referral category this form was the only one completed and was also used to record a brief description of any action taken by the Diversion Team and a summary of outcomes. The Assessment Form, completed for those assessed by the Team, was used to record more comprehensive personal and clinical details. Importantly, it was only here on this form that a client's history was explicitly required and recorded in the form of previous convictions and previous contacts with the psychiatric services. No criminal or psychiatric history was required for those individuals whose response was Advice Only or Advice Plus, although because it was considered so important in some cases where it was known it was recorded anyway. Risk assessment formed a core part of the information recorded during assessment and, along with a history of behaviour, many of the

elements linked with an increased risk of harm to self or others were recorded, including: employment, family and social support, diagnosis and current symptoms, compliance with medication, a history of harm to self or others and any evidence of current risk. Finally the Referral Outcomes form completed at discharge was used to summarise the actions undertaken by the Diversion Team and any other activity occurring during the referral process. In particular, the Outcomes Form included space for a description of any social or health care needs identified by the Diversion Team and details concerning how these were to be met, as well as what if any problems were encountered trying to ensure they were met, as well as the outcome of any Court appearances.

At discharge the Team were also required to make an assessment of the intensity of support they had provided using the following guidelines:

Low

- Any short term intervention lasting up to two hours from beginning to end of total intervention.
- Infrequent contacts over a long period of time.
- Minimal discussion with other agencies.
- Brief letter to court.

Medium

- Any short term intervention lasting two to four hours from beginning to end of total intervention.
- Frequent contacts.
- Liaison with other agencies.
- Development of care package.
- Verbal or written reports to court or Crown Prosecution Service.

High

- Any short term intervention lasting more than four hours from beginning to end of total intervention.
- Multi-disciplinary working.
- Frequent liaison with other agencies.
- Verbal or written reports to court or Crown Prosecution Service.
- Continuous involvement over a longer period of time.

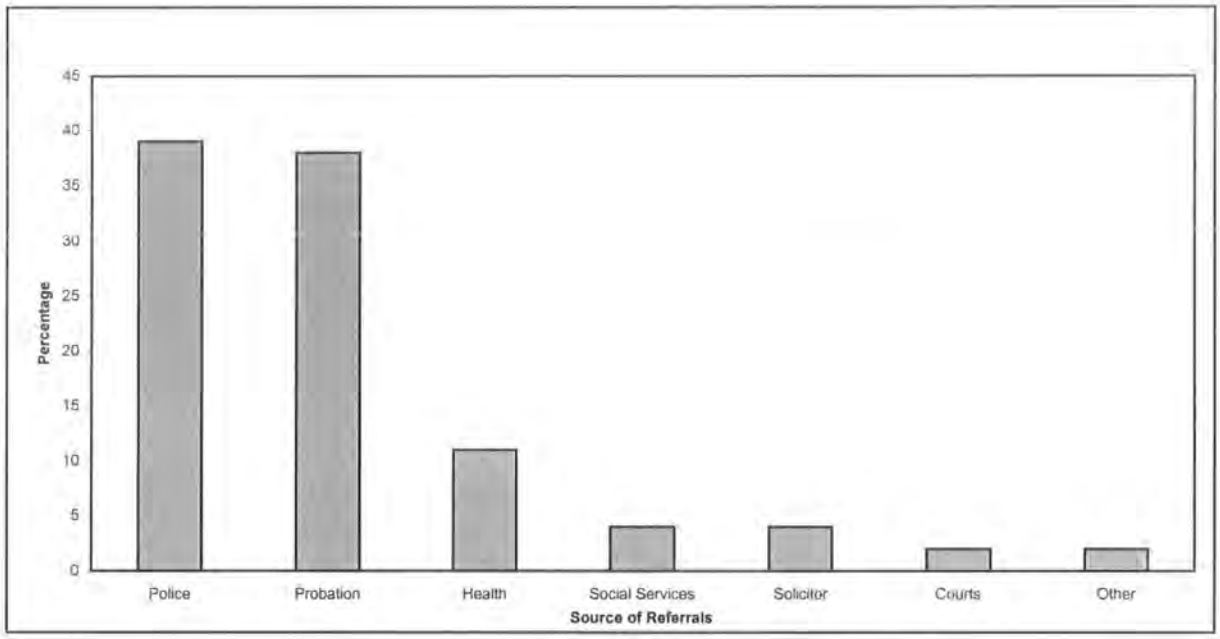
4.4.3 Vital Statistics

In my role as Action Researcher with the Cleveland Diversion Team I produced regular reports describing the activity of the service. The sixth report, produced after 18 months of Diversion Team activity, provided a detailed description of the various types of people referred to the Team, what had happened to them and what the issues were.

As described earlier, during the 18 months covered by the sixth report the Team received a total of 807 referrals (an average of 42 referrals/month). The number of individuals referred however was 626, a discrepancy arising because a growing number of individuals were being re-referred after being discharged by the Diversion Team. Most of those referred lived in Middlesbrough, although some gave a home address outside of the Cleveland boundary. The Team were however providing a response to the referring agency, for instance the Bail Hostel in Middlesbrough, who provide accommodation to local and non-local defendants. This was an issue for a number of reasons including the increased problems involved in obtaining information and in accessing services to meet identified need for those individuals who were not Cleveland residents.

The majority of referrals were made by Cleveland Constabulary, followed closely by Cleveland Probation Service (as described in Chart 4.2).

Chart 4.2 : Source of Referrals Made To The Cleveland Diversion Team



Together these two agencies accounted for 77% of referrals. These main sources of referrals reflected the status in the criminal justice system of those referred. The overwhelming majority (88%) were referred prior to conviction. Which was interpreted to mean that the service was fulfilling that part of the Government objectives which stated that mentally disordered offenders should "be diverted from the criminal justice system at the earliest possible stage" (Criminal Justice Consultative Council, 1993).

The demographic characteristics of those referred to the Team was summarised as follows:

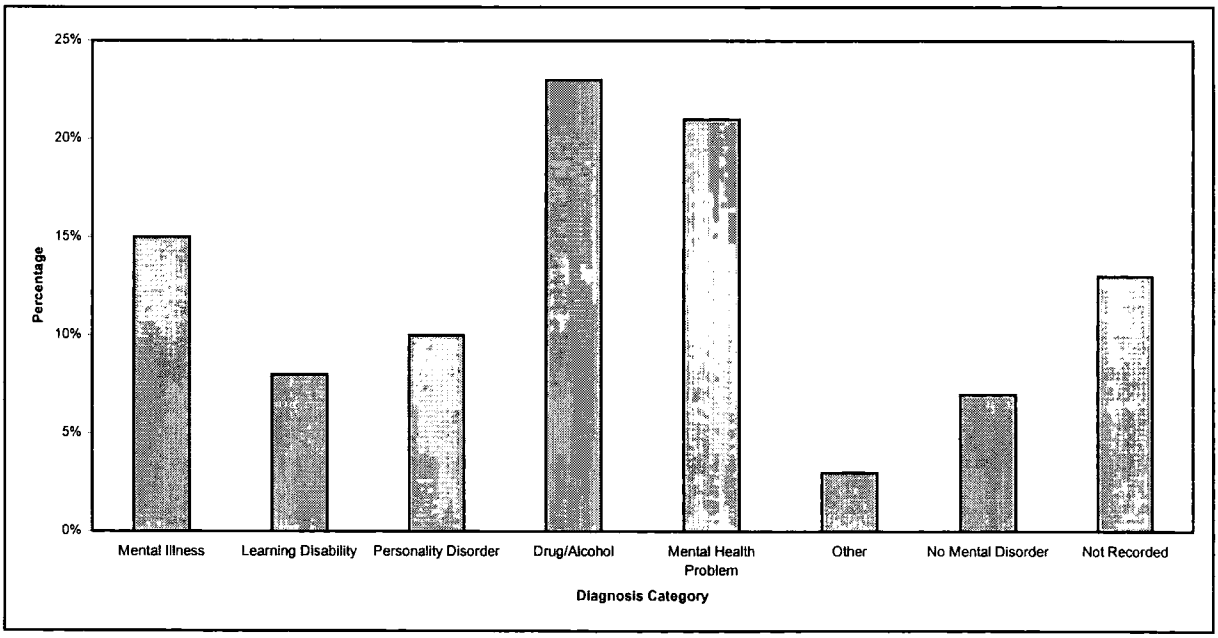
- 84% were men
- the median age was 29 years
- the oldest was 75 and the youngest 14 years
- 88% were recorded as 'white British'
- the overwhelming majority were single and unemployed

The majority of those referred to the Diversion Team were not assessed, instead the 'advice' categories made up almost 60% of responses as follows:

- Advice Only 25%
- Advice Plus 32%
- Initial Assessment Only 12%
- Initial Assessment Plus 29%
- Other 2%

Assessments were undertaken jointly wherever possible, however due to some staff shortages 51% were undertaken by a single practitioner. An edict imposed by the Health Service also stated that all assessments must include a health service practitioner. Again however due to circumstances 18% of assessments were undertaken by the Diversion team's Approved Social Worker and/or Probation Officer without health service representation. Of those assessed, 80% were identified as showing signs of a mental disorder as described in Chart 4.3, only half of whom were already known to one or more health or social services.

Chart 4.3 : Primary Diagnosis Category Of Those Assessed By The Cleveland Diversion Team



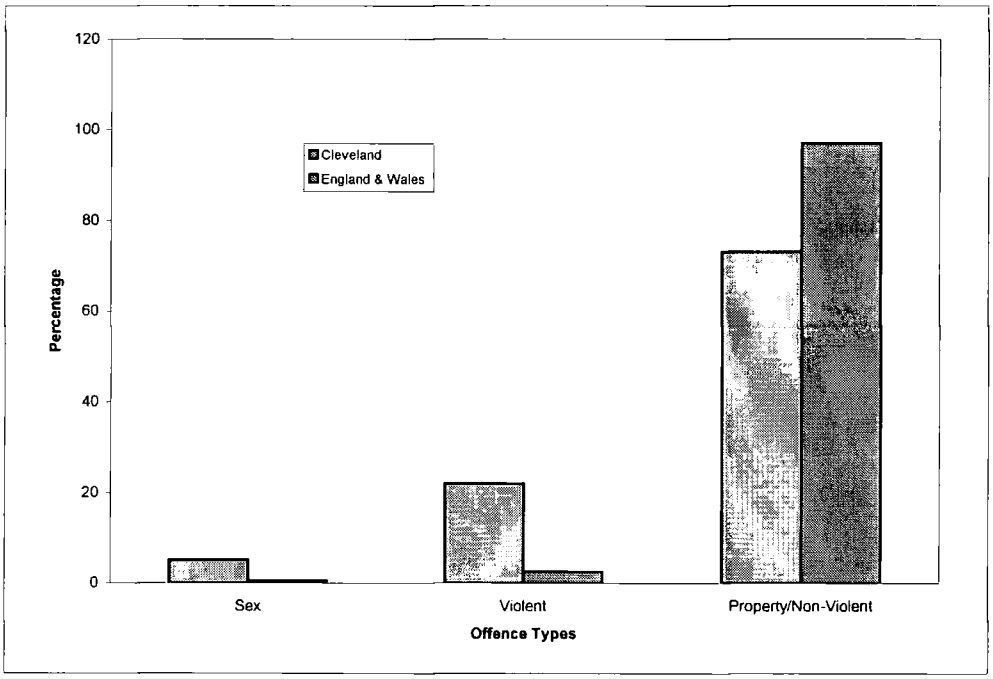
The number of people identified as having some form of mental illness or mental health problem had been falling steadily over the first 18 months of practise despite a rising number of people assessed. There was also a striking decline in the number of learning disabled offenders identified, in fact it halved over time. The explanation for this was the attachment of a Forensic Learning Disability Nurse to the Diversion Team at the end of 1995, along with the establishment of a full multi-disciplinary Learning Disability service and in-patient unit. It is likely that prior to this Diversion Team members had been identifying individuals as learning disabled using criteria broader than that subsequently imposed by the Forensic Learning Disability Service. On the other hand there was a rise in number of those referred who misuse drugs and/or alcohol and those identified as personality disordered. There was also a three fold increase in the number of referrals assessed as showing no signs of a mental disorder.

Over two thirds of people were referred with a current alleged offence, some of whom had multiple alleged offences. For the purposes of analysis in Report Six, primary offences (i.e. most serious offence) only were considered as follows:

- Sex 5%
- Violent 20%
- Robbery 2%
- Burglary 7%
- Theft 10%
- Drugs 1%
- Fraud 2%
- Motoring 5%
- Criminal Damage 5%
- Other Property/Non-Violent 42%

In Chart 4.3 these results are presented in a way similar to the Cleveland survey results reported earlier (Chart 4.1, p.111).

Chart 4.4 : A Comparison of Offences Allegedly Committed by Mentally Disordered Offenders in Cleveland and Committed by All Offenders in England and Wales

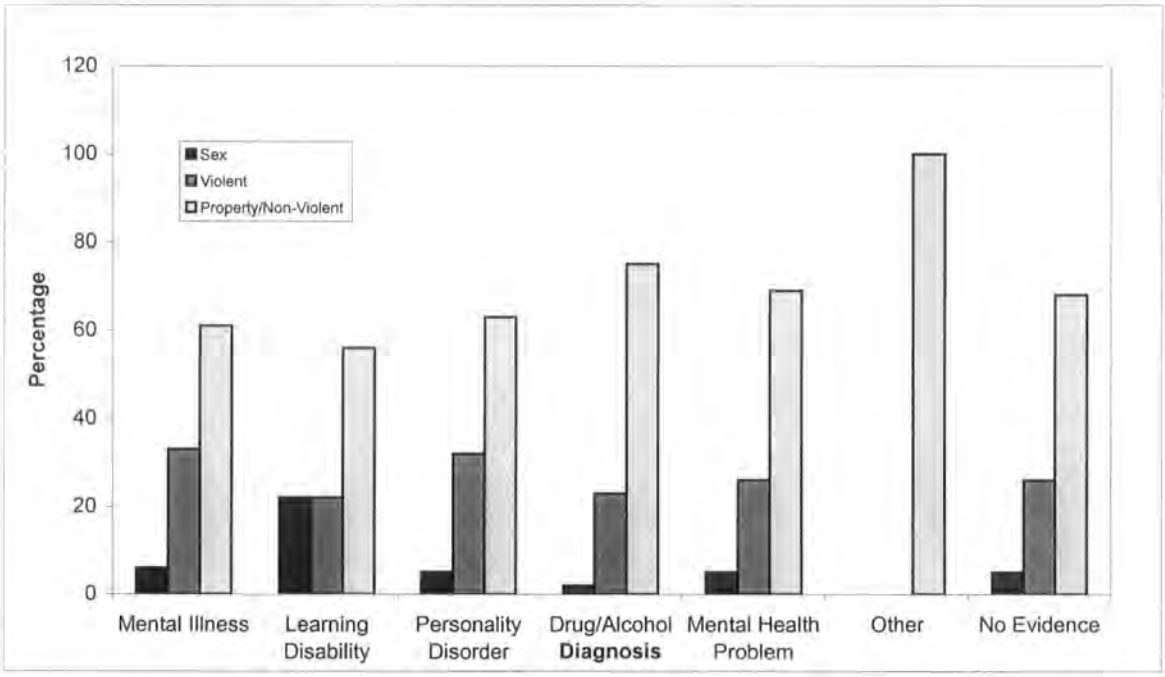


Those referred to the Diversion Team were four times more likely to have committed a violent than a sex crime and over three times more likely to have committed a non-violent than a violent offence. The figures for England and Wales (Home Office, 1995) suggest that offenders generally were seven times more likely to have committed a violent than a sex crime and over 38 times more likely to have committed a non-violent than a violent offence. It was the case therefore that a higher proportion of those committing sex or violent offences were referred to the Diversion Team, perhaps as a function of the nature of the offence rather than evidence only of a mental disorder.

Chart 4.5 shows the within diagnosis offence ratios. People diagnosed as Learning Disabled were on average four times more likely to have [allegedly] committed a

sex offence when compared with other mentally disordered offenders referred to the Diversion Team. Those with a mental illness or personality disorder were more likely than others to have committed a violent offence. Although all those referred were more likely to have committed a property/non-violent offence than any of the other types.

Chart 4.5 : Offence Ratio Within Each Diagnosis Category



The assessment of risk undertaken by the Diversion Team as part of their general assessment was recorded as a potential of causing harm to self and/or others. Over two thirds of those assessed were at little or no risk of self harm and almost 60% at no risk of causing harm to others. The more likely someone was to cause self harm then the more likely he was to be known to health or social services. Conversely, the more likely someone was to cause harm to others the less likely he was to be known to health or social services. Perhaps this reflected the nature of generic services whereby aggressive or potentially 'dangerous' individuals were increasingly labelled 'forensic' and therefore unsuitable for general services. Alternatively it may have

been a function of the Diversion Team client group which included a high proportion of serious offenders for whom attempts to access services may not have been made in the past and who, prior to referral to the Diversion Team, may have been dealt with solely within the Criminal Justice System.

Two thirds of those referred to the Diversion Team over the previous 18 months had one or more health or social care need identified. Seven percent were assessed as requiring admission to a psychiatric hospital – 5% compulsory and 2% voluntary, of which 4% and 1% were actually admitted. The remainder were in need of treatment or support within the community – including 5% with accommodation needs and 23% requiring further assessment, of which 3% and 12% were recorded as having this need met. In the majority of cases it was the Health Service to which individuals were referred to in order to meet need. Half of those referred were previously unknown. Service deficit was recorded where the Diversion Team assessed that need was not met with an appropriate response. Overall, service deficit was recorded in 5% of cases, half of which involved the Health Service alone.

As well as accessing support and treatment the Diversion Team also aimed to influence the outcome of arrest or criminal charge or court hearings by providing information to those working in the criminal justice system. Much of this exchange on information was informal and unrecorded, but included negotiations with the Police, Crown Prosecution Service and Defence Solicitors. Formal reports to court were however recorded and over the previous 18 months 66 such report were provided mainly to inform bail decisions. In the majority of these cases bail was granted. Ignoring those people on bail awaiting sentence, 33% of Diversion Team clients had charges discontinued or no action taken, 53% received a non-custodial penalty (the majority involving some for of Probation Order), 2% were given a Hospital Order and 12 % sentenced to a term in prison. Of those sent to prison 69%

were assessed by the Diversion Team as presenting with a mental disorder, although the majority were drug or alcohol related.

The results described in Report 6 were interesting because they appeared to provide evidence that there were indeed a significant number of people in Cleveland with a mental disorder – although the most likely diagnoses were drug/alcohol misuse or 'mental health problems', the inclusion of either of which under the banner 'mental disorder' could be contested – coming into contact with the Criminal Justice System having [allegedly] committed a (often violent) criminal offence. The results supported both the need for the Diversion Team and their effectiveness in diverting mentally disordered offenders away from the criminal justice system or custody. However the results were also frustratingly limited because they described only part of the picture, excluding such things as an exploration of the psychiatric and criminal histories of the people referred to the Diversion Team (needed to provide evidence to support either the criminalisation or medicalisation hypotheses as discussed in chapter 3) because simple conventional methods of data analysis were inadequate to deal with the large number of variables used to describe such histories. Equally, the evaluation of the impact of the Diversion Team was inadequate being based on generalisations (such as the overall number of people diverted from the criminal justice system or custody) instead of more detailed exploration and identification of patterns (such as who was diverted and who not and what could explain the difference). The analysis needed to move on, the question was how? What method would enable the exploration and identification of patterns in such a large and complex time ordered dataset? One possibility was the elaboration of high dimensional order cross-tabulations (i.e. multivariate contingency tables), for example: variable by variable by variable by variable by variable by variable; would produce a six dimensional table. However as Byrne (1998) points out this is not the best way of exploring the arrangement of cases within an overall changing system as

printing out all possible arrangements and interpreting the results would be very laborious. Instead Byrne recommends "cluster analysis will achieve much the same results very much more easily". How this method was employed is described in detail in Chapter 6 Methodology.

4.4.4 The Diversion Team Database

From the outset the Steering Group responsible for the development of the service decided that a Diversion Team database was necessary because the data collected and generated by the service should be organised in a form which was meaningful and useful for administrative, clinical and research purposes. No 'off the shelf' database existed to meet the needs of such a specialised Team and so the decision was made to approach a software developer to programme a tailor made system. The design of the database is described in detail in Chapter 6 and as such will not be repeated here.

The Cleveland Diversion Team Database played a central role in the functioning of the service. Following completion of documentation after referral receipt, assessment or discharge, information was inputted onto the database by the Diversion Team administrator. The administrator then used this information for clinical audit, for e.g. ensuring cases were closed rather than left open unnecessarily, that all information was recorded on relevant documentation and inputted onto the database, providing lists of clients for clinical meetings etc. Diversion Team members also used database reports for individual clinical audit, for e.g. listing their own clients, activities and outputs. They also used it to access clinical information quickly and efficiently, for e.g. checking to see if a person had been previously referred to the service, responding to requests for information etc. The reports submitted to the Steering Group evaluating the service were based largely on data

supplied by the database. Finally the anonymised data supplied for the research undertaken in this thesis originated from the Diversion Team database.

4.5. Summary

Local statutory agencies in Cleveland established the need to develop a custody diversion service which could respond to the needs of local residents. The objectives were ambitious including: establishing an effective multiagency custody diversion team, a range of community disposals for convicted mentally disordered offenders and an effective aftercare service for mentally disordered offenders discharged from prison or hospital.

This chapter concentrated on the development of the custody diversion team. The operational policy and practice of the team described who could be referred, when and how and what actions the diversion team might subsequently consider. A brief summary of the types of people referred to the team, what actions the team took and with what outcomes demonstrates the general activity of the team. What information they collected and recorded determined what data was subsequently available to this research. The following chapter describes the aims of the research – why was it important to evaluate the Cleveland Diversion Team?

5. PROBLEMATIC

This chapter explores the questions and issues at the centre of this research, asking 'why did these questions justify exploration?'; 'how would they be answered?'; and 'what might the answers look like?'

There were two related research questions. The first concerned the need to understand or chart the trajectories or careers of those individuals referred to the Cleveland Diversion Team for Mentally Disordered Offenders. This question could also invariably be entitled 'what evidence is there to support the criminalisation hypothesis?' The second research question concerned the impact of the Cleveland Diversion Team on the psychiatric and criminal careers of people referred to them. Where the aim of the first question was to examine what evidence there was to support the policy of diversion from the criminal justice system or custody for mentally disordered offenders, the second was to evaluate the effect of the policy – the former examining inputs (in the form of the psychiatric and criminal histories of individuals referred to the Cleveland Diversion Team) and the latter outputs (in the form of outcomes for clients of the service).

Each research question will be considered in turn under the following Sections, beginning with an explanation of the question and its background, followed by the justification for asking the question, then next the methodology involved in forming an answer, and finally what the answer might be.

5.1. Research Question 1: What types of psychiatric/criminal careers did individuals referred to the Cleveland Diversion Team experience?

5.1.1 Background

By career I meant "an individual pattern or progression in an nonoccupational life course" (Jary and Jary, 1991) rather than a way of making a living. For instance a 'criminal career' is defined as the longitudinal sequence of offences committed by an individual offender (Farrington, 1994). As Farrington points out a criminal career has a beginning (onset) and end (desistance) and a career length in between (duration). During their careers, offenders commit offences at a certain rate (frequency) and for those who commit several offences, it is possible to investigate how far they specialise in certain types of offences and how far the seriousness of their offending escalates over time. Similarly a psychiatric career must have a beginning but may or may not have an end. During their careers, people will have periods when they are well and periods when they are unwell, periods when they are in touch with the various psychiatric services and when they are not. Diagnoses can and often will vary during these periods. Again, as with criminal careers, it is possible to investigate the patterns that emerge as part of a psychiatric career.

The investigation in this instance however focused on people who would experience some interaction between both careers, criminal and psychiatric.

5.1.2 Justification

The policy of diversion from custody was based upon assertions about the nature of the careers being experienced more and more frequently by mentally disordered offenders. This was despite the fact that research in this area was varied (discussed in detail in chapter 2. The Context Necessary for Policy Development). In short, it was argued that for various reasons growing numbers of mentally disordered people

were becoming involved with the criminal justice system and serving time in prisons. The question was did those referred to the Cleveland Diversion Team exhibit career characteristics suggestive of a tendency towards increasing involvement with the criminal justice system and the risk of prison sentences, therefore supporting the premise for the policy? Or were there significant differences suggesting that concerns were unnecessary at least for Cleveland's residents or alternatively that the Cleveland diversion service was being targeted at different people?

The policy of diversion from custody for mentally disordered offenders, and the Custody Diversion Teams responsible for its implementation, were established by the Government in the early 1990s. The aim was to reduce the prevalence of psychiatric disorder in sentenced and remand prison populations and counteract the effects of a process of criminalisation – a popular theory supported by some researchers and public officials, that suggested that a growing number of people with a mental disorder were coming into contact with the criminal justice system for a variety of reasons, including the failures of the policy of care in the community following a large scale process of psychiatric hospital closures commonly referred to as deinstitutionalisation. It was suggested that whereas previously people who were proving 'disruptive' because of a mental disorder would have been dealt with by the psychiatric system, now that process was being replaced by a general move towards the criminal justice system and prison as the preferred method of social control with an associated emphasis on punishment rather than treatment.

An important part of my research was to carefully consider the evidence offered to support claims that a significant proportion of prisoners were mentally disordered as general estimates of the prevalence of psychiatric morbidity in prison populations varied enormously depending upon the populations studied, the variations in

methodology, and the different professional biases of the researchers involved. However it seemed there was some agreement among researchers that figures were significant. The level of mental disorder in the general population had been estimated at between 15%-17% (Gunn 1992) whereas on average the level of identifiable disorder reported by research from within the sentenced prison population was about twice that. The question was why were so many mentally disordered people in prison? It was possible that part if not most of this answer could perhaps be found in the observation by Gunn et al (1991) that most studies of sentenced prisoners reported a high level of disorder but a low level of psychosis. In other words that the majority were diagnosed as misusing drugs and/or alcohol, or having have some vague 'mental health problem', or, some would argue, an equally vague 'personality disorder'. Would the same be true of those referred to the Cleveland Diversion Team? Were these people victims of this medicalisation process or were the diagnoses being justifiably applied and the issue was one of a lack of suitable treatment facilities or, in the case of personality disorder, disagreement among doctors about treatability?

In addition to estimates of the current prevalence of psychiatric morbidity in prison populations, concerns had been growing because evidence suggested that these numbers were increasing due to a process of 'transcarceration', whereby one form of institutional setting (the psychiatric hospital) was simply being substituted for another (the prison). Such claims about the interrelationship between prisons and hospitals could be traced back to a 1939 study of several European countries. Penrose (1939) had concluded that, "as a general rule, if the prison services are extensive, the asylum population is relatively small and the reverse also tends to be true" (p.3). He had compared the number of psychiatric inpatients and the number of prison inmates in 18 European countries and reported an inverse ratio: $r = -0.62$. Penrose explained his findings by arguing that the population of every country

contains a small number of people whose behaviour is so undesirable 'from the social point of view', that they needed to be confined, if necessary against their wishes, to safeguard the interests of the rest of the community. The development of services for the control of these antisocial elements depended not only upon the current social standards but also upon the financial resources of the state. There were two ways of segregating these undesirables: 1) imprison them, or 2) hospitalise them. For the first method to succeed society must wait for a crime to be committed, which then justified retributive or deterrent action against the offender usually involving removal from society. The second method meant the deviant was regarded as 'material for medical attention' and institutionalised. More recently, Penrose's research and his findings had been replicated in the UK using psychiatric hospital and prison figures (Weller and Weller, 1988), producing an even stronger correlation, $r = -0.94$.

This rather simplistic, popular version of the 'transcarceration' hypothesis took the criminalisation hypothesis a step further - where the criminalisation process suggested that there were alternative methods of controlling deviancy: either medicalise and hospitalise or criminalise and imprison (put simply treatment versus punishment); transcarceration stated that one form of institutional setting had simply been substituted for another with many former mental hospital patients being reinstitutionalised directly from hospital to prison. In this its narrowest sense, the transcarceration hypothesis was much more difficult to sustain than the criminalisation thesis and in terms of those referred to the Cleveland Diversion Team would be quite easily disproved.

However a rather more sophisticated view of the transcarceration hypothesis was available which involved a critical perspective on control as a holistic phenomenon (Lowman, Menzies and Palys, 1987). Whereas historically the study of social

control has been trapped between disciplinary boundaries – with isolated systems of discourse, such as psychiatry or penology, developing around what had been treated as closed or effectively discrete systems of control – this approach was proving increasingly inadequate as systems became ever more intertwined, merging in complex patterns of power allocation, resource deployment and mutual accommodation. More recently, trends have pointed to a peno-juridical, mental health, welfare and tutelage (guardianship) complex which can only be examined by appreciating cross-institutional arrangements and dynamics. Privatisation, decontrol, deinstitutionalisation and decentralisation have had consequences for the courts, prisons, probation, welfare and mental health. The careers of individuals have been characterised by institutional mobility as they are pushed from one section of the help-control complex to another. 'Control' essentially has no locus and the control mandate has increasingly entailed the 'fitting together' of subsystems rather than the consolidation of one agency in isolation from its alternatives. This approach to social control incorporates criminalisation as only one method among many, including medicalisation. These are the processes by which it is suggested people are moved around the health/social care and criminal justice systems. This model of control seemed more easily sustainable intellectually, and perhaps empirically, in relation to observations about Cleveland's mentally disordered offenders.

5.1.3 Methodology

Which of the positions actually characterised the careers of mentally disordered offenders in Cleveland – the tendency to view the recent carceral trends as singular or unidimensional phenomena or as a moment of the oscillation between alternating modes of control – was not straightforward because, at a pragmatic level one of the most significant problems confronting research on the transcarceral system involves tracing the paths of 'conscript clienteles' across institutional boundaries (Steadman

and Morrissey, 1987). As Watson (1993) pointed out, researching the careers of mentally disordered offenders renders inadequate any simple focus on clearly delineated and significant episodes such as discharge from hospital, arrest, conviction, sentence etc. What was needed was an attempt to understand the complex ways in which some individuals become channelled through particular institutional and extra-institutional careers. When applied to the development of services, such as diversion schemes, this kind of approach could lead to a specific form of evaluation: "how can future provision be organised, not merely so that it is flexible, and in some undefined way 'tailored' to the individual, but also so that the consequences of particular decisions do not create new forms of career structure which lead to or maintain the mentally disordered as an offender?"

The task of formulating the research to answer my first research question was made more difficult because the ways in which particular types of career structure may become established necessarily involve contemporary changes in institutional and community provision for the mentally ill. In order to evaluate the impact of the Cleveland Diversion Team on those people with a mental disorder who had offended in the past or who were now offending, it was not simply a matter of comparing one set of careers before deinstitutionalisation with another set after deinstitutionalisation because some careers may have involved the deinstitutionalisation process itself. The simplistic understanding of the transcarceration hypothesis discussed above, which reduces the careers of those affected either to a move from hospital to prison via the community or homelessness for example, or to a statistical shift in location from hospital to prison for the newly mentally disordered, was unhelpful. Instead what was required was a detailed understanding of the life histories of people who found themselves involved with the criminal justice system for a variety of reasons and after a variety of experiences. The process by which some mentally disordered people become homeless needed to

be understood, although it was by no means relevant to all mentally disordered offenders and therefore could not provide an explanation for the offending of many mentally disordered offenders. The concept of career had to be applied sensitively to individuals in a variety of situations, and not as a vehicle for a crude speculation that large numbers of people were being herded along one narrow track from the hospital to the prison. Research had to proceed on the basis that mentally disordered offenders do not form a homogeneous group, sharing a unified sequence of experiences.

On a pragmatic level, access to detailed descriptions of the psychiatric and criminal careers of the 1011 individuals referred to the Cleveland Diversion Team between April 1995 and September 1997, was not an issue. The team completed a comprehensive assessment of those referred to them, which was then inputted into a dedicated relational database (discussed in full in chapter 6 Methodology). The design of this assessment tool and related database had been thoroughly researched by the team and influenced by myself, in an earlier existence as action researcher with them. Having been formally granted ethical approval for the research I was proposing, to explore the careers of mentally disordered offenders referred to the Cleveland Diversion Team, and allowed access to the team's database, the issue was how to frame the research in such a way that it would help establish the case for a particular analytic methodology and provide a structure within which to interpret outputs. In other words to seek to 'conjoin sociological theory and method' when, as Pawson (2000) argues:

> "...the best social explanation requires a judicious blend of these two domains of social inquiry [theory and empirical research]." (p.283)

It was clear very early on that the approach offered by the general linear model (which takes the form of a statement of constant conjunction or single cause and consequent effect) would be inadequate basically because it is unable to deal with the concept of 'interaction' in any meaningful way. Whilst working as a member of the Cleveland Diversion Team I had observed that although people referred to the team could appear similar – same deprived backgrounds, similar ages, same problems with alcohol and drugs, maybe similar psychiatric diagnoses – they would experience very different lives. In other words these people may have appeared similar but something made them different, they were 'greater than the sum of their parts' (a reference to holism, although I did not intend to resort to an explanation based on the unanalysed whole rather than the analysed discrete parts, instead what mattered was the existence of interactions among the parts). Any turn to a reductionist analysis would be imposing a linearity and order that did not exist. Linearity in relationships is most simply expressed in algebraic terms by the equation:

$$Y = a + bX$$

where b gives the amount of change in Y when X changes by one unit, i.e. every time X increase by one, Y increases by b – an additive relationship. The search for such linearly founded laws is the search for predictive ability. As Byrne (1998) argues:

> "If we can establish the relationships so that our formalised linear mathematical models are indeed isomorphic with the real world...then we can predict what will happen in a given set of circumstances...Once we can predict, we can engineer the world and make it work in the ways we want it to." (p.19)

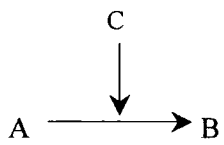
Byrne however spoils this by adding that "the trouble is that much, and probably most, of the world doesn't work in this way", and it doesn't work this way because of the effects of interaction. Interaction, as it is referred to here, is what happens when superposition breaks down (where superposition refers to a principle that may be applied to systems in which individual variables act linearly: the resultant effect on the system is equivalent to the summation of the effects of the individual variables that are acting on the system). In other words the effect of two or more variables acting together is not simply the sum of their effects taken separately. Instead we find that there are complex emergent properties, for example:

$$A \,\&\, B \longrightarrow C$$

where the interaction of A and B leads to C. This can be compared with the linear equation A plus B equals C, where A plus B is additive and C is always the result:

$$A + B = C$$

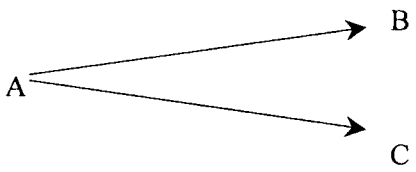
In another example of a non-linearity, the relationship between two variables is modified by the value of a third:



where the relationship between the two variables A and B is contingent or dependant upon the interaction of the third, C, and as such may or may not be realised. Consequently it seemed to me that in order to explore the characteristics of the individuals referred to the Cleveland Diversion Team and the careers they had experienced on the way to any kind of causal explanation, I needed an account

which combined such non-linear relations, including emergent properties and multiple and contingent causation.

Complexity theory, which has developed from accounts of chaos theory, deals with such non-linear relations and changes that do not fit into a simple linear law. Along with the ideas of emergence, probably the most useful element to my research at the time was the notion of movement from one state to another through a process of bifurcation, which was dependant on key changes in the magnitude of underlying causal variables. The process of bifurcation implies neither simple linear determination (constant conjunction where if A happens then B happens), or random process where anything can happen. Instead what is implied is complex change, so that in the first bifurcation if A happens then B *or* C happens depending upon small initial variations in the form of A:



This fits very well with my need to map the movement in people's careers from one stage to another. For example, an individual referred to the Cleveland Diversion Team (above, A) may be either diverted from the criminal justice system to care and treatment by the health and social services thus braking the cycle of offending (B) or the team may decide no treatment or other needs are evident, make no referral to health and social services, the individual is processed through the criminal justice prison and sent to prison thus maintaining them as an offender. The individual is the same, while the outcome is dependant upon the action taken by the team. Whilst this is a very simple example, and does not reflect the actual situation, it does indicate

how the action taken at A determines which of the two paths the mentally disordered offender will follow.

Following the identification of complexity theory, the next step was to think about the tools that have been developed for the analysis of data about the real world in complex terms. The method that suited my purposes was cluster analysis. Essentially the procedure is used to classify a set of cases into a number of relatively homogenous subsets in which the members of these subsets are more like each other than they are like the members of other subsets. Cluster analysis allowed me to use all of the information I had available about all of the people referred to the Cleveland Diversion Team in order to first chart a career for each individual and then identify career typologies from within all careers, without requiring any prior knowledge of cluster characteristics or even of how many clusters would emerge. One important issue was the difference between 'natural vs. special-purpose types' of cluster analysis (Lorr, 1983).Forgy (1965) had pointed out that, "A typology can reflect a fact of nature, that there are actually discrete, separate subtypes of individuals within a larger sample". The natural cluster is proposed to represent such a summarisation. Lorr on the other hand had proposed that the attributes that form the basis of a classification must represent a selection from all possible characteristics. The selection he argued would depend on our purpose. For example to study evidence of the criminalisation of people with a mental disorder details of psychiatric and criminal history would be important. No single all-embracing classification is possible because the basis of a classification depends upon the researcher's interest and purpose and more importantly similarity is not a general characteristic. It would be necessary to specify the attributes on which the individuals referred to the Cleveland Diversion Team were to be compared for example, the classification of types of psychiatric and criminal history could be based on: date, type of inpatient stay (e.g. voluntary or involuntary), diagnosis, and

length of hospital admission; date, type, diagnosis and length of all other psychiatric contacts; history of harm to self and/or others; date, offence type and sentence of all previous convictions.

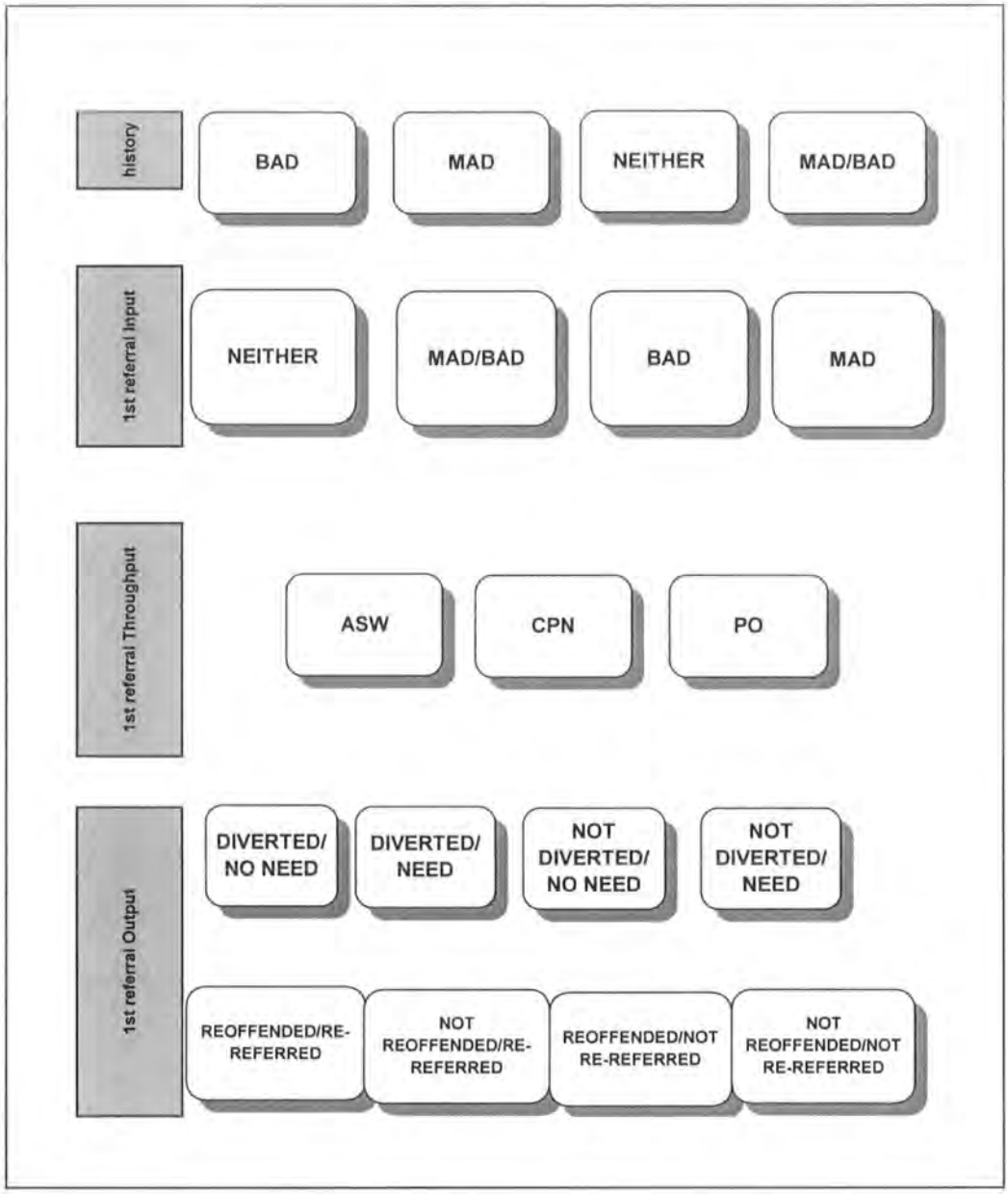
Following the identification of cluster analysis as the method which fit within a complexity framework and offered a means of mapping the careers of Cleveland Diversion Team's mentally disordered offenders, the next step was to apply it to the analysis of the data supplied. The concept of a 'career' carries an implication of time and indeed the Cleveland Diversion Teams' database was time ordered. The importance of this was that it enabled me to identify key periods in the careers of everyone referred which meant that attribute specific clusters could be identified within these given periods, beginning with history, and the movement of people between them mapped over time. These key periods represented important stages or bifurcation/multifurcation points where decisions or actions taken may have an impact upon the direction a career takes (see Figure 5.1 below).

The key stages in the careers of those referred to the Cleveland Diversion Team are identified down the left side of Figure 5.1. The clusters identified to the right of each stage represent a description of all possible states. It is important to note that states, while possible, may not be realised:

1. whereas in linear systems the ability to predict is absolute because changes over time in control parameters produce incremental and linear changes in the system;
2. in chaos theory no prediction can ever be made because small changes through time produce indeterminate results i.e. anything can happen;
3. the interesting thing about complex solutions is we cannot predict absolutely but we can know what will happen will be drawn from a set of alternatives (i.e. the

possible states in Figure 5.1) 'greater than one but less than too many to cope with – the realm of determined chaos' (Byrne, 1998).

Figure 5.1 : Key Stages in an MDO Career



The point is that changes can be mapped over time and historically we can see what has happened so that we may be able to, not predict as such, but to act so that some things happen and others don't. In order to do this we have to know what might

happen, i.e. what are the possible states from which we must choose a preferable outcome?

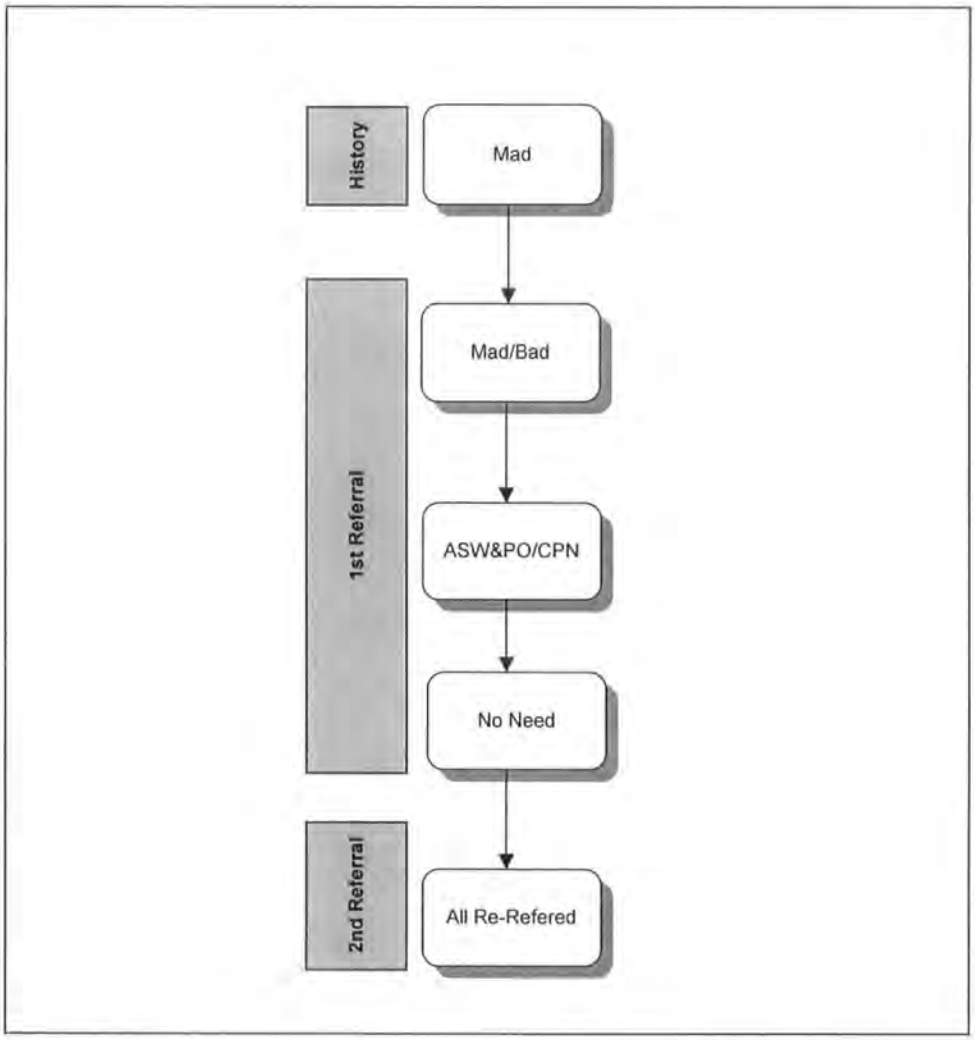
5.1.4 Outcomes?

It was possible that a number of groupings might be identified from all people referred to the Cleveland Diversion Team, and certain experiences or even definite career structures discerned. What would be the most likely axes around which such groups might cluster? It was possible that particular career trajectories might be associated with psychiatric diagnosis and type of offence or a combination of the two. However it might have also been the case that there were marked differences in the experiences of the sexes. There might also have been important differences between those whose mental disorder or offending began at an early age and those for whom these events occur much later in life.

It would be through such an account of career patterns that a better understanding of the operation of sex, race and class biases could be established. Some notion of a disadvantaged career structure, rather than the experience of unconnected episodes of prejudicial treatment, could perhaps explain the over-representation of certain minority groups within the sentenced and restricted patient populations. The analysis would identify the locations where key decisions were taken (the multifurcation points or points in a persons career where one of many options must be selected as discussed above) some of which lead to structured disadvantages. Tracing through differences in the situations of individuals arriving at these locations, and the variety of consequences that flow from them, should afford the most detailed understanding of the overall pattern of representation.

In terms of the research question: "what types of psychiatric/criminal careers did individuals referred to the Cleveland Diversion Team experience?", mapping the careers in this way should provide some indication of the weight of evidence in Cleveland which supports or otherwise the criminalisation hypothesis, the reason behind the introduction of the policy aimed at custody diversion for mentally disordered offenders. A criminalised career might for example look like the following (see Figure 5.2):

Figure 5.2 : An Example of a Criminalised Career



The people represented in Figure 5.2 would have a significant psychiatric history, including a diagnosis of mental illness and periods of hospitalisation. They would be referred to the Cleveland Diversion Team having been arrested by the police for some minor offence – e.g. causing a public nuisance. The team would not identify a need for intervention and the person would be processed and sentenced by the criminal justice system. These individuals go on to re-offend as the cycle of criminalisation has not been broken, and are re-referred to the diversion team.

5.2. Research Question 2: What impact does the Cleveland Diversion Team have on the psychiatric/criminal careers of individuals referred to them?

5.2.1 Background

The term 'divert' is defined as to turn aside or to deflect (Concise Oxford English Dictionary) and the policy of diversion for mentally disordered offenders was introduced to ensure that people with a mental disorder did not end up serving prison sentences by deflecting them away from the criminal justice system to care and treatment by the health and social services. Too many mentally disordered prisoners due to the effects of criminalisation? Then it seemed the solution was straightforward – take them out of the 'inappropriate' system (the criminal justice system) and put them in the 'appropriate' one (the health and social care system).

Briefly, the background began with the Butler Committee (1975) which recommended that mentally disordered offenders should be dealt with other than through the courts. Fifteen years later the Home Office, in its now well known circular No. 66/90, reiterated this view. Diversion was to be achieved in two different ways: first by better use of existing resources and Home Office Circular 66/90 provided very detailed advice to all those agencies likely to be involved in dealing with mentally disordered offenders (e.g. the police, crown prosecution

service, probation, social services, courts, health authorities, prison health acre service); and second by the development of new and specific provisions for mentally disordered offenders – in particular the development of 'diversion schemes' across the country e.g. the Cleveland Diversion Team, with which this research is concerned. Such schemes were practical initiatives usually consisting of a multi-agency team of practitioners from the health, probation and social services, whose aim was to identify individuals with a mental disorder at various stages in the criminal justice system and divert them by providing information and securing alternative treatments or placements.

The Cleveland Diversion Team, operational from 1995, was just such a large, well resourced, multi-agency service whose aim was to divert mentally disordered offenders away from the criminal justice system except when public interest required prosecution. They offered a wide ranging service, adopting a broad definition of their client group (i.e. who was covered by the phrase 'mentally disordered offender'), and covering all stages of the criminal justice system from arrest to sentence. Whereas initially it had been assumed that those who would benefit from the service would be people with a severe mental disorder committing minor or nuisance type offences (in line with the criminalisation hypothesis) actual referrals received by the team were much more complex involving people who were not at risk of a prison sentence and who did not require hospitalisation, people who were not so obviously in need of, or indeed perhaps should not be considered for, diversion from the criminal justice system and whose mental disorder was more vague or involved primarily drugs or alcohol misuse. All of which makes measuring the impact of the Cleveland Diversion Team on the psychiatric and criminal careers of those referred to them rather more complicated, particularly as outcomes had become increasingly complex and perhaps more vague.

5.2.2 Justification

Although it was generally assumed that diversion from the criminal justice system would have a beneficial impact on the lives of most mentally disordered offenders, the policy was not without its critics. In addition, the aims of the diversion policy evolved over time and what outcomes could or should be expected have become uncertain. It was important therefore to establish what effect the Cleveland Diversion Team had on the psychiatric and criminal careers of those referred to them – which outcomes were realised and therefore what others, whilst possible, remained unrealised. Careers could then be evaluated to identify what actions produced what effects – beneficial or not, expected or not.

The arguments for psychiatrisation (as opposed to criminalisation) had been made on the grounds that hospitalisation of mentally disordered offenders was less stigmatising and hospital treatment benefited patients more than did prisons. Prisons were unable to provide the environment or range of treatments that a health care regime could (Abramson 1972). Diversion was considered a humanitarian approach, reflecting the view that "in making a Hospital Order the court is placing the patient in the hands of the doctor, foregoing any question of punishment and relinquishing from then onwards its own controls over them" (Department of Health and Social Security, 1975, para. 14.8). In other words where mentally disordered people offended, punishment and protection were not over-riding criteria, nor even relevant ones. The National Association for the Care and Resettlement of Offenders (NACRO, 1993) went a step further suggesting that diversion offered a panacea to the community as well as the individual: reducing the chance of reoffending, treating the individual's mental health problem, and saving time and effort for other professionals.

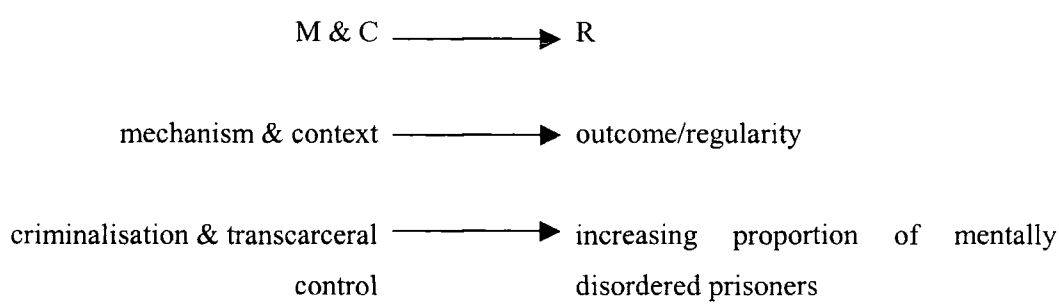
However not everyone agreed, asking 'if most mentally disordered offenders are neither very seriously ill nor dangerous, how much intervention is justified/', particularly when, as Campbell and Heginbotham (1991) argued, 'special' provision manifests itself as special discrimination? Diversion to psychiatric care may mean that an offender is compulsorily detained under the mental Health Act 1983 for longer than they would have been in police or prison custody. It may also be perceived as less desirable (and ultimately more stigmatising) than custody by the offender.

In addition to concerns about discrimination and stigmatisation, tensions existed (both philosophically and practically) between care/treatment on the one hand and protection/punishment on the other. Such conflict emerged particularly where issues of 'public protection' were evident and prosecution and a court disposal were considered necessary in order that a restriction order could be made, providing some control, in terms of public safety, over the person's progress through the hospital system and back into the community. Further complications from a therapeutic perspective involved suggestions that a mentally disordered offender should be given the chance to 'face up to' the fact and significance of his or her offending. NACRO (1993) also argued that it was a person's right to have the allegation against them and the supporting evidence tested in a court of law, particularly where the alleged offender denied it. Further difficulties emerged because of the difference between an offence committed as a direct consequence of a mental disorder and an offence that was not directly related in this way but where it was subsequently recognised that the offender was mentally disturbed (i.e. mental illness as a cause of the offence Vs mental illness caused afterwards as a consequence of the nature of the offence or court sentence).

All of which introduced some doubt into what otherwise appeared a wholly beneficial policy. Added to this was also a growing vagueness surrounding the definition of 'mentally disordered offender' and what was meant by 'diversion'. As described in the previous Section, the Cleveland Diversion Team adopted a broad definition of their client group and offered a wide ranging service from arrest to sentence. This meant that referrals did not necessarily fit neatly with a diversion policy whose aim was to divert individuals away from the criminal justice system and custody, and into a psychiatric hospital. Many of those referred did not have a severe mental disorder – a significant proportion were 'misusing drugs and/or alcohol' or had a 'mental health problem' – and did not require admission to hospital. Despite the fact that many were committing significant offences (violence against the person, burglary, theft etc) they were not at risk of a custodial sentence. A discontinuation of criminal proceedings was also not appropriate for most, being neither ill enough and committing fairly serious offences. There was a need therefore to explore what the team doing, for whom, with what effect?

5.2.3 Methodology

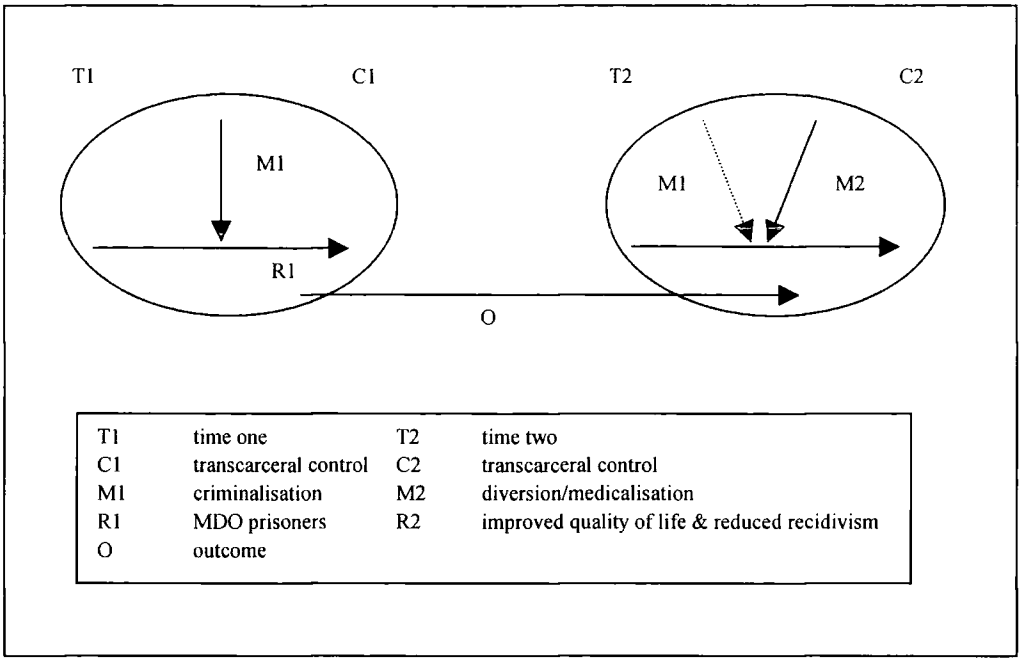
Pawson and Tilley (1997) had developed a useful framework for modelling the change brought about by the introduction of a 'social programme' such as custody diversion for mentally disordered offenders. This framework incorporated two concepts fundamental to complexity theory, interaction and contingency: phenomenon or regularities (R) are caused by an underlying mechanism (M) which are only "fired" in particular local, historical or institutional contexts (C):



The policy of diversion from custody for mentally disordered offenders was introduced in order to break the cycle of criminalisation and redirect the mentally ill to appropriate forms of care and treatment rather than punishment and prison. Figure 5.3 describes the introduction of the diversion programme which began with concerns about increasing numbers of mentally disordered offenders serving custodial sentences (R1) and identification of criminalisation as the causal process or mechanism (M1) and aimed to change this outcome so that mentally disordered offenders experienced an improved quality of life and were less likely to re-offend (R2) by reducing the effects of criminalisation with the introduction of the policy of diversion (M2 overcomes M1).

As a representation of an evaluation of the Cleveland Diversion Team, time 1 (T1) represents history (psychiatric and criminal) before introduction of the team. The team became operational at time 2 (T2), diverting people to care and treatment by the health and social services (M2), leading to a redirection of career which was less recidivist (posing less of a public threat generally) and involved an improved individual quality of life (R2).

Figure 5.3 : Basic Ingredients of Successful Programmed Social Change (Pawson and Tilley 1997, p.74)



T1	time one	T2	time two
C1	transcarceral control	C2	transcarceral control
M1	criminalisation	M2	diversion/medicalisation
R1	MDO prisoners	R2	improved quality of life & reduced recidivism
O	outcome		

Mapping the careers of those referred to the Cleveland Diversion Team would enable me to explore the outcomes of this bifurcation point (R1 to R2). As described earlier (Figure 5.1, p.155), a number of key periods were identified within the careers of those referred to the team, representing important stages where decisions or actions taken may have had an impact upon the direction a career took. Clusters could then be identified within each of these stages using all of the information available and relevant to the cluster:

1. History, where individuals were referred with or without a psychiatric and/or criminal history.

2. At referral individuals were or were not in touch with the psychiatric services and accused of a criminal offence. *[In practise, despite the inclusion of a large number of demographic details, the actual cluster outcomes were grouped around psychiatric and criminal details. This probably reflected the fact that most of the people referred to the Cleveland Diversion Team (and teams*

nationally) were young, male, single and unemployed (reflecting the general criminal population)].

3. Each case was carried by one of the team members: nurse, social worker or probation officer, who assessed need and accessed resources. Actions carried out by team members were fairly generic and included: a full mental health assessment; information gathering; information sharing, for example, written reports to courts and Crown Prosecution Service; recommendations, for example, to continue or discontinue criminal proceedings and transfer to hospital. [*Again in practise, despite including such activity details, the actual cluster outcomes were grouped around the profession of the case worker*].

4. The details included in the cluster analysis of outcomes were types of health/social care need identified, how they were met and by whom, with what if any problems, re-referral to the Cleveland Diversion Team following re-offence or identification of additional need [*In practise, actual cluster outcomes grouped around evidence of need and re-referral*]. Evidence of need was used very generally to reflect improvement in quality of life – where if a person has unmet need e.g. regarding accommodation and this need is identified and acted upon, then this should most likely improve that person's quality of life. In fact, it has been claimed that diversion is increasingly perceived as one way of surfacing need and accessing services (James 1996). Re-referral was used as a very general indication of level of risk, particularly where it involved a re-offence. Meeting need was described as one of the most effective ways to prevent re-offending. For example, Coid (1988) argued that a large proportion of the offences committed by mentally disordered offenders were relatively minor and reflected a need for food or shelter which may have arisen because of an underlying mental disturbance or lack of care and support.

Cluster analysis would be performed for each of these four key career stages: history, input, throughput and output and each mentally disordered offender referred to the Cleveland Diversion Team would belong to one particular cluster at each stage (see Table 5.1 for example):

Table 5.1 : An Example of Individual Cluster Membership

Client ID Number	History Cluster	Input Cluster	Throughput Cluster	Output Cluster
1	1	2	1	1
2	3	3	1	2
3	1	2	1	1
4	2	1	2	3

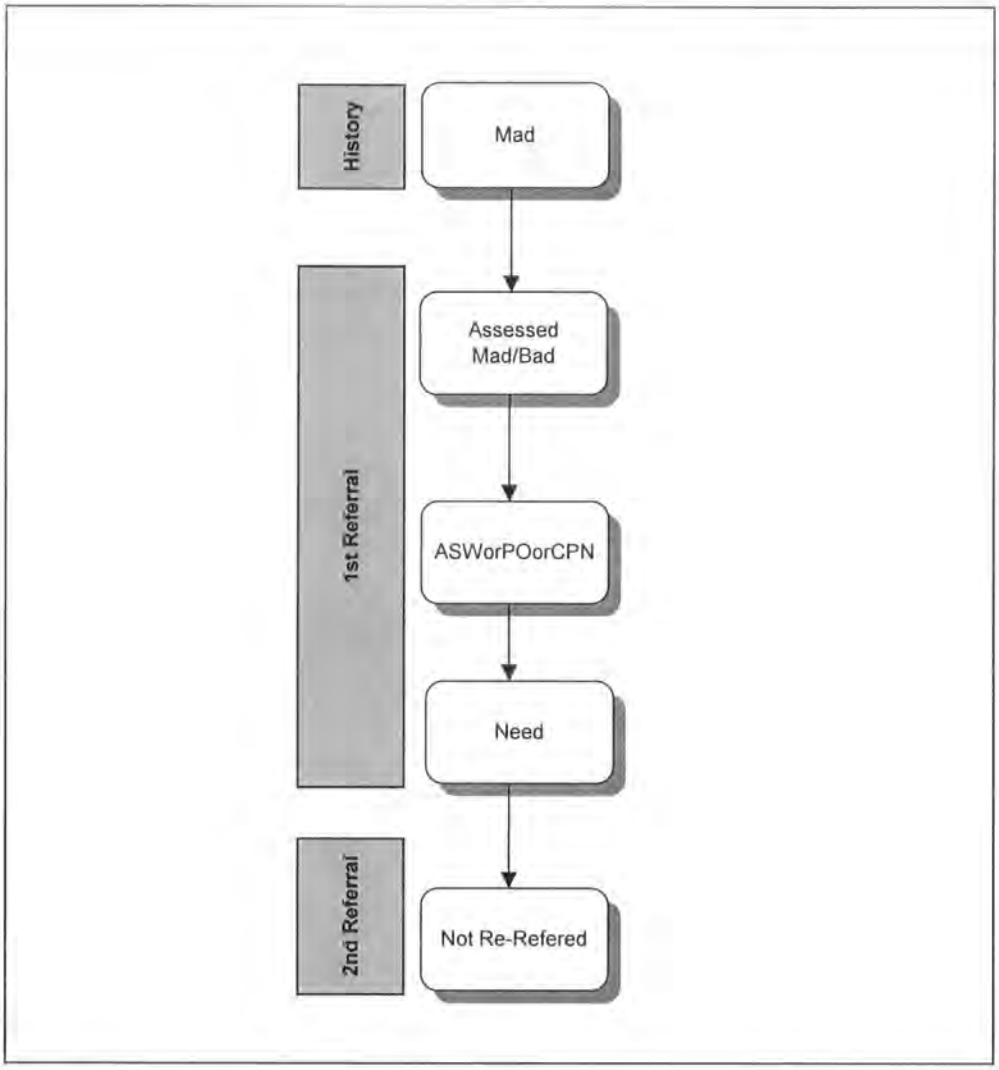
Client 1 belongs to History Cluster 1, Input Cluster 2, Throughput Cluster 1 and Output Cluster 1. This is a description or map of the career of client 1, beginning with his psychiatric and criminal history (which may or may not support the criminalisation hypothesis) and ending with a measure of the impact of the Diversion Team on future criminality and social well being. Each of the 1011 individuals referred to the team would have just such a sequence of cluster memberships describing their careers. In addition, as can be seen in Table 5.1, Clients 1 and 3 have the same cluster pattern. The next stage in the cluster analysis would be to cluster the clusters, thereby identifying a [hopefully] small number of cluster patterns i.e. the shared careers of Cleveland's mentally disordered offenders.

5.2.4 Outcomes

I hoped to identify a small number of explicit careers whose patterns could be explained with reference to current debate about criminalisation/medicalisation and the whole notion of transcarceration. So for example, there may have been a

particular career which seemed to support the argument that a number of mentally disordered people were experiencing a process of criminalisation. This career might look something like the following described in Figure 5.4:

Figure 5.4 : An Example of a Criminalised Career



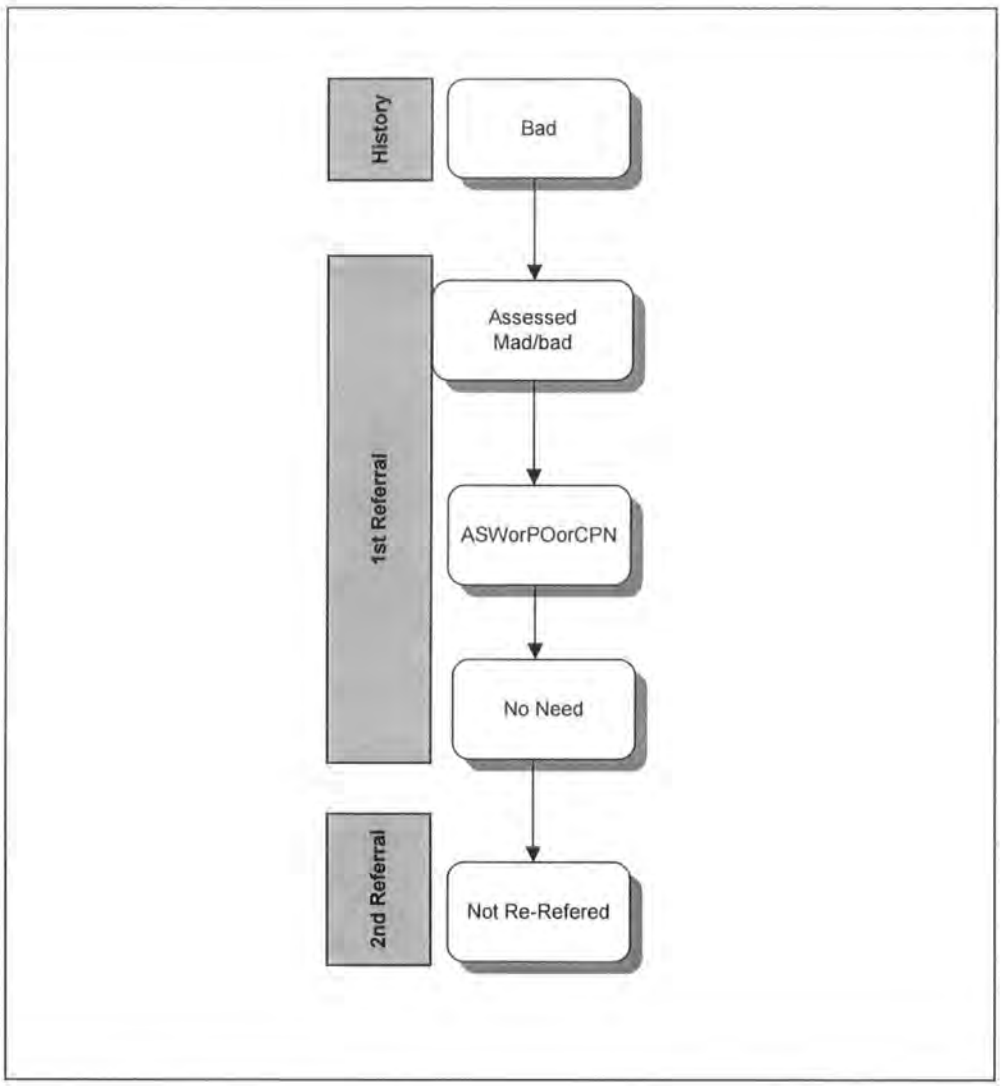
These people would have a history of mental disorder and contact with the psychiatric services including periods of hospitalisation. Their diagnosis then and at assessment by the Diversion Team would be considered 'significant' i.e. a mental illness rather than a mental health problem or drug/alcohol misuse. The offence they were accused of at the point of referral to the team would be classed as 'property/non-violent', or a minor, nuisance type offence. The team would uncover a

number of unmet needs such as appropriate accommodation, friendship and mentoring, stabilisation of mental disorder or alleviation of distressing symptoms etc. and access the service appropriate to meet each need e.g. the voluntary sector services or health, probation or social services. Criminal charges may be discontinued i.e. people are diverted from the criminal justice system, however the most important outcome was that the cycle is broken – these individuals do not re-offend and are not re-referred to the Cleveland Diversion Team. It can be assumed that these people do not re-offend by the very fact that they are not re-referred. If they re-offended in any significant way they would surely be referred back to the Diversion Team to elicit some input into the Criminal Justice System and sentencing procedure.

Whereas in Figure 5.4 it could be argued that these individuals were appropriately re-medicalised, Figure 5.5 represents another medicalised career but this time it could be argued an inappropriate one. People here would have no previous psychiatric history but a number of previous convictions involving probably violent or sex offence. These people may be referred to the team because of the nature of their offending. The team, by the very fact they assess these people, begin an association with the psychiatric services – it would be recorded that the people involved had been referred to the Diversion Team. Diagnoses applied would be drug/alcohol misuse or 'mental health problems', which research has shown could be applied to most if not all of the prison population. No needs would be identified by the team and individuals would not be diverted from the criminal justice system. They would not be re-referred to the team – it may be recorded as inappropriate and any future referral attempt would be turned away by the team unless some significant change could be reported by the referrer. Therefore unlike those in Figure 5.4, it should not be assumed that no re-referral equates to no re-offending.

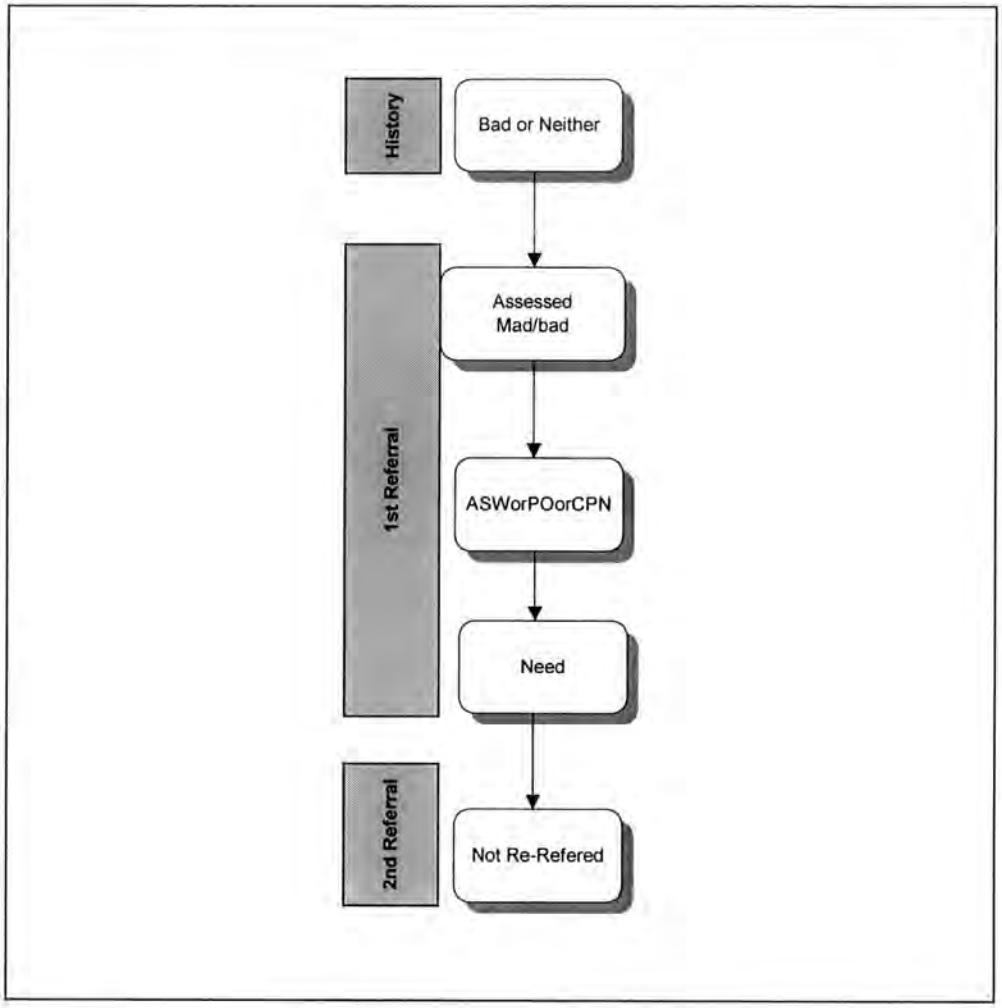
These people probably do re-offend but are not classed as "material for medical attention", and therefore are not appropriate for the diversion service.

Figure 5.5 : An Example of an Inappropriately Medicalised Career



A variation on the career described in Figure 5.5 could of course involve people who have recently developed a mental disorder – either as a function of their offending or as a prerequisite to their offending behaviour or to an escalation in the seriousness of the offences they are committing.

Figure 5.6 : An Example of an Appropriately Medicalised Career



The people experiencing Figure 5.6 careers may have no psychiatric or offending history. At assessment the team identify the onset of a serious mental disorder, with a number of clearly related and immediate needs.

Finally, I may have expected to identify a career which suggested that whatever the team were doing was acting to maintain this group of mentally disordered people as offenders.

Figure 5.7 : An Example of a Criminal Career Maintained by the Cleveland Diversion Team

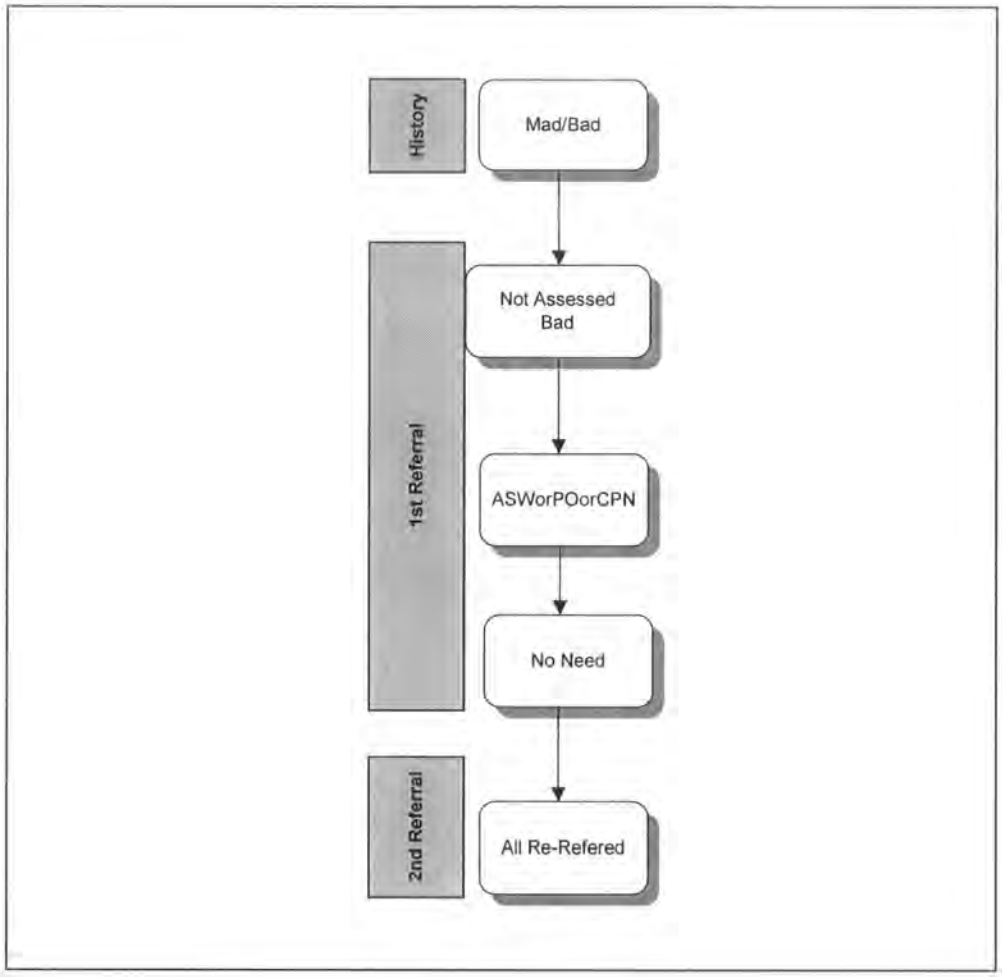


Figure 5.7 describes people who, despite having evidence of a psychiatric and criminal history, are not assessed by the team and therefore have no mental disorder identified or needs uncovered, and all of whom are later re-referred. Re-referral in this instance could represent a re-offence or could be an attempt by the referrer to elicit a different response from the team. Mentally disordered offenders belonging to this group pass through the diversion service with little or no input and it is perhaps this very inaction that helps perpetuate the cycle of offending (particularly if this career could be compared with another of similar history but where the team became involved, identifying needs and preventing subsequent re-referral/re-offending). The identification of a career with such a negative outcome would offer an important

opportunity to explore in detail the Cleveland Diversion Team's involvement in maintaining these mentally disordered individuals as offenders.

5.3. Summary

There were two questions fundamental to this research. The first asked what types of psychiatric and criminal careers did the people referred to the Cleveland Diversion team experience? This question was important because the introduction of the policy of diversion for mentally disordered offenders and the aims of the teams set up to implement it, were based on concerns that the careers of mentally disordered people increasingly involved contact with the criminal justice system and even prison sentences. The second question asked what impact did the Cleveland Diversion Team have on the criminal and psychiatric careers of people referred to them? If ever more mentally disordered people were becoming involved with the criminal justice system and serving prison sentences, then it was important to confirm that specialist teams were fulfilling the policy aim and diverting them away from the criminal justice system to the health and social services.

These questions were going to be answered using a complex realist framework and the typological technique, cluster analysis, to identify and map the institutional careers of individuals referred to the Cleveland Diversion Team. My aim was to relate original differences in the types of people referred to differences in outcomes as mediated through differences in the way they were processed by the team. It was probable that what worked for some would not work for others. The following chapter describes the methodology employed – framework and technique – in detail.

6. METHODOLOGY

This chapter describes the methodology employed by this research, an evaluation of the Cleveland Diversion Team's impact on the psychiatric and criminal careers of those referred to them. From the philosophy and framework provided by critical realism and complexity theory through to the practicalities involved in the exploration of a large and complex dataset, this is a breakdown of the many and complex stages involved in the identification of the institutional careers concerned.

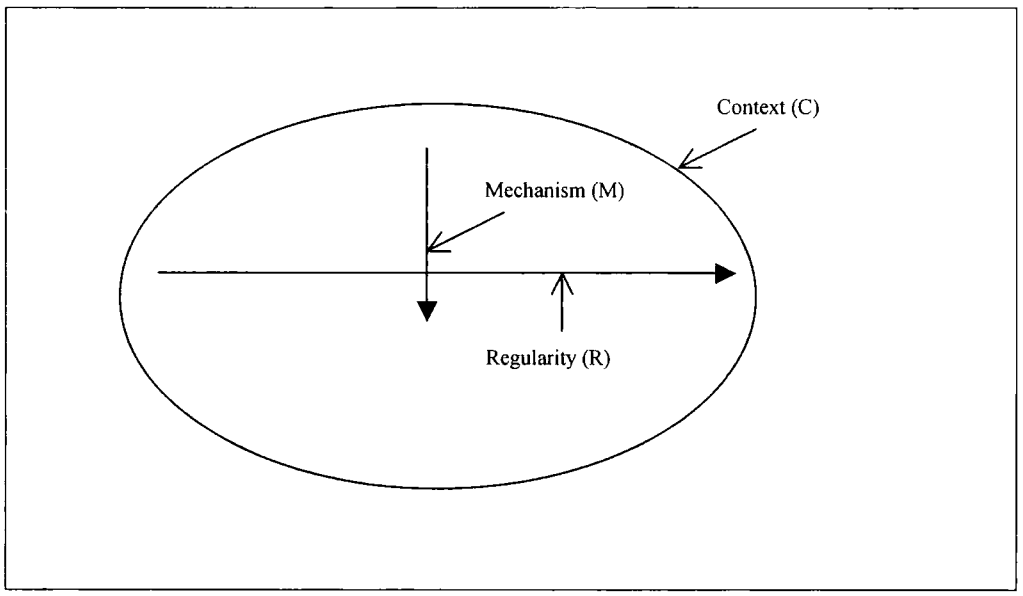
6.1. A Realist Evaluation

Pawson and Tilley (1997) boldly describe the basic task of social enquiry is to explain interesting, puzzling, socially significant regularities (R). Explanation takes the form of positing some underlying mechanism (M) which generates the regularity and therefore consists of propositions about how the interplay between structure and agency has constituted the regularity. Investigation, the authors emphasise, will involve how the workings of such mechanisms are contingent and conditional and thus only "fired" in particular local, historical or institutional contexts (C). In other words:

mechanism & context ⟶ outcome

Research, they proclaim, has to answer the questions: *what are the mechanisms for change triggered by a programme and how do they counteract the existing social processes?* (p.75). Figure 6.1 sets out the basic ingredients of Pawson and Tilley's Realist social explanation.

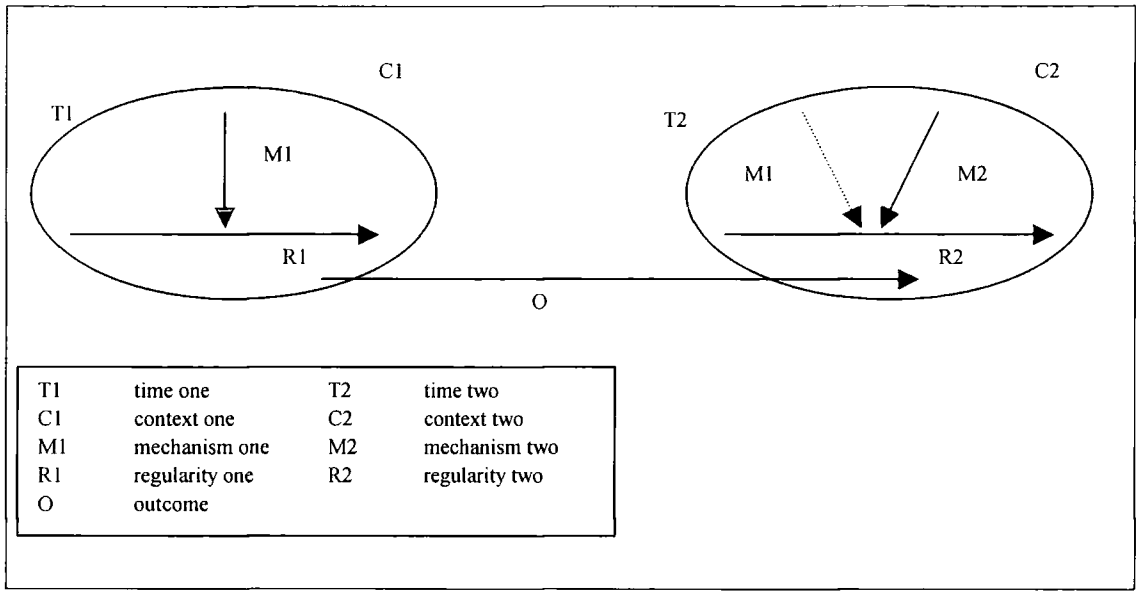
Figure 6.1 : Basic Ingredients of Realist Social Explanation (Pawson and Tilley 1997,p.72)



The ingredients described in Figure 6.1 provide a framework which I applied to the problem of mentally disordered offenders and diversion from custody programme. Abramson (1972) argued that following deinstitutionalisation a 'criminalisation of mental behaviour' has occurred (R). His claim was that relatively minor, nuisance behaviours by ex-mental patients were resulting in criminal charges in order to confine persons who were being disruptive as a result of the mental disorder, but for whom no psychiatric hospital beds were available (M). Such a process can only occur in a context where the deviant is re-defined as bad and the favoured method of social exclusion becomes the prison (C).

The Realist Evaluation method offered by Pawson and Tilley, as well as providing an overall framework, also describes a way in which change can be modelled (Figure 6.2).

Figure 6.2 : Basic Ingredients of Successful Programmed Social Change (Pawson and Tilley 1997, p.74)



T1	time one	T2	time two
C1	context one	C2	context two
M1	mechanism one	M2	mechanism two
R1	regularity one	R2	regularity two
O	outcome		

The policy of diversion from custody for mentally disordered offenders was introduced in order to break the cycle of criminalisation and redirect the mentally ill to appropriate forms of care and treatment rather than punishment. The introduction of the diversion programme began with the identification of the process of criminalisation (R1) and aimed to change this (R2) by reducing the effects of criminalisation (M2 overcomes M1). Herein lies the hub. The change in rates (R2-R1) is an outcome (O) with which my study is concerned. Figure 6.2 is a stylisation of the careers of mentally disordered offenders. Time 1 (T1) represents history (psychiatric and criminal) before the custody diversion programme. Time 2 (T2) is the significant period in the careers of mentally disordered offenders when the diversion programme (M2) impacts and causes change or a redirection of career but only within a changed context (C2). My study aims to map the careers of those referred to the Cleveland Diversion Team for Mentally Disordered Offenders and to explore the outcomes of this key period or bifurcation point (R2-R1). I selected the method I used in my research, and which I will describe in this chapter, because it enabled me to study the large number of people referred to the Cleveland Diversion

Team during the course of their lifetimes and to explore the outcomes of referral to the Team within a complex realist framework.

6.2. Secondary Analysis

The first part of my study is a secondary analysis of information collected by the Cleveland Diversion Team for administrative purposes about those individuals referred to them and the processes which impact upon them. Various definitions of secondary analysis have been offered, for example Hakim (1982) defines it as:

> "any further analysis of an existing dataset which presents interpretations, conclusions or knowledge additional to, or different from, those presented in the first report on the enquiry as a whole and its main results." (p.1)

Clearly Hakim refers to the re-working of survey data but does indicate that there are a number of sources of quantitative social data that may be used for secondary analysis including aggregate data as produced by the population censuses, and, as with my case, datasets derived from administrative and public records.

Secondary analysis on the whole has not become an established method of research among social scientists in Britain perhaps because of the traditionally supposed association between surveys and the positivist epistemology. That there is no one-to-one relationship between a research method and an epistemological position has been well established (Bryman, 1984 ; Platt, 1986) and the assumption that the survey can only be used within a positivistic framework has been effectively rebutted (Marsh, 1982). However there are a number of issues concerning the use of data collected for a purpose other than the current study to which it is to be applied, and collected by someone other than the current researcher. Angela Dale and her

colleagues (Dale et al, 1988) argue that "the secondary analyst must, in order to use the available dataset sensitively and with validity, confront...an important set of issues." (p.20) These they set out as follows:

1. What was the purpose of the study? Was it an academic study designed to explore background issues? Was it a very quick poll aimed at capturing attitudes at one point in time? What was the conceptual framework that informed the study?

2. What information has been collected? Does it cover the range of issues in which the researcher is interested? What categories have been used for classifying, say, occupation or marital status? Does the data incorporate the distinctions required by the secondary analyst?

3. What sampling frame was used, and what is the sampling unit – that is, has the survey sampled individuals, or households or employers? What are the potential biases in the data? What is the response rate?

4. The secondary analyst needs to establish the credentials of the data. Who was responsible for collecting the data? What is the quality of the data?

5. Is the survey nationally representative? Will it support generalisations about the population sampled?

6. When was the data collected? Is it still relevant or have there been substantial changes that make the data source of little value?

It is important at the outset to make clear that although the data to which I have access was collected for administrative purposes by the practitioners within the Cleveland Diversion Team, I have been involved from the outset with decisions

regarding what information should be collected and how it should be coded. Consequently to a greater extent I have been able to influence the data in order that it can support the study I am undertaking. The six points described above are addressed throughout the remainder of this chapter.

6.3. The Research Population

The dataset upon which my research is based includes 1011 (one thousand and eleven) individual people. This is not a sample but rather represents the universe of all individuals referred to the Cleveland Diversion Team for Mentally Disordered Offenders during April 1995 to September 1997 (two years and six months). The 1011 cases do not represent the total number of referrals received by the Cleveland Diversion Team. Individuals could and were referred on more than one occasion, i.e. over time a number of individuals experienced multiple referrals to the Cleveland Diversion Team. Since the Team began operating at the start of April 1995 up until the end of September 1997 (when the current dataset was extracted), 1011 separate people were referred a total of 1305 times – representing a 129% referral to client proportion, or an average yearly referral rate of 522 (average 44 referrals/month)[11].

These referrals meet, or at the time of referral were suspected of meeting, the Cleveland Diversion Team service parameters – the limiting factor or boundary is dictated in the first instance by the presence of mental disorder (suspected or actual) and a criminal offence (actual or potential). In other words, those referred to the Cleveland Diversion Team, and therefore included in my dataset, are suspected mentally disordered offenders in the broadest sense. This status is confirmed or denied for those referrals assessed by the Team and recorded by them using the following broad categories:

[11] In actual fact all 1011 clients were referred a first time; 206 (20%) clients were re-referred a second time; 62 (6%) a third; 14 (1%) a fourth; four (0.4%) a fifth; and one (0.1%) person was re-referred to the Cleveland Diversion Team six times.

a) for mental disorder the categories are:

mental illness

learning disability

personality disorder

drug and/or alcohol misuse

mental health problem

other (specify)

no evidence

b) for criminal offence the categories are:

violence against the person

sex

robbery

burglary

drug

fraud

theft

criminal damage

motoring

property/non-violent

c) for criminal justice status categories are:

pre-criminal justice system/vulnerable

arrested but not charged

charged but not convicted

convicted but not sentenced

sentenced serving custodial

sentenced serving Probation Order

sentenced serving Community Service Order

sentenced serving Supervision Order

sentenced serving other (state)

post criminal justice system/vulnerable

In addition to mental disorder and criminal offence there are two further variables which define service, and therefore population, parameters. Firstly, age: the Cleveland Diversion Team provide a service for adults. Therefore those referred should be 18 years or older (except in exceptional circumstances). Finally, geographical origin: the Cleveland Diversion Team provide a service for the residents, agencies and service providers within the Borough of Cleveland (including Hartlepool, Stockton-upon-Tees, Middlesborough, and Langbargh and East Cleveland).

6.4. Service Modelling and Complexity Theory

Each referral received by the Cleveland Diversion Team is recorded by them and stored within a database. What detail or level of information is collected in each instance is a product of the service modelling undertaken by the Team. The documentation used to record information was developed by Team members during service planning sessions held prior to the service becoming operative. It was during these sessions that the Team began to describe or model[12] the processes which they decided should be involved in the service they would provide [Electronic Mail, SimSoc Mail Discussion List, Scott Moss, 16/3/99 – "we are concerned with developing models that usefully reflect and accurately capture existing real-world

[12] "A model is an artificial object that is hypothesised...to provide an abstract representation of some aspects of social structures and processes." (Hanneman and Patrick, 1997 p. 2)

phenomena while, if I understand these issues correctly, you are interested in the design of systems that do not yet exist but are required to meet particular performance standards", i.e. predictive models]. This activity required them to make decisions about service parameters and form. What would referrals to the Team 'look like' and how could they vary? It was at this early stage that the Team recognised that not all referrals would or should be treated in the same way – and it was at this point the referral typology emerged[13] from discussions about the variety of possible referrals and referral reasons. The validation of this classificatory schema is based on the fact that it has changed very little over the years. There are basically three types of referral: information, advice, and assessment; each of which indicate the processes involved, the service provided and level of information recorded.

I think it is important to begin with a general overview of the Cleveland Diversion Service. The service exists at different levels – individual client and service level – and as such can be mapped at each scale. Figure 6.3 depicts the service at client level. It specifies what information the Cleveland Diversion Team decided (in consultation with others) would be necessary and relevant to the description of each period of time.

[13] I think the term 'created' would not be appropriate here because the emergent typology was a product of "interactive local level processes" (Mihata in Eve et al 1997 p.31), i.e. it is not a classification imposed upon the service but a bifurcative irreducible product of all possible referrals.

Figure 6.3 : Client Model

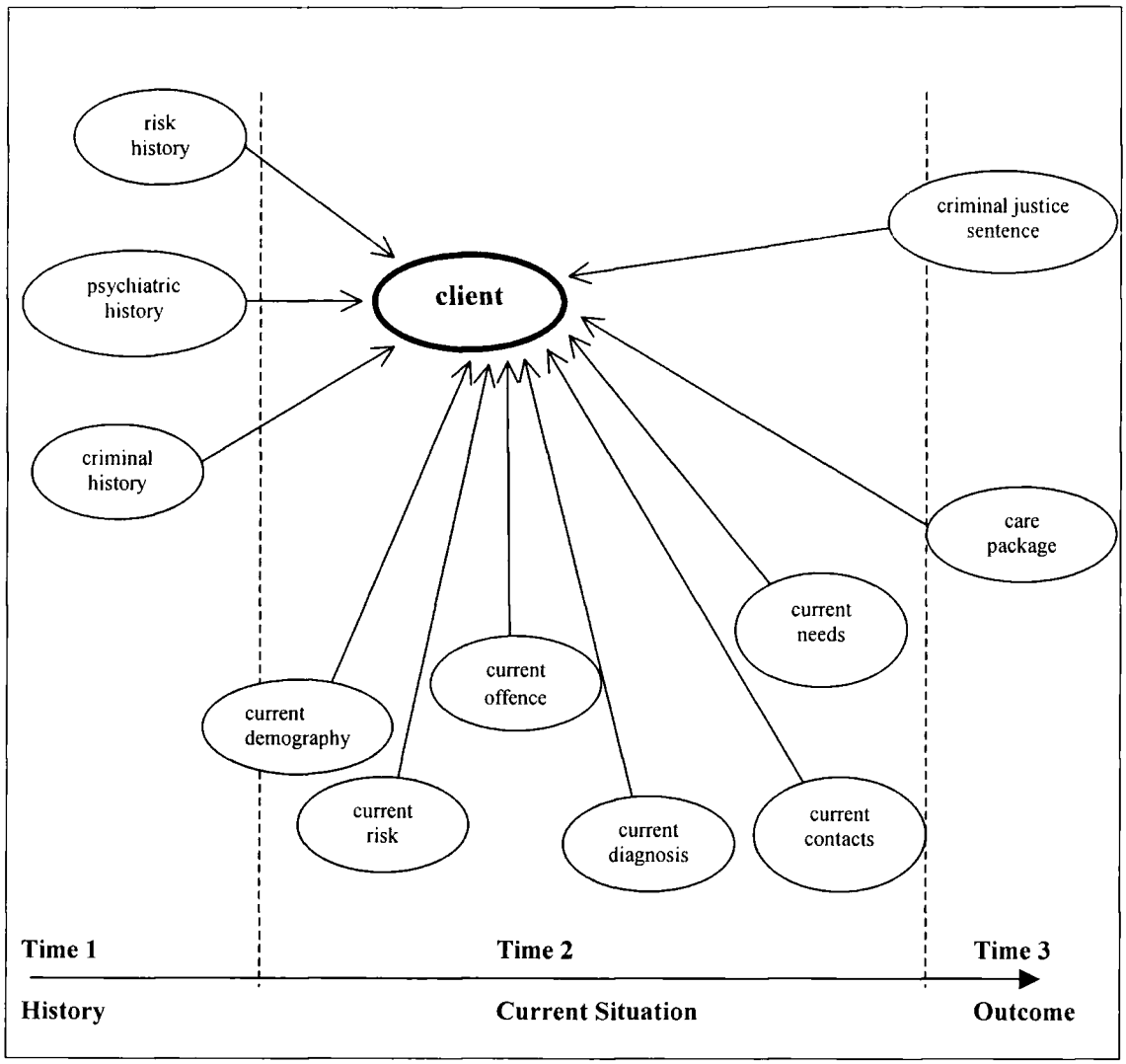


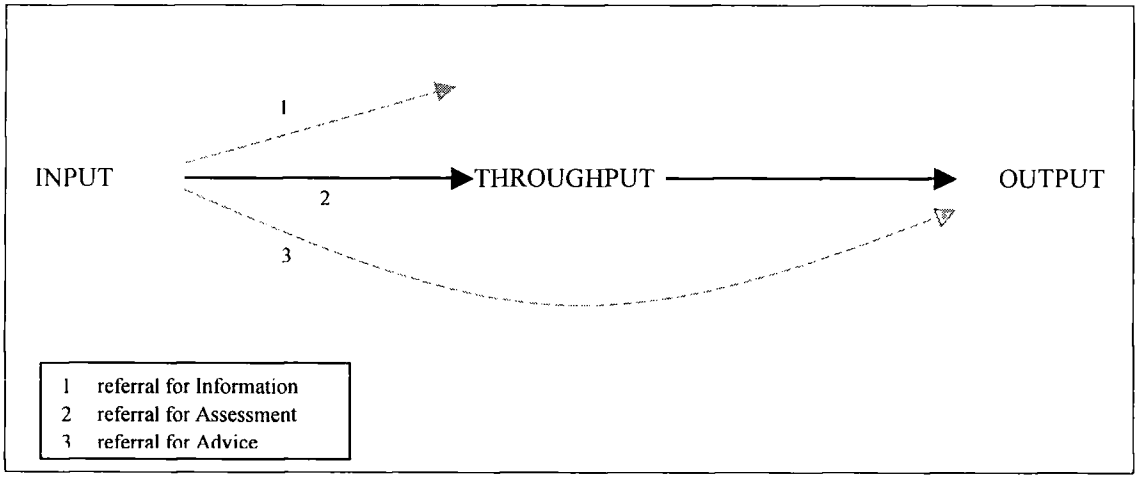
Figure 6.3 models the individual through time, in other words it describes a career process. Time 1 indicates the beginning of a career, a persons history. Information relevant to the Cleveland Diversion Team includes previous convictions, details of previous psychiatric history and data concerning risk – including previous self harm or suicide attempts and harm caused to others. Time 2 describes the situation at the point of referral to the Cleveland Diversion Team. Information which describe this current situation for the Cleveland Diversion Team are current offence and diagnosis, current indication of risk to self or others, demographic details, any contacts with other agencies, and an assessment of the individuals current health,

social care or other needs. Finally time 3 marks the 'after'; where time 1 is the history, time 3 is the future. The details measured and recorded by the Cleveland Diversion Team are criminal justice outcomes – including decisions made by the Police and sentence imposed by the Courts – and the outcomes of the health, social care or other needs identified by the Team.

Figure 6.4 models the Cleveland Diversion Team at a general service level. The process includes three successive time periods. 'Input' encapsulates initial referral receipt where certain information is considered necessary in order to make decisions and indeed a certain status required in order to progress to the next stage. Client information is not collected and recorded by the service in the sequential, time ordered fashion modelled in Figure 6.3 – i.e. history : current : future, (this complication is summarised in Figure 6.5). For instance at 'Input', client level information recorded consists of a description of their current situation: demography, offence, diagnosis, contacts with other agencies. At service level information includes referrer information, referral reason, other administrative information. This information together determines whether or not a referral moves into the 'Throughput' phase, or takes a different path. The 'Throughput' period involves most of the Cleveland Diversion Team's activity. For a proportion of those who move through this stage it also involves the collection of more detailed information in order to build a much more defined picture of the career of the individual referred – including criminal and psychiatric history, as well as current situation. Movement to the 'Outcome' stage is an inevitable progression from 'Throughput' for all those involved. However what the outcome actually is, is as previously a product of the information and activity involved in the 'Throughput' period.

To reiterate there are three pathways a referral may take once received by the Cleveland Diversion Team. Figure 6.4 path 1 represents those referred for Information. These individuals do not go beyond this stage in the process. Pathway 2 are those referred for Assessment. These clients progress through all stages in the process where information is measured and recorded for each phase. Clients who are diverted down pathway 3 are those referred for Advice. These individuals proceed through each stage in the referral process but for various reasons information is measured and recorded at the beginning and end only. In other words a referral form and an outcomes form are completed but no assessment form.

Figure 6.4 : The Cleveland Diversion Service General Process



This main diagrammatic linearity in Figure 6.4 basically derives from the irreversible time-ordered nature of the process, although in real terms the Cleveland Diversion service and their clients could neither be described nor understood in a simple or linear fashion.

Whilst the Cleveland Diversion Team did not recognise it as such, their account of this dynamic system and the information necessary at each stage in order to 'see' what a referral entails and therefore what actions are required is very similar to the idea that information can be turned into pictures making a flexible map of all the

data available – Complexity Theory's concept of phase space or state space. The state space is all the possible states in which a system might exist in theoretical terms. Or as Byrne (1998) puts it "We can think of this in system terms as defining the state of the system in terms of a set of n co-ordinates in n dimensional space when we have n parameters." (p.24) In other words what information is required at the point of referral (the parameters of the referral stage), form the axes of a multi-dimensional plane within which the state of the referral can be plotted. It was the French mathematician Henri Poincaré who invented a way for the human brain to 'see' dynamics in the minds eye. The human visual system wasn't designed to see dynamics – if it had been it would be able to visualise many dimensional spaces directly, zoom in for fine detail and so on. As Cohen and Stewart (1994) argue it is however enormously useful to represent dynamic concepts visually:

> "The geometry of dynamical systems takes place in a mental space, known as phase space. It's very different from ordinary physical space. Phase space contains not just what happens but what might happen under different circumstances. It's the space of the possible." (p.200)

This concept offered me the breakthrough I needed in order to model the Cleveland Diversion service and the careers of those referred to it. The key dimension of movement in the careers of these mentally disordered offenders is change through time (as presented in Figure 6.2 by the arrow R1 to R2). Time is the fundamental axis. Poincaré described in more detail a way in which I could model careers/service in time. The essential point to grasp is that time is not used as a continuous axis measured in Newtonian terms, but rather by recording the careers of these mentally disordered offenders at successive time points (dictated by the Cleveland Diversion Team's administrative system) and presenting a description of them at each

successive time they were measured. In other words, in phase space the complete state of knowledge about a dynamical system at a single instant in time (at service level it could be the referral of an individual or the input stage of the Cleveland Diversion service, or at client level it could be individual history or the start of their career), collapses to a point. The point then is the dynamical system at that instant. At the next instant, again here represented at service level by 'throughput' and at client level by current situation, the system will have changed and so the point moves. The data or variables dictate the axes and the actual specific information received the co-ordinates.

These ideas and the service model are summarised in Figure 6.5. There are five system model variations, each reflecting either different levels or a different emphasis. The first describes the three types of referral or the referral typology the Team described during their service planning sessions. The diagram makes it very apparent that the Team modelled a set of progressively involving referrals with either a presence or not at each of the dynamical system stages. Referrals for Information exist only at the first stage – the first stage represents the 'current', meaning that these referrals can only be mapped at this one point using the parameters set by the Team for this stage (they have no history, throughput or output). Referrals for Advice possess a current input and an outcome but have no history and may be missing other co-ordinates recorded during the middle assessment stage – which represents the 'then and the now'. The third referral type, referral for Assessment, exists within each state space.

Figure 6.5 : System Models

Information	X	X
Advice	X	Advice
Assessment	Assessment	Assessment
Referral Form	Initial Assessment Form	Referral Outcomes
Client Current Situation	Client History + Current Situation	Client Outcome
INPUT →	**THROUGHPUT** →	**OUTPUT**
demography	demography	team reports
current offence	referrer information	other reports
current diagnosis	history: previous convictions	court appearances
referrer information	psychiatric history	summary of care
package		
Care Programme Approach information	self harm	CPA current to
psychiatry +		
administrative information	other harm	not current to
psychiatry		
	current offence	information changes
	current contacts	other general info.
	Care Programme Approach information	measure of service input
	current diagnosis and other psychiatric information	administrative info.
	risk assessment	
	administrative information	
	client opinion	

As Sardar and Abrams (1998 p. 49) describe phase space turns dull statistical data into a telling picture, abstracting all the essential information from the moving parts and providing us with an easy to grasp overview of the system's behaviour over time. The Team managed – without recognising it – to model this dynamical system at a variety of levels; recognise its time ordered nature; incorporate the concept of modelling within phase space or a multi-dimensional plane by stating what information should be required at each stage; and even apply a rudimentary simulation[14] technique by subjecting each referral type to stimulus in the form of an imaginary referral with given parameters and describing what each stage might 'look like'.

6.5. The Cleveland Diversion Team Documentation

The documentation used by the Cleveland Diversion Team to record information about the individuals referred to them emerged as a product of the service modelling undertaken by the them (Appendix One). It indicates what information the Team decided would adequately describe each stage in the referral process. Clearly single indicators would not have been adequate to describe the state of the system. Instead the Team wanted to describe the nature of the system by using all of the variables which could be used. Byrne (1998) argues "We want it specified in terms of n co-ordinates in an n dimensional space, even if the form of the system is not determined by the value of all the variables describing it, but rather by the values of a much more limited number of control parameters." (p.25) In other words it is preferable to use all possible variables to describe a system even though only two or three of these may be of causal significance. The Cleveland Diversion Team however are limited to some extent by what is feasible in terms of the time involved in data collection, and therefore what is considered relevant to the description of this system.

[14] "A 'simulation' is the act of subjecting the model to an experimental stimulus and observing its behaviour." (Hanneman and Patrick, 1997 p.1)

6.5.1 Referral Form

The Referral Form is completed for all referrals received by the Cleveland Diversion Team, regardless of reason for referral. This document provides the Cleveland Diversion Team with the minimum information required to make a decision about progress to the next stage in the process. Table 6.1 describes the variables included in this document and a description of the coding applied to them where appropriate.

Table 6.1 : Details Included in the Referral Form and Guidelines Description

Detail	Guidelines	
Referral method	How the referral was made to the Team. Includes three choices – referral form; telephone call; in person.	
Referral status	Referral taxonomy. Includes three choices – Information; Advice; or Assessment.	
Date	Current date	
Full name (including also known as…)		
Address (including telephone number)		
Gender	With a choice of male or female	
Date of Birth		
Age		
Ethnic Origin	Guidelines listing: White British White European Irish (North/South) Black Caribbean Black African Black other (specify)	Indian Pakistani Bangladeshi Chinese Asian other (specify) Mixed Race Other (specify)
Solicitor name and address		
Current Alleged Offence	A qualitative description of the criminal offence(s) which the client has [allegedly] committed. This is used to select one or more of the following categories: violence against the person sex robbery burglary drug fraud theft criminal damage motoring	

	property/non-violent
Presenting Behaviour/Diagnosis (if known)	A qualitative description of the persons behaviour which has given rise to the current concern.
GP name and address	
Name of Referrer	
Referrer Agency	Referrers Employer, guidelines list: Health Service Social Services Probation Service Police Criminal Justice System (including Solicitors, Courts, Crown Prosecution Service) Private (including Group 4) Voluntary Family/Carer Self Borough Council (including Housing) Prison
Referrer address and telephone number	
Reasons for referral and additional information	A qualitative description - the guidelines suggest the inclusion of any current contacts with statutory or voluntary agencies; any current concerns the referrer has about this individual; and the referrers assessment of the urgency of referral.
Currently on Care Programme Approach[15]	With a choice of yes or no.
Level of Care Programme Approach[16]	With a choice of minimal; mid; or full
Care Programme Key Worker name	
Key Worker Agency	Key Workers' employer
Date referral received	
Referral received by	The name of the Cleveland Diversion Team member who initially received the referral.
Referral auctioned by	The name of the Cleveland Diversion Team member who carried out any necessary actions.
Date referral auctioned	
Action taken	A qualitative description of the action taken.
Discharge date	

[15] The Care Programme Approach (CPA) arose out of concern about the inadequate follow-up care for people leaving psychiatric hospitals (Kingdom, 1994). A Department of Health Circular HC(90)23/LASSL(90)11 addressed to both health and social services authorities required the implementation of "systematic arrangements" for assessing and reviewing both health needs and social care needs of people with mental health problems who could be treated in the community, as well as "effective systems" for ensuring the delivery of the services needed. This implied: 1) assessment of the health and social care needs for the patient with particular regard as to whether the patient has a severe and enduring (i.e. chronic) mental illness; 2) nomination of a key worker; 3) regular review and monitoring of the patient's needs and progress and of the delivery of the care programme. The annex to the Circular also highlighted four important issues related to the local arrangements for care programming: inter-professional working, involving patients and carers, keeping in touch with patients while ensuring that services are provided, and the role of key workers.

[16] Tiers of the CPA (Department of Health, Building Bridges 1995): 1) minimal – limited disability/health care needs and low support needs which are likely to remain stable. Regular attention from one practitioner/key worker only. Short care plan, indicating the regular interventions planned and review date; 2) mid – medium level of support, requiring assessment and interventions from more than one practitioner. Needs likely to be less stable. Care plan will be more complex; 3) full – for users with severe mental illness, suffering from severe social dysfunction, whose needs are likely to be volatile, or who represent a significant risk. Requires multidisciplinary assessment and intervention described in a detailed care plan.

Signature	Of the Team member responsible for the discharge.
Summary of outcome	A qualitative summary of referral outcomes, including information or advice given to the client or referrer, court sentence etc.

In summary the Referral Form records administrative information, a description of client demography, current offence and presenting behaviour (diagnosis would be included if the person is already known to the Psychiatric Services and has received a diagnosis prior to referral to the Team), CPA contact information, details about the Referrer and a description of their reason for making the referral. A brief description of any action undertaken by the Team and any outcomes are recorded for those who do not progress any further along this process.

6.5.2 Assessment Form

The next stage in the process is service throughput or client assessment. This period represents the main data collection and activity phase in the referral process. Individuals referred for Advice and Assessment each experience the 'throughput' stage but details are measured and recorded only for those referred for and who undergo a full assessment by the Team. Table 6.2 describes the data the Cleveland Diversion Team decided is necessary to describe this phase.

Table 6.2 : Details Included in the Assessment Form and Guidelines Description

Detail	Guidelines
Referral method	How the referral was made to the Team. Included three choices – referral form; telephone call; in person.
Referral status	The type of referral defined by the Team. Included three choices – Information; Advice; Assessment.
Caution advised	Indicates if the client is a potential risk to professionals.
Schedule 1	Indicates if the client is a Schedule 1 offender – i.e. has been convicted of offences against children.

Assessor name 1	Name of the Team member who lead the assessment
Assessor name 2	Name of the Team member also present during the assessment
Date	
Time	
Client status	Indicates status in the criminal justice system, the guidelines include: Pre-CJS/vulnerable Arrested but not charged Charged but not convicted Convicted but not sentenced Sentenced serving custodial Sentenced serving Probation Order Sentenced serving Community Service Order Sentenced serving Supervision Order Sentenced serving other (state) Post CJS/vulnerable
Remand status	The guidelines include: Custody Court bail Court bail with conditions (specify) Police bail Police bail with conditions (specify) Not applicable
Client name (including also known as…)	
Address (including telephone number)	
Accommodation type	The guidelines include: Owner occupied Private rented Rented from Housing Association Rented from Local Authority Special needs/resettlement unity (specify) Living with family/relatives Living with friends Hospital (specify) Prison (specify) B&B/lodgings NFA/night shelter Probation hostel Social Service hostel Other (specify) Not known
Gender	
Date of birth	
Age	
Next of kin (including relationship)	
Ethnicity	The guidelines include: White British White European Irish (North/South)

	Black Caribbean Black African Black other (specify) Indian Pakistani Bangladeshi Chinese Asian other (specify) Mixed Race Other (specify)
Country of birth	
Locality of origin	Indicates the geographical origin of the client, the guidelines include: Hartlepool Stockton Middlesborough Langbaurgh Other (specify)
Religion	The guidelines include: Church of England Roman Catholic Methodist Salvationist Quaker Baptist Mormon Jehovah's Witness United reform Seventh Day Adventist Pentecostal Plymouth Brethren Christian Scientist Christadelphian Church of Nazarene Swedish Church Buddhist Hindu Jewish Moslem Presbyterian Russian Orthodox Shinto Sikh Spiritualist Taoist Greek Orthodox None-practising None Other (state)
Marital status	The guidelines include: Married Single

	Widowed Divorced Separated Co-habiting Other (state)	
Number of dependants	Indicates the number of dependant children or the number of dependant others (e.g. spouse, parents etc.)	
Employment status	Requires specification as follows:	
	a) economically active:	
		Employed full time
		Employed part time
		Self employed
		Government Scheme
		Unemployed
	b) economically inactive:	
		Student
		Permanently sick
		Retired
	Other (state)	
Occupation		
Family/social support	Description of the type, amount and quality of general support received.	
Physical disability/illness		
Referrer name		
Referrer agency	Referrers Employer Guidelines list: Health Service Social Services Probation Service Police Criminal Justice System (including Solicitors, Courts, Crown Prosecution Service) Private (including Group 4) Voluntary Family/Carer Self Borough Council (including Housing) Prison	
Referrer address/telephone number		
Previous convictions date		
Previous convictions offence type	Describes the official charge(s). This is used to select one or more of the following categories: violence against the person sex robbery burglary drug fraud theft criminal damage	

	motoring property/non-violent
Previous convictions court	Indicates the name of the Court, guidelines include: Teesside Crown Court Teesside Magistrates Hartlepool Magistrates Court Guisborough Magistrates Court Other (state)
Previous convictions result	The guidelines include: Life Imprisonment Detained S53(2) Hospital Order Extended Sentence Custodial Sent. > 12 months Youth Custody > 12 months Custodial Sent. < 12 months Youth Custody < 12 months Part Suspended Sentence Care Order to Local Authority Suspended Sent. S.O. Supervision Order Suspended Sentence Comb.Order, Comm. Serv. Comb.Order, Probation 40 Day Order Prob.Ord.WthCond>12mths Probation > 12 Months C&YP >12 CSO Prob.Ord.WithCond<12mths Probation < 12 Months C&YP <12 Attendance Centre Order Disqual. From Driving Guardianship Supv. Order Wardship Supv. Order Compensation Money Payment Supv. Order Fine Licence Endorsed Conditional Discharge Boundover Costs Absolute Discharge Caution Discontinued Charges Withdrawn/Dropped

Current alleged offence date	
Current alleged offence description	Description including the official charge as stated. This is used to select one or more of the following categories: violence against the person sex robbery burglary drug fraud theft criminal damage motoring property/non-violent
Current alleged offence severity	Guidelines describe each category as follows: 1) Nuisance – no physical risk and any property involved was of negligible value (under £10) 2) Mild – any violence was minor or property was valued under £50 3) Moderate – some injury could have or did occur but which was not serious, or any property involved was valued up to a few thousand pounds 4) Severe – in which there was a substantial risk of physical injury or severe injury occurred, or property value was substantial.
Current alleged offence proposed charge	Describes the criminal charge proposed.
Current alleged offence official charge	Describes the criminal charge given.
Current contact GP	Provides name and address and indicates if contact is past or present.
Current contact Probation Officer	Provides name and address and indicates if contact is past or present.
Current contact Community Psychiatric Nurse	Provides name and address and indicates if contact is past or present.
Current contact Social Worker	Provides name and address and indicates if contact is past or present.
Current contact Psychiatrist	Provides name and address and indicates if contact is past or present.
Current contact Psychologist	Provides name and address and indicates if contact is past or present.
Current contact Solicitor	Provides name and address and indicates if contact is past or present.
Current Contact other	Provides name and address and indicates if contact is past or present.
Summary of current contacts	Includes onset, frequency, reason and end of

	contact if known.
Currently on Care Programme Approach	With a choice of yes or no.
Level of Care Programme registration	With a choice of minimal; mid; or full
Care Programme Key Worker	Name of the recorded Key Worker.
Key Worker Agency	Key Workers' employer
Psychiatric history date	
Psychiatric history episode type	Categories care given in the guidelines as follows: Outpatient Community General inpatient informal General inpatient compulsory Regional Secure Unit inpatient compulsory Special Hospital inpatient compulsory Prison hospital wing Other (state)
Psychiatric history provider/service	Indicates who provided the service, the guidelines include the following: General Psychiatrist Forensic Psychiatrist Psychologist Prison Medical Officer Learning Disability Services Drug/Alcohol Counsellor Community Psychiatric Nurse Behaviour Therapist Social Worker Other (state)
Psychiatric history length	Specifies the length of time treatment or support was provided.
Psychiatric history diagnosis	Specifies any diagnoses provided.
Current evidence in rank order:	Specifies in order of importance any current evidence of mental disorder.
Mental Illness Learning Disability Personality Disorder Drug/Alcohol Mental Health Problem Other (specify) No Evidence	
Current symptoms	A description of current psychiatric symptoms.
Primary diagnosis (if known)	Indicates any current psychiatric diagnosis and its source.
Secondary diagnosis (if known)	
Current medication	A list of psychiatric medication.
Complying with medication	With a choice of yes; no; or not applicable.
History of harm to self	Description of any history of self harm - incl.

	frequency, type and seriousness.
History of harm to others	Description of any history of harm to others - incl. frequency, type and seriousness.
Current evidence of risk	Including direction, frequency, type and seriousness.
Probability of harm to self	An indication of risk based on an assessment of the above indicators, guidelines include: none; mild; moderate; severe
Probability of harm to others	An indication of risk based on an assessment of the above indicators, guidelines include: none; mild; moderate; severe
Clients perception of support required	A description of the clients opinion about what support would offer most benefit.
Other relevant information	
Consent to share information	Indicates that the client has given their consent for information to be shared with others when the Team consider this necessary.
Signature /date	Signature of assessors.

6.5.3 Outcomes Form

The third time period in the Cleveland Diversion service model is Referral Outcomes. During this period all outcomes from both the criminal justice system and health/social care/other systems are decided and recorded for those individuals referred to the Team for Advice or Assessment. The Referral outcomes form includes all of the data the Cleveland Diversion Team decided is relevant to the description of this final stage in the process as set out in Table 6.3.

Table 6.3 : Details Included in the Referral Outcomes Form and Guidelines Description

Details	Guidelines
Client name	
Client date of birth	
Team Reports date requested	
Team Reports date provided	
Team Reports author	Cleveland Diversion Team report author
Team Reports recipient	Indicates who the report was produced for, guidelines include the following: Teesside Crown court Teesside Magistrates Court Hartlepool Magistrates Court Guisborough Magistrates Court Crown Prosecution Service

	Defence Solicitor Other (specify)
Team Reports outcome	Represent the outcome of the process into which the Team Report is received – usually the criminal justice system, therefore the guidelines include the following: Court bail Court bail with conditions (specify) Remand into custody The Court Sentences listed on page 12 Other (specify)
Other Reports date requested	
Other Reports date provided	
Other Reports report type	Reports other than Team Reports, guidelines include the following: Pre-Sentence Report Psychiatric Assessment Psychiatric Report to Court Psychological Assessment Psychological Report to Court Other (specify)
Other Reports author	Guidelines include: Probation Officer (state name) Psychiatrist (state name) Psychologist (state name) Other (specify)
Other Reports court	Guidelines include: Cleveland Diversion Team Teesside Crown court Teesside Magistrates Court Hartlepool Magistrates Court Guisborough Magistrates Court Crown Prosecution Service Defence Solicitor Other (specify)
Other Reports outcome	As Team Reports outcomes listed above
Court Appearances date	
Court Appearances court	Provides the Court name
Court Appearances offence	Describes the official criminal charge
Court Appearances outcome	Guidelines include: Life Imprisonment Detained S53(2) Hospital Order Extended Sentence Custodial Sent. > 12 months Youth Custody > 12 months Custodial Sent. < 12 months Youth Custody < 12 months Part Suspended Sentence Care Order to Local Authority

	Suspended Sent. S.O. Supervision Order Suspended Sentence Comb.Order, Comm. Serv. Comb.Order, Probation 40 Day Order Prob.Ord.WthCond>12mths Probation > 12 Months C&YP >12 CSO Prob.Ord.WithCond<12mths Probation < 12 Months C&YP <12 Attendance Centre Order Disqual. From Driving Guardianship Supv. Order Wardship Supv. Order Compensation Money Payment Supv. Order Fine Licence Endorsed Conditional Discharge Boundover Costs Absolute Discharge Caution Discontinued Charges Withdrawn/Dropped
Summary of Care Package: date	
Summary of Care Package: assessed need	Guidelines include: Accommodation Advice/information Appointment/to be seen by other Appropriate Adult Assessment Assessment under the Mental Health Act Community care/support Compulsory admission to hospital Continuing community care/support Custodial sentence Liase/update professional involved None Offer not Accepted Place of Safety/S136 Psychiatric consultation Residential rehabilitation Supervision Voluntary admission to hospital Other (specify)

Summary of Care Package: actioned by	Indicates the name of the person (usually a Diversion Team Office) acting on the assessed need.
Summary of Care Package: referred to	Specifies the name, title and address of the person contacted to provide for the indicated need.
Summary of Care Package: agency	Specifies the Agency represented by the above: Health Service Social Services Probation Service Police Criminal Justice System (including Solicitors, Courts, Crown Prosecution Service) Private (including Group 4) Voluntary Family/Carer Self Borough Council (including Housing) Prison
Summary of Care Package: service provided	Guidelines include: Accommodation Advice/information Appointment/to be seen by other Appropriate Adult Assessment Assessment under the Mental Health Act Community care/support Compulsory admission to hospital Continuing community care/support Custodial sentence Liase/update professional involved None Offer not Accepted Place of Safety/S136 Psychiatric consultation Residential rehabilitation Supervision Voluntary admission to hospital Other (specify)
Summary of Care Package: service deficit	This indicates whether there is a deficit between the assessed service required to meet need and the service offered/provided. Choice of yes or no.
Current to Psychiatric Services: Key Worker	States name of specified Key Worker
Current to Psychiatric Services: Agency	Specifies the Key workers employer
Current to Psychiatric Services: CPA Category	Specifies the category indicated - minimal; mid; or full
Current to Psychiatric Services: date contacted	States the date the Key Worker was contacted by the Team
Current to Psychiatric Services: information given	Provides a brief description of the information given to the Key Worker by the Team
Not Current to Psychiatric Services: CPA1 form completed	Indicates if the Care Programme Approach registration form has bee completed for those individuals not current to Psychiatric Services.

Not Current to Psychiatric Services: CPA category initiated		Indicates which Care Programme Approach category was indicated on the registration form.
Not Current to Psychiatric Services: Cleveland Diversion Team Key Worker		The Diversion Team Officer responsible for the case.
Not Current to Psychiatric Services: review date		Indicates when the case should be reviewed in accordance with Care Programme Approach policy.
Not Current to Psychiatric Services: Key Worker/Agency transferred to		States the name and employing agency to whom responsibility is passed.
Not Current to Psychiatric Services: date		Indicates the date of case transfer.
Changes to relevant information		
Discharge statement		
Intensity of support provided:		
	Low	Includes: 1) any short term intervention lasting up to two hours from beginning to end of a total intervention 2) infrequent contacts over a long period of time 3) minimal discussion with other agencies 4) brief letter to Court
	Medium	Includes: 1) any short term intervention lasting two to four hours from beginning to end of a total intervention 2) frequent contacts 3) liaison with other agencies 4) development of care package 5) verbal or written reports to Court/CPS
	High	Includes: 1) any short term intervention lasting more than four hours from beginning to end of total intervention 2) multi-disciplinary working 3) frequent liaison with other agencies 4) verbal or written reports to Court/CPS 5) continuous involvement over a longer period of time.
Caseholder 1: name; signature; date		
Caseholder 2: name; signature; date		

6.6. The Cleveland Diversion Team Database

It was an intention from the outset that the details collected by the Team would be inputted into a database[17] in order to manage the information. I was charged at the beginning of service development with the construction of the database along with a database programmer. The data model[18] used is 'reality orientated', that is, it coincides with the Teams image of the piece of reality with which they are concerned i.e. the Diversion Service. In order to construct such an infological model it was important to make a precise specification of the Team's view of reality. Such a formalisation made use of the necessary basic database concepts: 'object'; 'property'; 'object relation'; and 'time':

An *object* is something physical or abstract that is the target of some user's interest. In this instance the object is the mentally disordered offender.

A *property* is something that, at a certain point of time, characterises an individual object or group of objects. In relation to Team referrals, the properties which describe clients at referral stage, assessment stage, and outcomes stage are set out in the Team documentation.

An *object relation* is something that characterises the relationship between two or more objects. The relationship between each referral in this database is the Cleveland Diversion Team i.e. that they are all referrals to the Diversion Service.

Time may occur as points of time or as time intervals. In this instance time is reduced to stages or points of time.

---

[17] "A database is a well organised collection of data. One should be able to process, update, and make additions to the contents of a database in a simple and flexible way. It should be easy to make different kinds of unplanned as well as planned retrievals of data from the data base." (Sundgren B. 1985 p.10)

[18] An idealised or schematised description of the database.

There are basically three main types of data models from which we could make a choice:

- hierarchical data models
- network models
- relational data models

The Cleveland Diversion Team database is based upon a relational data model. In a relational data model the database is conceptualised as a number of tables (called relations or relational tables). The object type 'mentally disordered offender' in the infological model are represented by one table for each cluster of information as shown in part in Figure 6.6 where a history of criminal convictions is stored in the Previous convictions table, current demographic information is stored in the Clients table, and details pertaining to each clients current referral to the Cleveland Diversion Team is held in the Referrals matrix. Each table contains one column for each referral variable. The Clients table contains one row for each individual person referred to the Cleveland Diversion Team. This however does not hold for all other tables. One individual may be referred to the Team many times, they may have many previous convictions, they may have committed a number of current offences and have more than one 'social care need' identified by the Team. Each piece of information is stored in one row, therefore for those with a number of previous convictions for instance there will be a number of rows within the table containing information about them. In Figure 6.6 for example, Mr Alias has one previous conviction for violence and has been referred to the Team twice, whilst Mr Smith has 15 various previous convictions and has also been referred to the team twice. This one to many relationship is more clearly described in Figure 6.7.

Figure 6.6 : Relational Data Model of the Cleveland Diversion Team

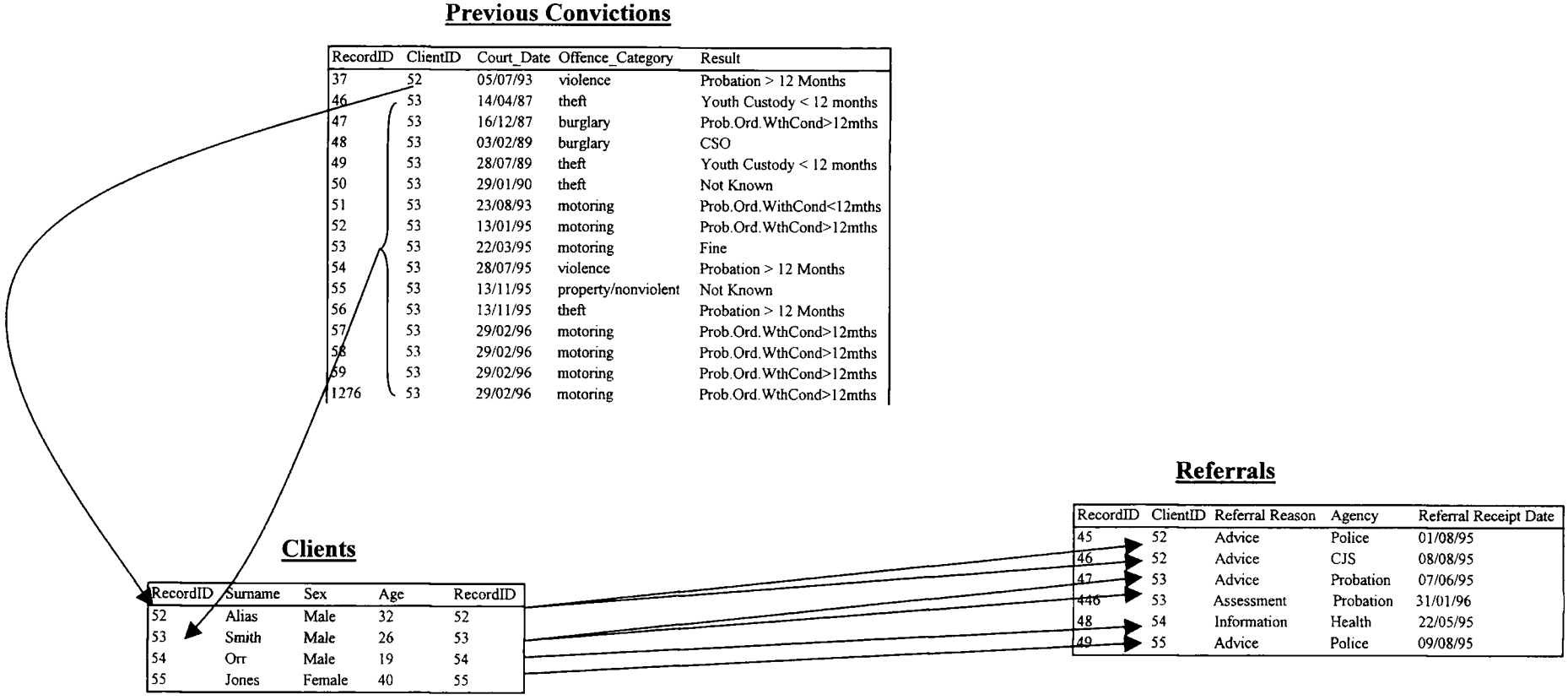
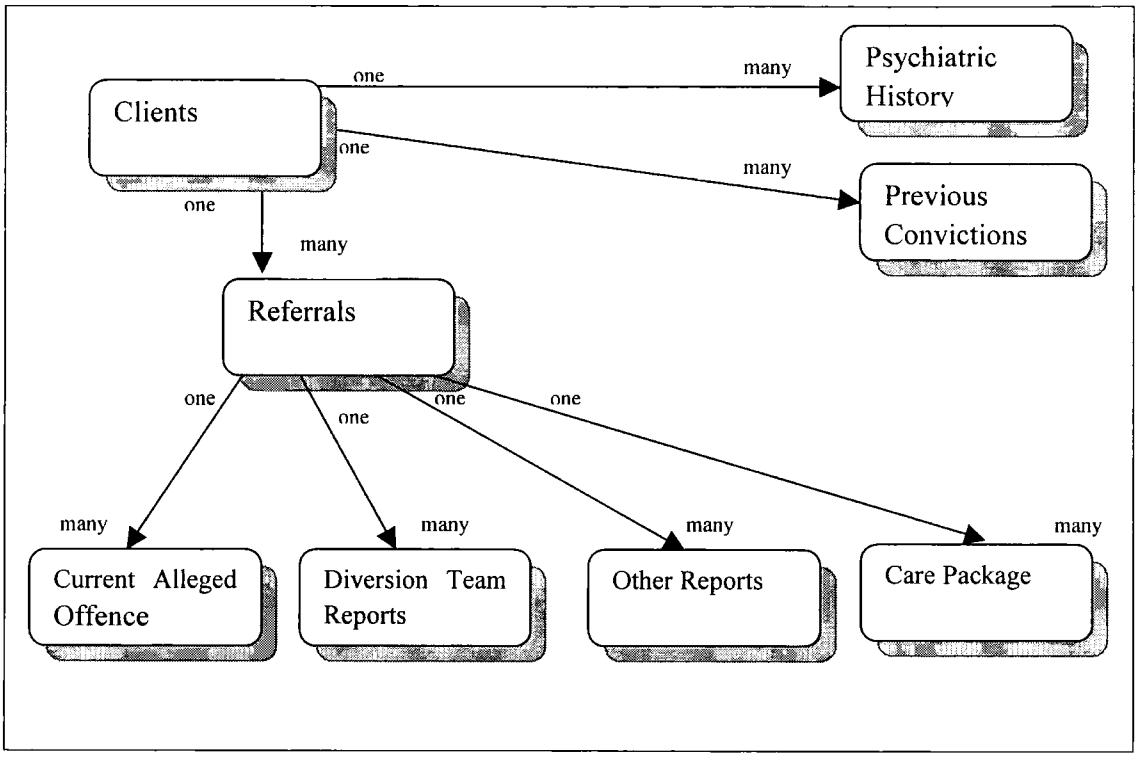
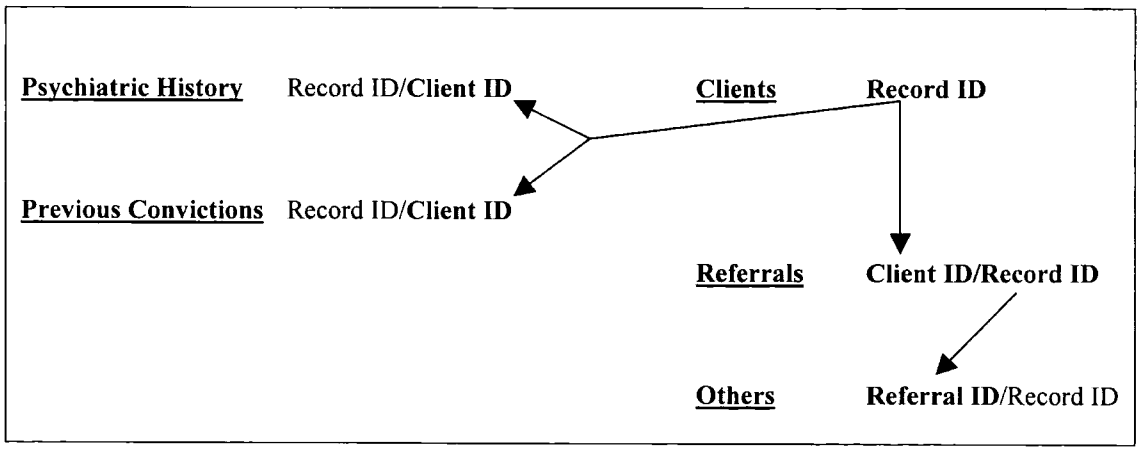


Figure 6.7 : Relations within the Cleveland Diversion Team Database



Every row in each of the tables has an identifier or an 'ID' number which links the tables together and ensures record integrity. Figure 6.8 shows the structure of the ID network. The complexity of the infological model representing the Cleveland Diversion service and the corresponding complicated database design caused major problems at the outset in terms of data analysis.

Figure 6.8 : The Cleveland Diversion Team Database ID Network



6.7. Data Management

To recount the aim of my research is to map the careers of mentally disordered offenders and explore the outcomes of referral to the Cleveland Diversion Team. To this end I initially decided I would need to construct one dataset containing all information – history variables and a description of referral and its outcome as summarised in Figure 6.9.

Figure 6.9 : The Ideal Dataset?

Client	History	Referral 1	Referral 1 Outcomes		Referral 6	Referral 6 Outcomes
1						
1011						

The eight information domains (as described in Figure 6.7) when exported from the database into another software programme for the purpose of analysis appeared as separate tables with no automatic relationship between cases. These tables would have to be merged together to produce the one encompassing matrix which would be ideal as it would reduce the one to many data relationships modelled in Figure 6.8 down to one to one.

This seemingly simple task to create one all embracing dataset caused immeasurable problems. Not least that the physical size of the dataset would be unmanageable. I devised a visual display in order to clarify what this matrix might look like – a kind of first stage Poincaré description of the number of axes within

which to plot these mentally disordered offenders (Appendix 2). However this I think brought home the enormity of the project – if a person were referred only once[19], had one previous conviction[20] and one previous psychiatric episode[21], had committed one current offence[22], had one report produced by the Cleveland Diversion Team[23] and one by another agency[24], had one criminal justice outcome recorded and one health/social care need[25], then this person would have a matrix containing 138 variables and as Gleick (1998) argues five or more axes would tax the visual imagination of even the most agile topologist.

It took me some time to realise that what I was considering did not necessarily fit with my developing ontology. I had become so wrapped up with the data management problems, I had lost the focus of my research. I needed to re-visit the aim of my project which is an interpretation of the trajectories described or reflected by the data. I had lost touch with this search for strange attractors (career patterns) – nature constrained, disorder channelled into a pattern with a common underlying theme, stability. The strange attractor lives in phase space and phase space as I have already discussed gives a way of turning numbers into pictures (a phase space portrait), abstracting every bit of essential information from a system of moving parts and making a flexible road map to all its possibilities. In phase space the complete state of knowledge about a dynamical system a single instant in time collapses to a point. That point is the dynamical system – at that instant. At the next instant, though, the system will have changed ever so slightly and so the point will move. The history of the system can be charted by the moving point, tracing its orbit through phase space with the passage of time. Every piece of a dynamical system

[19] One person was referred up to six times.

[20] One person had 170 previous convictions.

[21] One person had 13 previous psychiatric episodes.

[22] During one referral to the Cleveland diversion Team One person had 72 current offences listed.

[23] It is not uncommon for clients to have two Diversion Team Reports.

[24] Three people had five reports produced by an agency other than the Diversion Team.

[25] One person had eight health/social care needs recorded during one referral.

that can move independently is another variable, another degree of freedom. Every degree of freedom requires another dimension in phase space, to make sure that a single point contains enough information to determine the state of the system uniquely: one-dimension where only a single number is required to stand for temperature or population, and that number defined the position of a point on a one-dimensional line; two-dimensions where one variable is on the horizontal axis and the other on the vertical – if the system is a swinging, frictionless pendulum, one variable is position and the other velocity, and they change continuously, making a line of points that traces a loop, repeating itself forever; Lorenz's system of fluid convection (butterfly attractor) was three-dimensional, not because the fluid moved through three dimensions, but because it took three distinct numbers to nail down the state of the fluid at any instant; the most complex systems have many independent variables needing spaces of four, five or more dimensions. Making pictures of strange attractors is not a trivial matter:

> "The points wander so randomly, the pattern appears so ethereally, that it is hard to remember that the shape is an attractor. It is not just any trajectory of a dynamical system. It is the trajectory towards which all other trajectories converge. That is why the choice of starting conditions does not matter. As long as the starting point lies somewhere near the attractor, the next few point will converge to the attractor with great rapidity." (Gleick, p.150, regarding Henon's 'banana shaped attractor' – the first strange attractor – the butterfly attractor – was discovered in 1963 by Edward Lorenz).

Typically orbits wind their ever more complicated paths through three dimensions or more, creating a dark scribble in space with an internal structure that could not be seen from the outside. To convert these three dimensional skeins into flat pictures

the technique is to make a return map or a Poincaré map, in effect taking a slice from the tangled heart of the attractor, removing a two dimensional section just as a pathologist prepares a section of tissue for a microscopic slide. The Poincaré map removes a dimension from an attractor and turns a continuous line into a collection of points, implicitly assuming that much of the essential movement can be preserved. The process corresponds to sampling the state of a system every so often, instead of continuously. When to sample - where to take the slice from a strange attractor – is the question that gives a researcher some flexibility. The most informative interval might correspond to some physical feature of the dynamical system, or to a regular time interval, freezing successive states in the flash of an imaginary strobe light. It is such pictures that can finally reveal the fine fractal structure guessed at by Edward Lorenz.

Enlightenment. The nature of my research is such that it clearly lends itself to the extraction of such samples. The strange attractor is the 'mentally disordered offenders career' and the slices from this attractor should represent career periods, i.e. past, present, and future or in other words, 1) history; 2) referral; 3) outcome. As I mentioned earlier the history of the system can be charted by the moving point (the point being the complete state of knowledge about a dynamical system at a single instant), tracing its orbit through phase space with the passage of time. In other words I can map the careers of these mentally disordered offenders by charting their movement from one slice of time to the next.

I think my original problem arose because of my attempts to deal with all of the data at once by merging it all into one great dataset. Complexity theory allowed me to 'see' the whole picture, to get to grips with the shape of the data but not by relying on a reductionist analysis or by resorting to an entirely holistic approach – it would be a mistake to think that complexity refers to the whole of the data at the exclusion

of its parts. Instead complexity seeks to understand the whole as it is arrived at from the interactions of its parts – which takes us full circle back to the mapping project: Poincaré and phase transitions.

My first step was then to construct three datasets of not more than 100 variables as this was considered more than the imagination could probably cope with, 1) History, 2) First Referral and 3) First Referral Outcomes. The first decision I had to make were which variables should be included in each matrix. It soon became obvious that this was not going to be a straightforward case of transferring variables in their original state from the separate matrices and merging them where necessary to produce the matrices. Very many of the important descriptors which I was interested in and which I wanted to be included in my research were not included in the original database, but instead required calculation using two or more existing variables (for example, age at first conviction was calculated using date of birth and date of first previous conviction). Equally a number of existing variables could not be used in their original format (for example, physical disability and illness had to be coded into separate variables).

An important point to arise from these considerations was the existence of what is termed 'liminal' variables. Despite the fact that the construction of the Poincaré maps is described as self evident, that is not quite the whole story. The three matrices are more likely an idealisation of the process as there are a number of variables which could fit into more than one matrix and more than one combination of variables to describe each slice of time.

Despite these issues and a mind blowing period of various data manipulations using the functions available within the software Microsoft Excel, including nested 'if statements' and 'vertical lookups' (Appendix 3), I was able to sort and calculate and

select the information to construct initially four datasets upon which I could base my analyses. First a 'Case Book' matrix which details each case or individual and summarises what information is available for them. The list of variables included in the Case Book are set out in Table 6.4.

Table 6.4 : Case Book Variables

	Variable Name	Variable Type
1	RecordID	Unique identifier
2	Max Ref Code	Maximum amount of information available
3	Psych. Hist.	Number of previous psychiatric contacts
4	Pre-Cons	Number of previous convictions
5	Referrals	Number of referrals to the Cleveland Diversion Team
6	Current Offence	Number of current offences
7	CDT Reps	Number of reports produced by the Cleveland Diversion Team
8	Other Reps	Number of reports produced by others
9	Needs Identified	Number of needs identified

Second a History matrix which details the psychiatric and criminal histories of each client. The list of variables included in the History Matrix are set out in Table 6.5.

Table 6.5 : History Matrix Variables

	Variable Name	Variable type
1	first episode type	psychiatric history
2	elapsed time first episode (months)	
3	first diagnosis	
4	age at first episode (years)	
5	most recent episode type	
6	elapsed time last episode (months)	
7	most recent diagnosis	
8	age at latest episode (years)	
9	diagnostic uncertainty	
10	voluntary admissions	
11	compulsory admissions	
12	first/serious offence type	Previous convictions
13	elapsed time first pre-con (months)	
14	first/serious sentence	
15	age at first offence (years)	
16	most recent/serious offence type	
17	elapsed time last pre-con (months)	
18	most recent/ serious sentence	
19	age at most recent offence (years)	
20	most serious offence	
21	1 violent(n)	
22	2 sex(n)	
23	3 robbery (n)	
24	4 burglary (n)	
25	5 drug (n)	
26	6 fraud (n)	
27	7 theft (n)	
28	8 criminal damage (n)	
29	9 Motoring (n)	
30	10 property/ non-violent (n)	
31	most serious sentence	
32	prison sentence(n)	
33	hospital order(n)	
34	first incident	
35	elapsed time	
36	co-careers	
37	History of Harm	

In the third instance a 'First Referral' matrix which includes information current at the point of referral to the Cleveland Diversion Team as listed in Table 6.6.

Table 6.6 : First Referral Variables

	Variable Name
1	Referral Reason
2	Referral Method
3	Referring Agency
4	CDT Primary Worker
5	CDT Secondary Worker
6	Case Duration
7	Intensity Of Support
8	Primary Diagnosis
9	Secondary Diagnosis
10	Tertiary Diagnosis
11	Quaternary Diagnosis
12	Current Medication
13	Taking Medication
14	Probability of Self Harm
15	Probability of Harm to Others
16	Location Of Assessment
17	Current CJS Status
18	Primary Diagnosis
19	Secondary Diagnosis
20	History of Harm
21	CDT Primary Assessor
22	CDT Secondary Assessor
23	Remand Status
24	Current to GP
25	Current to Probation Officer
26	Current to CPN
27	Current to Solicitor
28	Current to Social Worker
29	Current to Psychiatrist

30	Current to Psychology
31	Current to Other
32	1 violence (number current)
33	2 sex (number current)
34	3 robbery (number current)
35	4 burglary (number current)
36	5 drug (number current)
37	6 fraud (number current)
38	7 theft (number current)
39	8 criminal damage (number current)
40	9 motoring (number current)
41	10 property/ non-violent (number current)
42	Total number of current offences
43	most severe current offence
44	least severe current offence
45	current offence severity variance
46	Elapsed Time CDT report request
47	CDT Report Author
48	CDT Report Recipient
49	CDT Report Outcome
50	Elapsed Time other author report request
51	Report Type
52	Report Author
53	Report Outcome
54	Date
55	Needs Identified
56	Needs Actioned By
57	Needs Provider
58	Provider Agency

Finally a 'First Referral Outcomes' matrix which includes first referral outcomes as listed in Table 6.7.

Table 6.7 : First Referral Outcomes Variables

	Variable Name	Variable Type
1	Most severe	current offence
2	Least severe	
3	Least severe final outcome from the CJS	
4	Most severe final outcome from the CJS	
5	Needs Identified	current social/health needs
6	Actioned By	
7	Provider	
8	Agency	
9	Service provided	
10	disparity between assessed need and service provided	current social/health needs
11	Service deficit	
12	Client re-referred to the CDT following discharge	

6.8. Cluster Analysis

I came up for air after this intense period of data manipulation to come face to face with the immediate and overwhelming problem how to do it, how to begin to undertake the quantitative work necessary in order to understand the complex nature of the careers of mentally disordered offenders contextualised within the processes of the Cleveland Diversion Team. I needed some way of studying this large number of people referred to the diversion process during the course of their career and to explore the outcomes of this key period [bifurcation point] in their career. 'Overwhelming' is literally the correct term to use as for a long time I felt as if I was drowning in data. With a rising sense of panic I considered this 'large and complex, time-ordered' dataset, searching the tools of data analysis with which I was familiar, only to become increasingly disillusioned that I would find a way to explore its depths without recourse to a reductionist frame, which linearity instinctively felt limiting in its capacity to explore what must surely be understood as the emergent

nature of this social ordering. Drowning until that is I was thrown a life jacket in the shape of cluster analysis.

The techniques covered by the term 'cluster analysis' were not developed by Sociologists, nor indeed were they designed to solve the problems posed by complex, emergent social order. In fact it is generally written that most of the early work on classification was in the field of biology, where it is more generally known as taxonomy (although the systematic grouping of objects on the basis of common properties dates back to Aristotle and the Greeks with their initial attempts to discover whatever properties or characteristics define the essence of a class or taxon). Linnaeus the 18th century Swedish botanist, concerned with the classification of plants (Genera Plantarum, 1737), animals and minerals stated that:

> "All the real knowledge which we possess, depends on methods by which we distinguish the similar from the dissimilar. The greater number of natural distinctions this method comprehends the clearer becomes our idea of things. The more numerous the objects which employ our attention the more difficult it becomes to form such a method and the more necessary. [*My drowning in data scenario.*]
>
> For we must not join in the same genus the horse and the swine, tho'both species had been one hoof'd nor separate in different genera the goat, the reindeer and the elk, tho' they differ in the form of their horns. We ought therefore by attentive and diligent observation to determine the limits of the genera, since they cannot be determined a priori. This is the great work, the important labour, for should the Genera be confused, all would be confusion." (Linnaeus in Everitt, 1974 p.2)

His schemes for the classification of botanical specimens had widespread impact on other fields. Although these early taxonomic efforts have been described or indeed criticised as "more of an art than a science", and the development of methods of numerical taxonomy based on the early ideas of Adanson (18th century) heralded as a move to more objective techniques, it seems to me these arguments miss much that is natural or instinctive in our need to categorise in order to be able to 'see the bigger picture', and reflect instead the embracing of a positivist understanding of science – a hug which has remained strong until recently but is now seeming to loose its grip, at least academically. Clusters in order to be useful to us must have a real meaning – they must reflect the patterns or order which occur within our world and in turn supply the order we need in order to process the information we have about our world. In this way the very act of clustering has an iterative impact. However I am not decrying the development of the very useful numerical classification techniques – I can only begin to imagine what a huge undertaking it would be to attempt to discover and examine clusters within my dataset manually. There were early attempts to use these techniques in fields other than the natural sciences (see Zubin, 1938 and Thorndike, 1953), but in general their use only became widespread in the past 30 years with the development of high speed electronic computers and the rapid appearance of clustering algorithms to take the burden of the very large amounts of computation generally involved.

Despite the fact that clustering methods were not developed with the strict intent of resolving the methodological quandaries posed by a growing understanding of the complex and emergent nature of social order, I am a great believer in the 'make do and mend' school of thought which encourages the adaptation of available tools in order to meet current needs. In fact, it has not been the actual method within the clustering method which has required adapting but instead what needs to change is the way in which we perceive it, or as Byrne points out:

> "What we need to do is think about the tools that we have developed for the analysis of data about the real world collected through survey methods[26] in complex terms." (p.72)

Consequently we can see how a procedure developed for and used to classify a set of cases into a number of relatively homogenous subsets in which the members of these subsets are more like each other than they are like the members of other subsets can equally be applied to a biological dataset describing plant characteristics as to my dataset describing the characteristics of mentally disordered offenders referred to the Cleveland Diversion Team. The application is not different although the subjects to which it is applied may be. Beyond this and in this particular instance, the interpretation of its application goes further than the explanation of classification in a simple sense to one which encourages us to begin thinking about cases as located within an n dimensional space – where the dimensionality is equal to the number of variables used in the clustering procedure. Much more importantly to me however is the idea that when applied to a time-ordered dataset, it is possible to generate a time-ordered typology – so that in brief typological analysis applied to time discrete subsets of the dataset enable the identification of career patterns by mapping movements between groups from one set of clusters to the next. Movement is restricted to a unidirectional event because within one set of clusters representing one discrete time period movement, cases do not move between one group and another, instead progress occurs between the first set of clusters and the next set representing the following discrete time period.

So to return to my original problem, cluster analysis is the name given to a variety of techniques used to group entities into homogenous subgroups on the basis of their similarities (Lorr, 1983), or the most commonly used term for techniques which

[26] Byrne expands by explaining that cluster analysis techniques were developed by biologists in order to handle ecological and other descriptive data which described aspects of reality, not for the handling of experimental results.

seek to separate data into constituent groups (Everitt, 1974). One of the important aims of clustering techniques is data reduction. Everitt seemed to be addressing my problem directly when he argued:

> "...in many fields the research worker is faced with a great bulk of observations which are quite intractable unless classified into manageable groups, which in some sense can be treated as units. Clustering techniques can be used to perform this *data reduction*, reducing the information on the whole set of say N individuals to information about say g groups (where hopeful g is very much smaller than N)." (p.4)

Similarly, Lorr suggests that once a large mass of data has been collected on numerous cases using many measures, the problem is one of data reduction:

> "By applying clustering techniques, information regarding...N cases can be reduced to information concerning a smaller number of g groups. Construction of a taxonomy simplifies the observations with a minimal loss of information." (p.4)

Hurrah!- I began to believe that it would be possible for me to give a more concise and understandable account of the contexts and characteristics of the mentally disordered offenders in my dataset, and more importantly have access to *simplification with minimal loss of information*, and this to me was the crux of the matter.

However data reduction is only one aim of cluster analysis – Lorr (p.3) describes five in total:

1. Identify natural clusters within a mixture of entities believed to represent several distinguishable populations

2. Construct a useful conceptual scheme for classifying entities

3. Generate hypotheses within a body of data by discovering unsuspected clusters

4. Test hypothesised classes believed present within a certain group of cases

5. Identify homogeneous subgroups characterised by attribute patterns useful for prediction

Ball (in Everitt p.3) lists seven:

1. Finding a true typology (as Lorr's first aim)

2. Model fitting

3. Prediction based on groups (as Lorr's fifth aim)

4. Hypothesis testing (as Lorr's fourth aim)

5. Data exploration

6. Hypothesis generating (as Lorr's third aim)

7. Data reduction (as Lorr's second aim)

Having settled on the fact that the cluster analysis life raft was buoyant enough to meet my needs, both of these lists express my immediate concern described by Lorr

as 'natural vs. special-purpose types'. Marriott (1971) in his description of the problems of cluster analysis asks:

> "Is there a 'natural' subdivision of the individuals into groups? This is the most interesting and important problem; it occurs in taxonomy, where species and genera can be regarded – at least in theory – as natural groups; in medicine and psychiatry, where syndromes may indicate distinct disorders; in ecology, where environmental features may lead to a number of more or less homogenous, and distinct categories; and in many other disciplines." (p.59)

Forgy (1965) argues, "A typology can reflect a fact of nature, that there are actually discrete, separate subtypes of individuals within a larger sample". The natural cluster is proposed to represent such a summarisation. Lorr proposes that the attributes that form the basis of a classification must represent a selection from all possible characteristics. The selection he argues depends on our purpose, for example to study voting behaviour, people are questioned on their political beliefs. In other words a group of persons can be composed by occupation, by nationality, by race, by personality and so on. Clearly no single all-embracing classification is possible. One reason, Lorr continues, is that the basis of a classification depends upon the researcher's interest and purpose. Another reason is that *similarity is not a general characteristic*. It is always necessary to specify the attributes on which a set of entities are compared. Clusters are natural if they are based on a maximum of characteristics, if a large number of propositions can be stated regarding their members and if they convey a high content of information and can be used for many purposes – i.e. are of systematic import. Alternatively classification by a small

number of specific characteristics, for example, gender or eye colour, produces special-purpose groups.

This seemed to suggest to me that whilst there may be 'natural' clusters – where no a priori knowledge of set characteristics or numbers of sets of significant clusters which will emerge is required – this depends very much upon initial conditions. In other words it seems to me that for a truly natural cluster to emerge all initial conditions would need to be known and measured to the degree of accuracy needed to model the system. Particularly because similarity is not a general characteristic, cluster output must be recognised as 'sensitive to initial conditions' – which basically means that the typology generated by the application of cluster analysis will very much depend upon the variables specified in the analysis. Even the smallest change in the information upon which the classification is to be based could produce massive variation in output. The classic and well-known expression of this extreme sensitivity to initial conditions is in relation to weather systems. Efforts to model weather systems in mathematical terms are faced with the major problem that variations in initial conditions of the scale of the force of a butterfly's wing beat can produce vastly different weather outcomes over quite short time periods.

6.9. The Cluster Method

There are a variety of cluster analysis techniques which Everitt (1974) classifies into types roughly as follows:

1. Hierarchical techniques – in which the classes themselves are classified into groups, the process being repeated at different levels to form a tree.

2. Optimisation-partitioning techniques – in which the clusters are formed by optimisation of a clustering criterion. The classes are mutually exclusive, thus forming a partition of the set of entities.

3. Density or mode-seeking techniques – in which clusters are formed by searching for regions containing a relatively dense concentration of entities.

4. Clumping techniques – in which the classes or clumps can overlap.

5. Others – methods which do not fall clearly into any of the four previous groups.

or Lorr's (1983) description:

1. Hierarchical or multilevel methods – can be classed as agglomerative or divisive. The agglomerative technique begins with all N individual cases or units and at each stage combines together the two entities or clusters that are closest; finally all cases are combined into one family or cluster. The divisive technique operates in the opposite direction. It begins with the entire set and subdivides it into two and continues to subdivide each cluster into finer subsets.

2. Non-hierarchical or single-level procedures – are of two kinds. The primary technique involves iterative partitioning of entities into multiple clusters. Usually some optimising criterion is applied to relocate entities to clusters after an initial assignment. The second technique is to form clusters one at a time and without iteration for a better assignment.

Following advice I elected to use the hierarchical techniques and particularly the agglomerative hierarchical methods. This procedure attempts to identify relatively homogeneous groups of cases (or variables) based on selected characteristics, using

an algorithm[27] that starts with each case (or variable) in a separate cluster and combines clusters until only one is left. Within SPSS raw variables can be analysed or a choice made from a variety of standardising transformations. Distance or similarity measures are generated by the Proximities procedure. The software SPSS offered a choice of three techniques: K-Means Cluster Analysis[28], Hierarchical Cluster Analysis and Discriminant Analysis[29]. One of my reasons for selecting the hierarchical cluster method is that criteria have been developed for determining the level in a hierarchy at which there is an optimum number of clusters present as a problem common to all clustering techniques is the difficulty involved in deciding the number of clusters present in the data. Lorr describes this as the 'stopping rule': he argues that in the Social Sciences the goal is usually to find natural groups and reproduce underlying structure, therefore if a hierarchical procedure is applied the level that best reproduces the structure must be determined. He goes on to describe the rule developed by Mojena (1977) named 'Mojena's Rule', which uses the distribution of the clustering criterion (the within-group sum of squares) to determine when a "significant change from one stage to the next implies a partition which should not be undertaken" (p.99). Everitt similarly suggests that an examination of the dendogram (see footnote 30 p.228) for large changes between fusions would be useful. As I will describe later, I use the point at which a sudden, disproportionate change in the sum of squared within-group deviations about the

---

[27] A method, procedure or set of instructions for carrying out a task by means of a precisely specified series of steps or sequence of actions (Jary and Jary 1991,p.13) – all clustering algorithms are procedures for searching through the set of all possible clusterings to find one that fits the data reasonably well (Hartigan 1975, p.11).

[28] This procedure attempts to identify relatively homogeneous groups of cases based on selected characteristics, using an algorithm that can handle large numbers of cases. However, the algorithm requires you to specify the number of clusters. You can specify initial cluster centres if you know this information. You can select one of two methods for classifying cases, either updating cluster centres iteratively or classifying only. You can save cluster membership, distance information, and final cluster centres. Optionally, you can specify a variable whose values are used to label casewise output. You can also request analysis of variance F statistics. While these statistics are opportunistic (the procedure tries to form groups that do differ), the relative size of the statistics provides information about each variable's contribution to the separation of the groups.

[29] Discriminant analysis is useful for situations where you want to build a predictive model of group membership based on observed characteristics of each case. The procedure generates a discriminant function (or, for more than two groups, a set of discriminant functions) based on linear combinations of the predictor variables which provide the best discrimination between the groups. The functions are generated from a sample of cases for which group membership is known; the functions can then be applied to new cases with measurements for the predictor variables but unknown group membership.

group mean of each profile variable occurs to indicate the optimum number of clusters.

The agglomerative hierarchical methods are the most popular of the clustering techniques. Although the number of algorithms available is considerable, nearly all are variations of three approaches: linkage methods, centroid methods and minimum-variance methods. The basic procedure is however the same. The process begins with the computation of a distance or similarity matrix between all possible pairs of entities. For example a very common similarity coefficient is the product moment correlation coefficient and perhaps the most common distance measure is Euclidean distance. Once the indices are available the matrix is searched for the closest (or most similar) pair *i* and *j*. Then *i* and *j* are merged to form cluster *k* and the matrix entry values are modified to reflect the change. The matrix is searched again for the closest pair and the two are merged into a new cluster. The process is followed until all entities are in one cluster. Sneath and Sokal (1973) used the acronym SAHN to characterise the procedure: sequential, agglomerative, hierarchical, and nonoverlapping.

Within the group of agglomerative hierarchical cluster techniques I selected the Minimum-Variance method (otherwise known as Ward's method after Ward (1963) who proposed this general hierarchical clustering programme). The procedure is based on the premise that the most accurate information is available when each entity constitutes a group. Consequently as the number of clusters is systematically reduced from k, k-1, k-2,..., 1, the grouping of increasingly dissimilar entities yields less precise information. At each stage in the procedure the goal is to form a group such that the sum of squared within-group deviations about the group mean of each profile variable is minimised for all profile variables at the same time. The value of the objective function is expressed as the sum of the within-group sum of squares

(called the error sum of squares, ESS). Each reduction in groups is achieved by considering all possible pairings and selecting the pairing for which the objective-function value is smallest. Each cluster previously formed is treated as one unit. When the complete hierarchical solution has been obtained, the ESS values may be compared to ascertain the relative homogeneity of the groups formed. A sharp increase in the ESS indicates that much of the accuracy has been lost by reducing the number of groups. It is probably easier to explain using an example (the output from my analysis is large and complex, therefore I will make use of the example provided by Everitt (p.15):

"Suppose five individuals are to be clustered on the basis of their values on a single variable using this method of cluster analysis. The values of the variable for each of the five individuals are:

		Variable Value
	1	1
	2	2
Individual	3	7
	4	9
	5	12

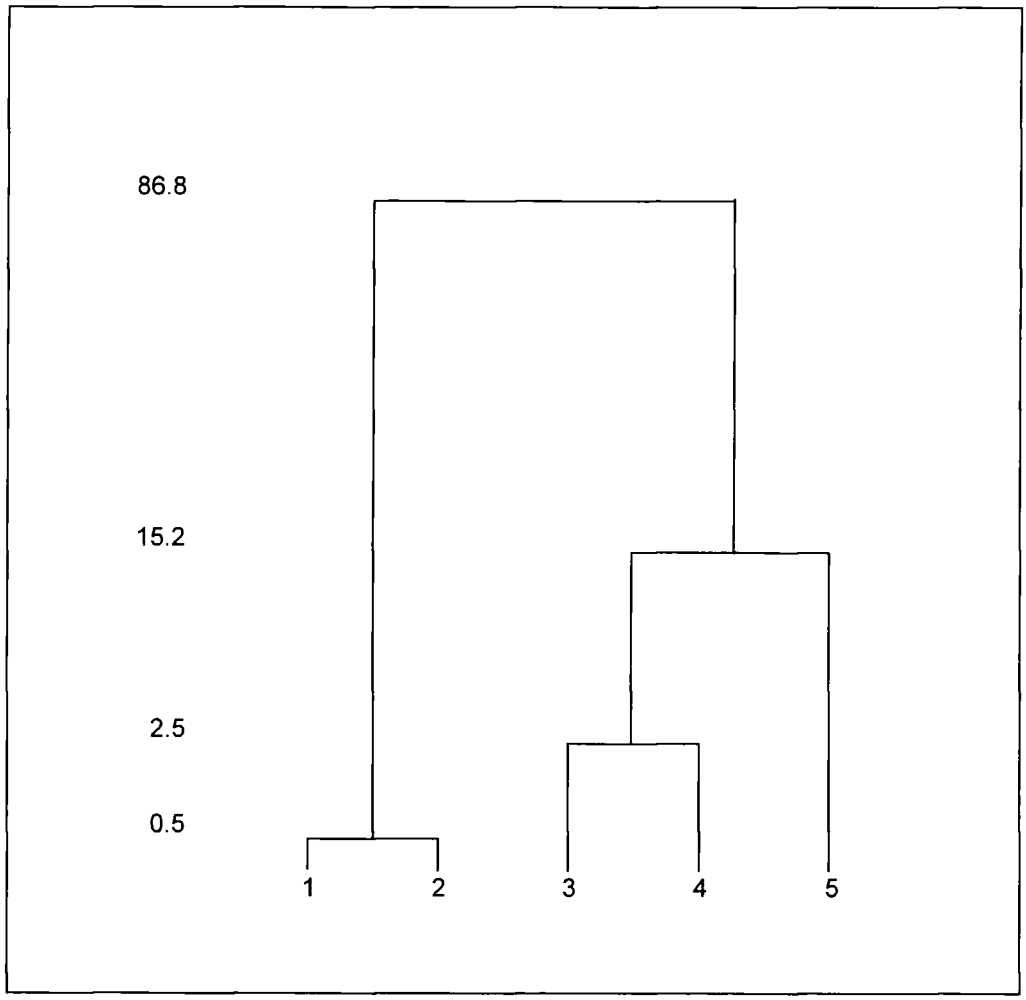
The error sum of squares (ESS) is given by:

$$ESS = \sum_{i=1}^{n} x_i^2 - \frac{1}{n} \left(\sum_{i} x \right)^2_i$$

where x is the score of the i the individual. At stage one each individual is regarded as a single member group and so ESS is zero. The two individuals whose fusion results in the minimum increase in ESS for the first group – in this example it is

individuals 1 and 2 and the ESS becomes 0.5. At the next stage individuals 3 and 4 fuse to form a second group, increasing the ESS by 2.0 to 2.5. Next individual 5 joins the group formed by 3 and 4, and the ESS increases by 12.7 to 15.2. Finally the two remaining groups are fused and the ESS increases by 71.6 to 86.8. The results may be summarised as a dendogram[30] (Figure 6.10).

Figure 6.10 : Ward's Clustering Dendogram



6.10. Detailed Methodological Procedure

My first task was to recode all of the data – nominal, ordinal and scale – into binary code. The majority of the data in my set were nominal (also referred to as frequency

[30] The usual form of graphic output from a hierarchical cluster analysis is a tree (dendogram). The tree provides a visual representation of the cluster structure of the hierarchy.

count or categorical) – the lowest and crudest form of measurement (Cramer 1998) where numbers are simply used to identify or name the attribute or category being described: for example gender of clients was coded as 1 for men and 2 for women. Ordinal is the next highest level of measurement. I initially coded a number of my variables in such a way to indicate increasing amounts of an attribute but where the intervals between the numbers do not represent equal amounts of the quality being measured, for example types of criminal offence are coded from 1-10 indicating increasing seriousness as follows:

- violence against the person 1
- sex 2
- robbery 3
- burglary 4
- drug 5
- fraud 6
- theft 7
- criminal damage 8
- motoring 9
- property/non-violent 10

Ratio scale is the highest level of measurement. It contains all of the qualities of the lower measurement levels but it also includes an absolute zero point so that a value which is twice as large as another reflects twice the amount of the attribute being measured. The ratio measurement included in my data was age.

I decided to recode all of the variables I might include in my clustering exploration into binary form in order to standardise the data and avoid confusion with the selection of data type (SPSS hierarchical cluster analysis allows either interval or

count or binary) and the choice of appropriate cluster method (method selection controls the method used to determine which cases or clusters are combined at each step). A binary or dichotomous variable is a special kind of discrete variable; it has only two values – yes/no, true/false, presence/absence of a quality. My data set existed in the main of 'unordered polytomies' in other words descriptive variables which consist of three or more mutually exclusive and exhaustive categories, for example employment status, psychiatric diagnosis category, criminal offence type (i.e. coded nominal data). Lorr (1983) argues that most techniques for analysing association data – both similarity and distance measures – lend themselves to binary coded variables (0-1) but not to polytomies. I therefore recoded my data into "arbitrarily assigned dichotomous dummy variables[31] as 0 or 1" (p.23). Table 6.8 provides an example:

Table 6.8 : Current Offences Recoded into Binary Format

Client No	Violent	Sex	Robbery	Burglary	Drug	Fraud	Theft	Criminal Damage	Motoring	Property/Non-Violent
1	1	1	0	0	0	0	0	0	0	0
2	0	0	1	0	0	0	0	0	0	0
3	0	1	0	0	1	0	0	0	0	0
4	0	0	0	0	0	0	0	0	1	0
5	0	0	0	1	0	0	0	0	0	0

Table 6.8 shows client one represented within the first row is currently charged with a violent and a sex offence, client two a robbery, client three a sex and a drugs offence, client four has a motoring charge and client five a burglary.

Next I had to select the set of variables which describe the clients/referrals contained in my dataset and which will constitute the frame of reference within which to establish the clusters. As Everitt (1974) points out the basic data for cluster

[31] A dummy variable is a binary coded vector in which members of a group are coded 1, while non-members are coded 0.

analysis is a set of N entities (here it is people referred to the Cleveland diversion Team) on which p measurements are recorded. The initial choice of the particular set of measurements used to describe each entity constitutes a frame of reference within which to establish the clusters. The choice reflects a judgement of relevance for the purpose of the classification. It was important therefore to ensure that the correct variables were chosen in the sense that they should be relevant to the classification being sought[32]. I was aware that the initial choice of variables is itself a categorisation of data which has no mathematical or statistical guidelines, but which instead reflects my judgement of relevance for the purpose of the classification. This situation has been used as a criticism levelled at cluster analysis:

> "The topic...calls to mind, irresistibly, the once fashionable custom of telling fortunes from tea leaves. There is the same rather arbitrary choice of raw material, the same passionately argued differences in technique from one teller to another, and, above all, the same injunction to judge the success of the teller solely by whether he proves to be right." (Cormack 1971, p.21)

Although I would point out that such judgements and decisions form a part of much research. For example choices regarding what entities should be included in a study and therefore what excluded are equally based on judgements founded on perhaps a mixture of previous theory and research findings and, as in my case, an a priori knowledge of the system. What is perhaps different here is that the cluster analysis method demands that the choice of variables for inclusion in the analysis is 'laid bare' – in other studies such choices may be hidden – and therefore may be more easily criticised.

[32] For example I am interested in the classification of 'offender/patients' for the purpose of investigating the effect of referral to the Cleveland Diversion Team. It would therefore arguably not be appropriate to include such variables as height, weight and other vital statistics since on the basis of these variables the most likely classification would probably be into males and females.

Following the decision regarding the choice of variables upon which the clusters would be based I undertook a number of exploratory hierarchical cluster analysis – using combinations of various variables – using these steps within the software SPSS:

a) in SPSS select 'statistics' from the menu, followed by 'classify', followed by 'hierarchical cluster';

b) within the hierarchical cluster dialogue box:

i. select the variables upon which the analysis will be based;

ii. select the option 'cluster by cases';

iii. select the 'display statistics' option (I deselected the display plots option as this produces a dendogram of the clustering algorithm which is usually large and not particularly useful at this stage);

iv. in 'statistics' select 'agglomeration schedule' and 'cluster membership – none';

v. in 'method' specifically 'cluster method' select 'Ward's method'; the measure should be set to 'binary – 1=present/0=absent; and 'save' should be set to 'cluster membership – none'.

c) the output agglomeration schedule from this first stage cluster analysis was then copied into Microsoft Excel (Table 6.9, p.233)

d) the difference in coefficient values was calculated;

Table 6.9 : An Example of the Output Agglomeration Schedule from the First Stage Cluster Analysis

Analysis based on current offence and diagnosis variables-(cases filtered to include only those assessed by the Cleveland Diversion Team

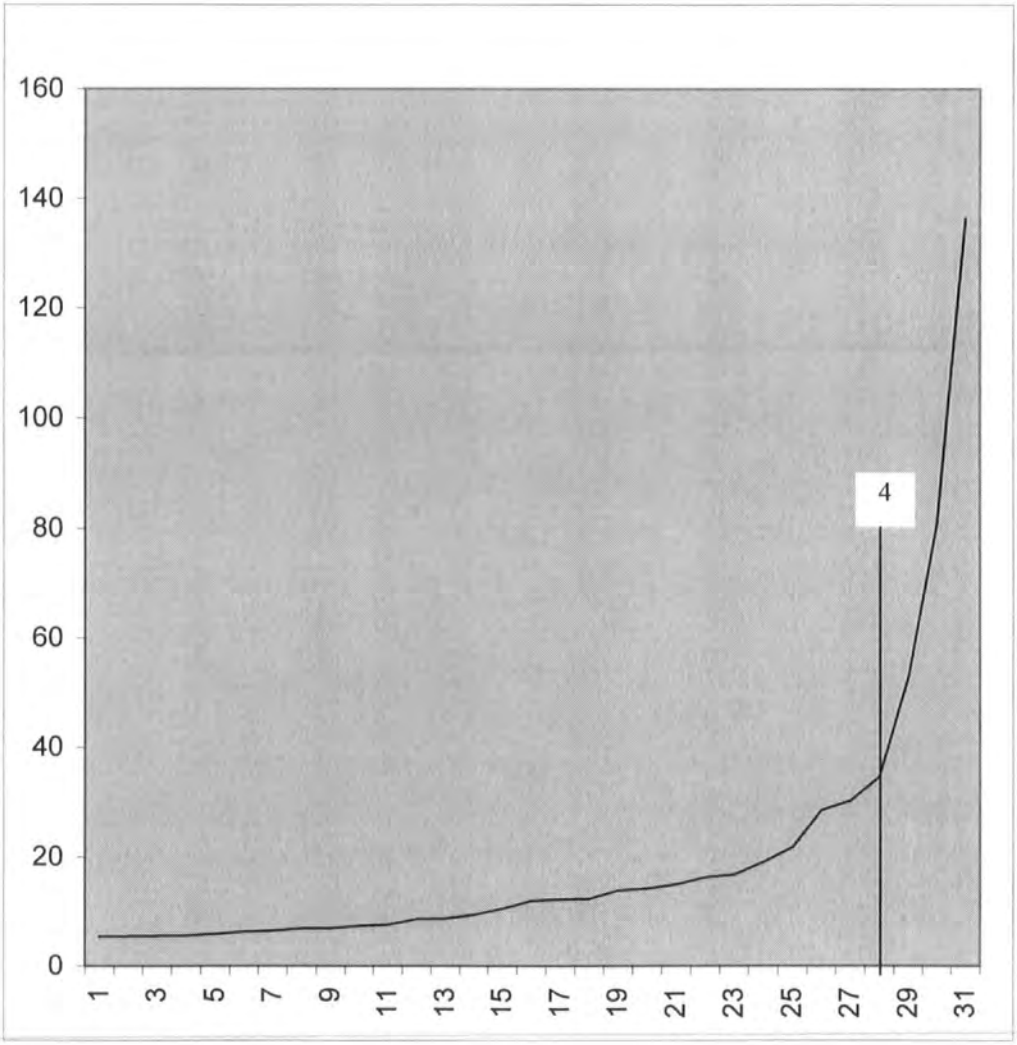
Agglomeration Schedule:

Stage	Cluster Combined Cluster 1	Cluster 2	Coefficients	Stage Cluster Appears Cluster 1	Cluster 2	First Next Stage	Difference in coefficient values – 223.8382 – 218.4109 = 5.427277 i.e. (stage 411) - (stage 410)
1	976	1009	0	0	0	20	
2	1005	1006	0	0	0	3	
3	28	1005	0	0	2	12	
408	24	185	207.9484	394	354	424	
409	16	369	212.9984	364	371	424	
410	21	50	218.4109	360	399	423	
411	66	110	223.8382	382	393	422	5.427277
412	220	232	229.31	346	389	425	5.471863
413	64	144	234.8577	252	402	429	5.547623
414	8	18	240.488	395	367	430	5.63031
415	37	318	246.3797	400	358	426	5.891769
416	146	296	252.6655	361	377	423	6.285721
417	43	268	259.1308	390	404	433	6.465363
418	54	328	266.0058	397	392	421	6.875
419	71	506	272.9501	398	386	427	6.944244
420	31	49	280.2911	381	406	434	7.341034
421	6	54	287.9061	383	418	435	7.61499
422	13	66	296.4888	403	411	432	8.582703
423	21	146	305.1715	410	416	428	8.682739
424	16	24	314.6067	409	408	429	9.435181
425	131	220	325.1424	407	412	428	10.53571
426	37	89	337.1067	415	239	431	11.96429
427	28	71	349.35	333	419	440	12.24326
428	21	131	361.7119	423	425	439	12.36191
429	16	64	375.5803	424	413	438	13.86838
430	8	12	389.7621	414	391	433	14.18182
431	37	88	404.7371	426	388	434	14.97501
432	13	72	420.9609	422	405	436	16.22385
433	8	43	437.7602	430	417	435	16.79926
434	31	37	456.8019	420	431	437	19.04169
435	6	8	478.61	421	433	438	21.80807
436	13	33	507.1273	432	278	437	28.5174
437	13	31	537.3878	436	434	440	30.26041
438	6	16	572.0668	435	429	439	34.67908
439	6	21	624.9693	438	428	441	52.90247
440	13	28	705.9538	437	427	441	80.9845
441	6	13	842.3281	439	440	0	136.3743

e) these values were plotted as a line Chart 6.1 (I was particularly interested in the sequence of values which included the biggest jump in value – usually taking the final 10 values in the list of values)

f) the chart provides an easily accessible visual representation of the coefficient differentials, which can then be examined for extreme directional changes as follows (i.e. Mojena's Rule which determines when a significant change from one stage to the next implies a partition which should not be undertaken – i.e. the optimal number of clusters). Chart 6.1 indicates a possible cluster number of 4 - if there were two possible breaks I would explore both numbers of clusters.

Chart 6.1 : The Difference in Coefficient Values from Table 6.9



g) Stage two of the hierarchical cluster analysis involves a re-run of the first stage analysis but this time within 'statistics' and 'method-save-cluster membership' instead of indicating zero, the number of clusters to be created can be specified.

h) Finally, in order to establish a description of each cluster a crosstabulation is performed using the new cluster membership variable and the variables used to create it:

i. from the menu select SPSS, followed by statistics, followed by summarise, followed by crosstabs;

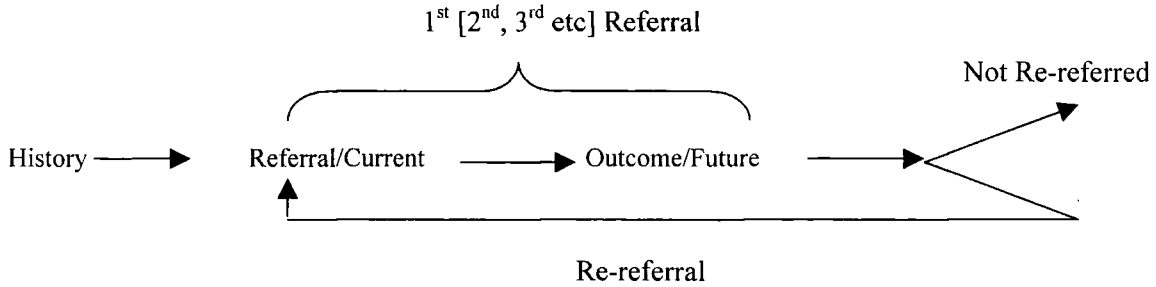
ii. 'row' – select new cluster membership variable;

iii. 'columns' – select variables used to create cluster membership;

iv. 'statistics' – choose chi-square to suggest strength of cluster (1.0=weakest – 0.0=strongest);

v. 'cells' – counts=observed; percentages=row/column/total.

The actual specific analyses would have to reflect the time ordered nature of the process and the data. As discussed earlier the data is ordered into career slices as follows:



The cluster analyses would therefore be undertaken first with the history variables, then a separate analysis would be performed using first referral variables, and finally first referral outcome descriptors. Consequently I would end up with three sets of clusters in the first instance. Analysis would then be repeated for second referrals, third referrals, fourth, fifth and sixth.

6.11. Mapping Movement Between Clusters

The emergent clusters describe the state of the system at discrete periods of time. Each cluster or Poincaré section is a slice through the psychiatric/criminal career, bringing into high relief each discrete time period used to describe careers but loosing an overall portrait of longitudinal careers. Mapping or tracing movement between clusters brings into focus each complete career structure. These career patterns are analogous to the elegantly termed 'strange attractors' first discussed by David Ruelle and Floris Takens in a paper they published in 1971 entitled 'On the Nature of Turbulence'. Sardar and Abrams (1998, p.51) describe what is strange about strange attractors:

1. They look strange. A multi-dimensional imaginary object is bound to look strange.

2. The motion on the strange attractors has sensitive dependence on initial conditions.

3. Strange attractors reconcile contradictory effects: a) they are attractors, which means that nearby trajectories converge on them; and b) they exhibit sensitive dependence on initial conditions which means that trajectories initially close together on the attractors diverge rapidly.

4. While strange attractors exist in an infinite dimensional space (the phase space or the space of the possible within which all careers exist), they themselves have only finite dimensions.

Similarly, the career structures I am seeking to uncover are:

1. multi-dimensional representations of general patterns; and,

2. career development is dependant upon previous circumstances; and,

3. each aggregate career structure which emerges following cluster analysis will include many individual careers which are similar but slightly different; b) careers which appear to share the same characteristics, for example exist within the same history cluster, can diverge or bifurcate at the first referral stage into separate clusters because of some small but significant differences; and,

4. all of the careers exist within n dimensional phase space; each career can be described within a specified number of degrees of freedom.

6.12. Mapping Method

The method I employed to follow movement between the clusters was to crosstabulate cluster members at one period with clusters members at the following period.

6.12.1 History to First Referral.

1. History data is divided into two main clusters depending upon whether information was collected or not, as discussed earlier, i.e. there are two main clusters: 'history not collected' and 'history collected'.

2. In SPSS I crosstabulated the 'history not collected' cluster with the first referral clusters. Based upon my knowledge of the Cleveland Diversion Team referral process I predicted that one career path would emerge going from 'history not collected' cluster to 'Information Only' cluster at the first referral stage. This is because, as described earlier, someone referred to the Team for Information Only would not have a history collected as routine.

3. The 'history collected' cluster itself separates into two based on the presence or absence of previous convictions. I classified each of these second level clusters to produced third level categories based on the presence/absence of previous conviction and/or a psychiatric history. From this third level typology, a fourth level analysis produced the most detailed classification. In SPSS I crosstabulated fourth level 'history collected' clusters with first level First Referral types.

6.12.2 First Referral to First Referral Outcomes.

The exercise mapping career development from First Referral clusters to First Referral Outcome clusters was relatively straightforward following the complications of the earlier activity. I crosstabulated first Referral clusters with First Referral Outcome clusters and charted the various career directions. No anomalies were apparent in the outcomes.

6.12.3 Mapping Problems

Mapping movement between history clusters and first referral clusters threw up a startling anomaly. The 'history not collected' cluster (which I identified using the Case Book variable 'Maximum Referral Code' in order that regardless of the number of referrals, the maximum referral reason code does not exceed three which

is 'Information Only') contained cases whose careers bifurcate into the First Referral clusters 'Advice' and 'Assessment'.

This did not make sense – as I predicted earlier only one career path should emerge from 'history not collected' cluster to 'Information Only' cluster at the first referral stage because someone referred for Information Only would not have a history collected as routine whereas those referred for 'Advice' and in particular 'Assessment' would most certainly have a history recorded. The cluster 'history not collected' means exactly that these people have never been referred for 'Advice' or 'Assessment'.

After making various unsuccessful attempts to uncover the error which seemed to have no apparent reason or pattern, I decided that it probably stemmed from the incomplete removal of blank records I had undertaken at an earlier stage. In order to correct the error I had to re-calculate the 'Maximum Referral Reason' in the Case Book summary variables and also re-input the First Referral 'reason' codes. I then re-calculated the First Referral clusters (the History clusters did not rely on 'referral reason' codes and therefore did not require recalculation) and crosstabulated the History clusters with the re-calculated First Referral clusters to map corrected career developments. The outcome of this re-map fitted more closely with my expectations.

6.13. Summary

My aim was to uncover the career patterns of mentally disordered offenders; to explore the effects of criminalisation and the impact of referral to the Cleveland Diversion Team for Mentally Disordered Offenders. A mentally disordered offender career is equivalent to a Strange Attractor in Chaos Theory. The Strange Attractor exists within Phase Space as the mentally disordered offender career exists within time and context. Structure is uncovered by constructing Poincaré maps – taking

sequential sections from the Strange Attractor/career and plotting the state of the system at each point using n axes/variables and n co-ordinates/data. Pattern is uncovered by mapping movement from one point to the next. Impact or change is an outcome which requires the interpretation of mechanism. This will be an emergent product of the following chapter.

7. RESULTS

This chapter provides a description of the results of the analysis of the data provided by the Cleveland Diversion Team. The data described the people referred to the diversion team, in particular their criminal and psychiatric details both previous and current, contacts with other services, the activity of the diversion team and individual outcomes. The data structure included a time dimension that meant that change could be charted. Input from the diversion team was intended to have a beneficial impact on the lives of mentally disordered people who had become repeatedly involved in the criminal justice system. To determine whether this was the case there would need to be some measure of what went before, what the diversion team did with the current situation, and what came after. This would be achieved using the technique 'cluster analysis' to identify the criminal and psychiatric careers experienced by people referred to the team.

The chapter however begins more simply with a straightforward description of the data provided by the diversion team. Section 7.1 provides a breakdown of referrals by criminal and psychiatric history, by demographic characteristics (including a detailed discussion surrounding accommodation), by psychiatric and criminal status at the point of referral, by diversion team activity and finally by outcomes. This use of descriptive statistics, while providing a useful summary of people and activities, could not however answer the two research questions: 1) are mentally disordered people experiencing a process of criminalisation? and 2) what impact does the Cleveland Diversion Team have on the careers of those referred to them? Both of these questions required a longitudinal approach, mapping change over time. This leads to Section 7.2, which describes the results of just such an approach detailing the identification of clusters at key stages in the careers of mentally disordered offenders: history, first referral input throughput and outcomes, and second referral.

Finally Section 7.3 provides a description of the five careers identified as experienced by those individuals referred to the diversion team – identifying which, if any, represent an experience of criminalisation and examining what each one tells us about the nature of the impact of diversion team activity.

7.1. A General Description of Referrals

7.1.1 Referral Rate

During the first two and a half years of operations (April 1995-September 1997 inclusive) on which this study is based, the Cleveland Diversion received a total of 1305 referrals (an average of 44 referrals/month). The number of individuals referred was 1011, a discrepancy due to the number of people re-referred to the service following discharge:

• Referred once only	805	80%
• Referred two or more times	144	14%
• Referred three or more times	48	5%
• Referred four or more times	10	1%
• Referred five or more times	3	0%
• Referred six or more times	1	0%

Eighty percent of people were referred once, leaving 20% who were referred two or more times. The immediate question was what was different about these 20% - did they represent a failure by the diversion team? The answer to this question could not be provided by the simple descriptive statistics used in this section, but would be answered in the next section with the use of cluster analysis and mapping techniques.

7.1.2 History

Over a third of those referred to the diversion team had a psychiatric history and of these almost half had been admitted to hospital on a voluntary basis and 17% on a compulsory basis. A diagnosis was known in 60% of cases. These could be broken down as follows:

• mental illness	212	21%
• learning disability	21	2%
• personality disorder	111	11%
• drug/alcohol misuse	132	13%
• mental health problems	131	13%
• not known	404	40%

Almost 60% of those referred had one or more previous criminal conviction and of these 44% had served one or more prison sentences. The offence ratio was as follows:

Sex	Violent*	Property/Non-Violent
1	8	7

*Includes robbery, arson and violence against the person.

People referred to the Cleveland Diversion Team were more likely to have a violent than a non-violent previous conviction recorded.

A quarter of people referred had co-careers, i.e. both a psychiatric history and previous convictions. This meant that 10% had a psychiatric history but no pre-convictions and 35% a criminal history and no previous psychiatric service contact. What did this mean in relation to the premise that a diversion policy was needed to

counter a process of criminalisation of the mentally disordered? Over three times more people were referred with a criminal history and no psychiatric history, suggesting that in Cleveland at least, the introduction of a diversion scheme might not be preventing a process of criminalisation so much as encouraging a medicalisation of those committing criminal offences. This possibility would require further exploration using the techniques of cluster analysis and career mapping.

7.1.3 Demographic Characteristics

The demographic characteristics of individuals referred to the diversion team could be summarised as follows:

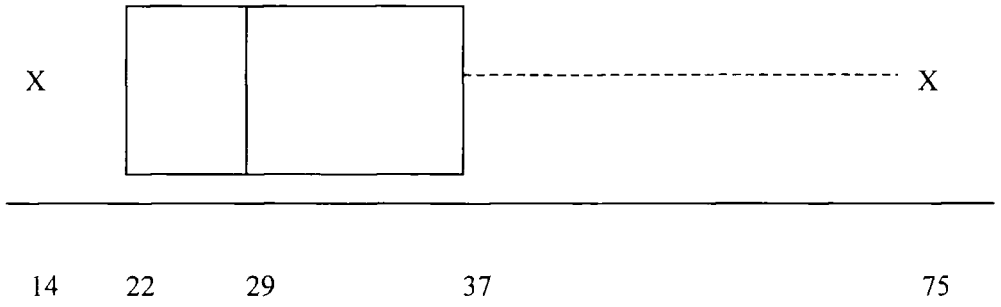
- 84% were men
- the median age was 29 years
- the oldest was 75 and the youngest 14 years
- 88% were recorded as 'white British'
- the overwhelming majority were single and unemployed
- 41% homeless or in temporary accommodation

The following subsections explore two of these characteristics, age and accommodation, in more detail.

7.1.4 An Analysis of Age

The age distribution of those referred to the Cleveland Diversion Team is described in Figure 7.1:

Figure 7.1 : A Boxplot Describing the Age of Cleveland Diversion Team Clients



The box itself (midbox) contains the middle half of the batch, containing half of the data. The lines across the ends of the box describe the upper and lower quartiles, and the line in the middle represents the median. The size of the midspread is measured by the length of the box, the extremes are each marked with an X. The level (median) and spread (distribution) can be seen at a glance. The boxplot shows an uneven asymmetrical spread of ages, with the median closer to the lower quartile than the upper and data trailing off upward. It appears that whilst Cleveland's diversion service for mentally disordered offenders was aimed at the adult population, the majority of those referred were 'young adults' (between the ages of 22-37 years). The older an individual became the less likely he was to be referred to the service – probably because generally the older an individual becomes the less likely he is to commit a criminal offence.

An interesting aside was the number of referrals received for individuals aged less than 18 years; the service was aimed at adults aged 18 years and over, and yet 6% of the 1011 individuals referred were under 18 years. Clearly this figure could not be treated as a measure of the need or demand for a service aimed at children and adolescent offenders. It did however show that there was a demand that was unmet elsewhere in the system, especially as the referrer must have been determined and the diversion team sure that there was no other more appropriate service.

7.1.5 Accommodation

The accommodation status of individuals referred to the Cleveland Diversion Team

Although somewhat unsatisfactory (because permanency and appropriateness were not recorded by the diversion team), if the definition of homelessness provided by the Reed Committee was applied:

> "Where 'homelessness' refers to people who find themselves on the street, in a squat, in a hostel, in bed and breakfast accommodation, or in prison or hospital awaiting discharge with no family, friends or 'home'." (p.89)

up to 41% of diversion team clients could fall into this category (Table 7.1):

Table 7.1 : Cleveland Diversion Team Clients by Type of Accommodation

Accommodation Type	Percentage	
B&B/Lodging	5	41% homeless
Bail Hostel	7	
Hospital	4	
NFA/Night Shelter	6	
Prison	7	
Probation Hostel	5	
Special Needs/Resettlement	7	
Other (temporary)	1	

Family/Relatives	22	59% housed
Owner Occupied	5	
Private Rented	4	
Housing Association	4	
Local Authority	24	

The figure of 41% must be used advisedly for many reasons including the fact that it was not made clear in the information provided by the diversion team how many of those residing at the Bail Hostel, Hospital, Prison and Probation Hostel had family or friends or a home to go to afterwards. Similarly the Special Needs/Resettlement units, although they were hostels, provided accommodation and security for residents to such an extent that it would have been difficult to describe them as homeless.

Despite these reservations a number of points need to be highlighted. The Probation Service hostels were providing accommodation to 12% of individuals referred to the Diversion Team. It had been recognised by the Cleveland Diversion Team and others, that it was often the Probation Service who were left to deal with those individuals for whom no other service was available or accessible. Whether Probation hostels were the most appropriate placement for mentally disordered offenders who presented with specific vulnerabilities, was a debatable point.

The Significance of Accommodation

In addition to the 12% residing in probation hostels, a further 12% of individuals referred to the Cleveland Diversion Team were living in bed and breakfast facilities or classed as 'no fixed abode'. Research carried out by Burney and Pearson (1995)

comparing mentally disordered offenders with the general offender population in London, found striking differences in the accommodation situation of these two groups. The majority of offenders with mental health problems did not have permanent accommodation and, compared with all offenders generally, they were twice as likely to be living in temporary accommodation or a hostel, and three times as likely to have 'no fixed abode' (Table 7.2):

Table 7.2 : The Accommodation Situation in London and Cleveland

Accommodation	London Mental Health Group %	London All Offenders %	Cleveland Mental Health Group[33] %	Cleveland All Offenders[34] %
Permanent	45	74	58	86
Temporary	28	16	17	5
Hostel	8	3	19	3
NFA	20	7	6	6

A similar comparison showed that Cleveland did not have accommodation problems of the same magnitude as London, and mentally disordered offenders were no more likely to be 'homeless' than Cleveland Probation Service clients. However mentally disordered offenders referred to the Cleveland Diversion Team were over three times more likely to be living in temporary accommodation and over six times more likely to be living in hostel accommodation than Cleveland Probation clients.

[33] Refers to those referred to the Cleveland Diversion Team.

[34] Refers to Cleveland Probation Service clients – a report provided which examined people serving a probation order in Cleveland between April 1995 and September 1997.

The outcomes for Cleveland Diversion Team clients whose assessed needs included 'accommodation'

Eight percent of those assessed by the Cleveland Diversion Team had accommodation needs identified. The majority of these people were men under the age of 25 years of age, diagnosed as learning disabled or drug/alcohol misusers, charged with property or other non-violent offences. Much of the specialist hostel accommodation provided in Cleveland provided accommodation for those with a mental illness or mental health problems. A number were described as 'unhappy' to admit people who had a learning disability, arguing that they did not have the skills required to support this vulnerable group, and indeed many of the hostels were described as 'unsuitable' for this client group. All of the hostels in Cleveland with the exception of one, did not admit those with a current drug and/or alcohol dependency unless a mental health problem was also present and there was a strong commitment from the client to abstain from substance misuse while resident. These rules were often strictly imposed and those who broke them asked to leave immediately.

Most of the hostels in Cleveland would admit offenders or those charged with a criminal offence, although all withheld the right to an assessment period that would include considerations of staff and resident's safety, as well as other aspects of communal living. One hostel particularly pointed out that no one charged with or found guilty of a sex offence would be considered for admission.

7.1.6 Geographical Origin

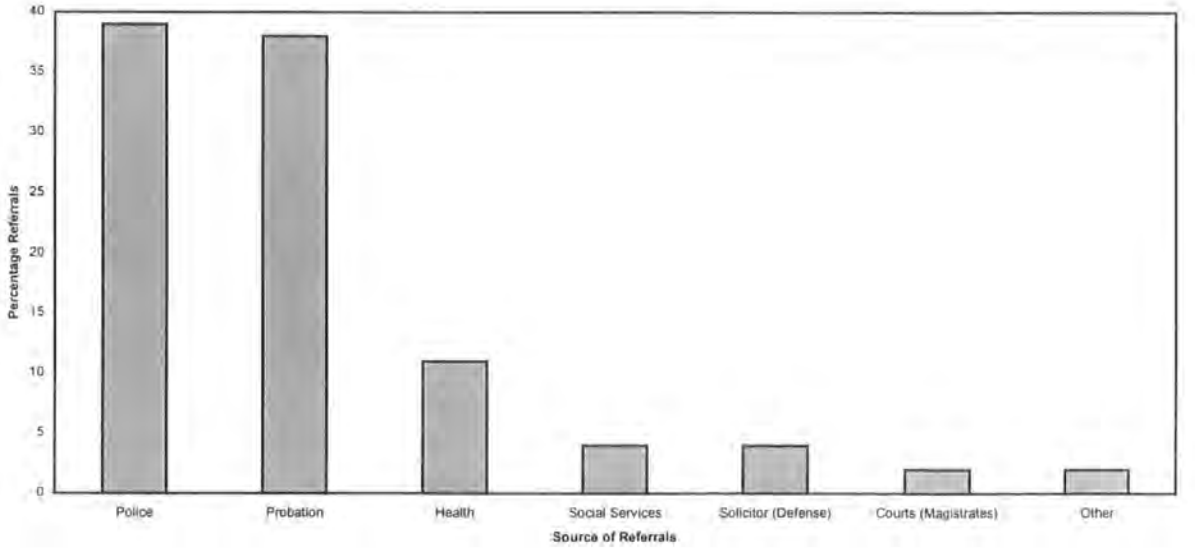
The majority of people referred were resident in Middlesbrough, followed by Hartlepool, then Stockton and finally Redcar and Cleveland. This was not unexpected as Middlesbrough had the highest number of recorded criminal offences. A small number of individuals referred were resident outside the Cleveland service

boundary. This raised some concern with regard to service delivery – the question being 'does the Cleveland Diversion Team offer a service to Cleveland residents or to those agencies operating with Cleveland making a referral (for example the police or probation service) regardless of the clients home address?' The problems encountered involved accessing information and appropriate service input from agencies outside of the diversion team's jurisdiction. However it was decided that the diversion team should respond to the referring agency in Cleveland, meaning for example, the probation service's Bail Hostel based in Middlesbrough and providing accommodation for local and non-local defendants, could refer any resident for whom they were concerned.

7.1.7 Referral Source and Status Within the Criminal Justice System

The majority of people were referred to the Cleveland Diversion Team by Cleveland Constabulary (39%), closely followed by the Probation Service (38%). Together these two agencies accounted for 77% of referrals, see Chart 7.1 for a breakdown of referral sources:

Chart 7.1 : The Proportion of Referrals made to the Cleveland Diversion Team by Referring Agency



The source of referrals reflected the current status in the criminal justice system of individuals referred to the diversion service. The overwhelming majority were referred prior to conviction as described in Table 7.3:

Table 7.3 : A Summary of Client Status in the Criminal Justice System

Status	Number	Percent
pre or post CJS/vulnerable	40	4
arrested but not charged	202	20
charged but not convicted	647	64
convicted but not sentenced	51	5
sentenced	71	7
Total	1011	100

This pattern of criminal justice status could be interpreted to mean that the diversion service was able to fulfil that part of the Governments objectives which stated that mentally disordered offenders should "be diverted from the criminal justice system at the earliest possible stage" (Criminal Justice Consultative Council, 1993), or when public interest requires prosecution, that the individual receives appropriate care and treatment, and the courts are informed with regard to bail and sentencing decisions.

7.1.8 Offence

Eighty percent of individuals referred to the Cleveland Diversion Team had one or more current alleged offence as follows (Table 7.4):

Table 7.4 : The Current Alleged Offences Recorded for Individuals referred to the Cleveland Diversion Team

Offence Category	Percentage
Burglary	7
Theft	10
Fraud	2
Drugs	1
Criminal Damage	5
Motoring	5
Property/Non-Violent	42
Robbery	2
Violence	20
Sex	5

These offences could be summarised as a percentage ratio as follows:

Sex	Violent*	Property/Non-Violent
5	22	73

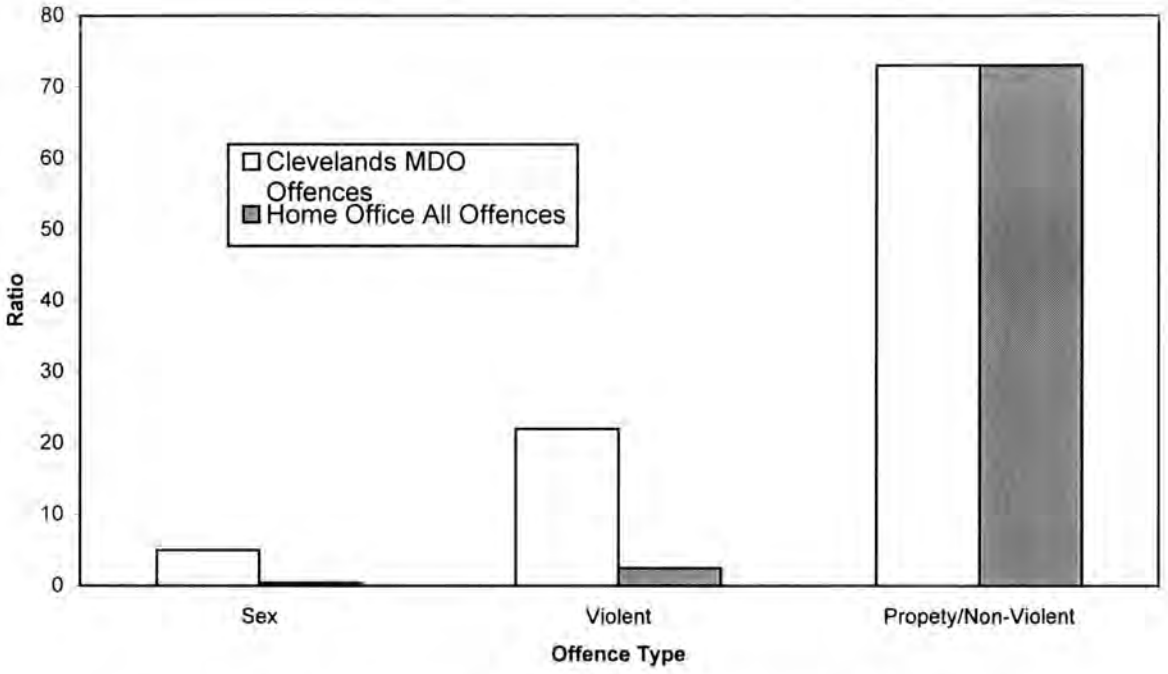
*Includes robbery, arson and violence against the person.

suggesting that those referred were four times more likely to have committed a violent crime than a sex crime and over three times more likely to have committee a non-violent than a violent offence. Figures reported by the Home Office (1995) suggested that the sex to violent to non-violent ratio for all offences committed was:

Sex	Violent	Property/Non-Violent
0.4	2.5	73

The ratio of offences committed by Cleveland's mentally disordered offenders can be compared with the ratio reported by the Home Office as follows (Chart 7.2):

Chart 7.2 : A Comparison of Offence Type Ratios



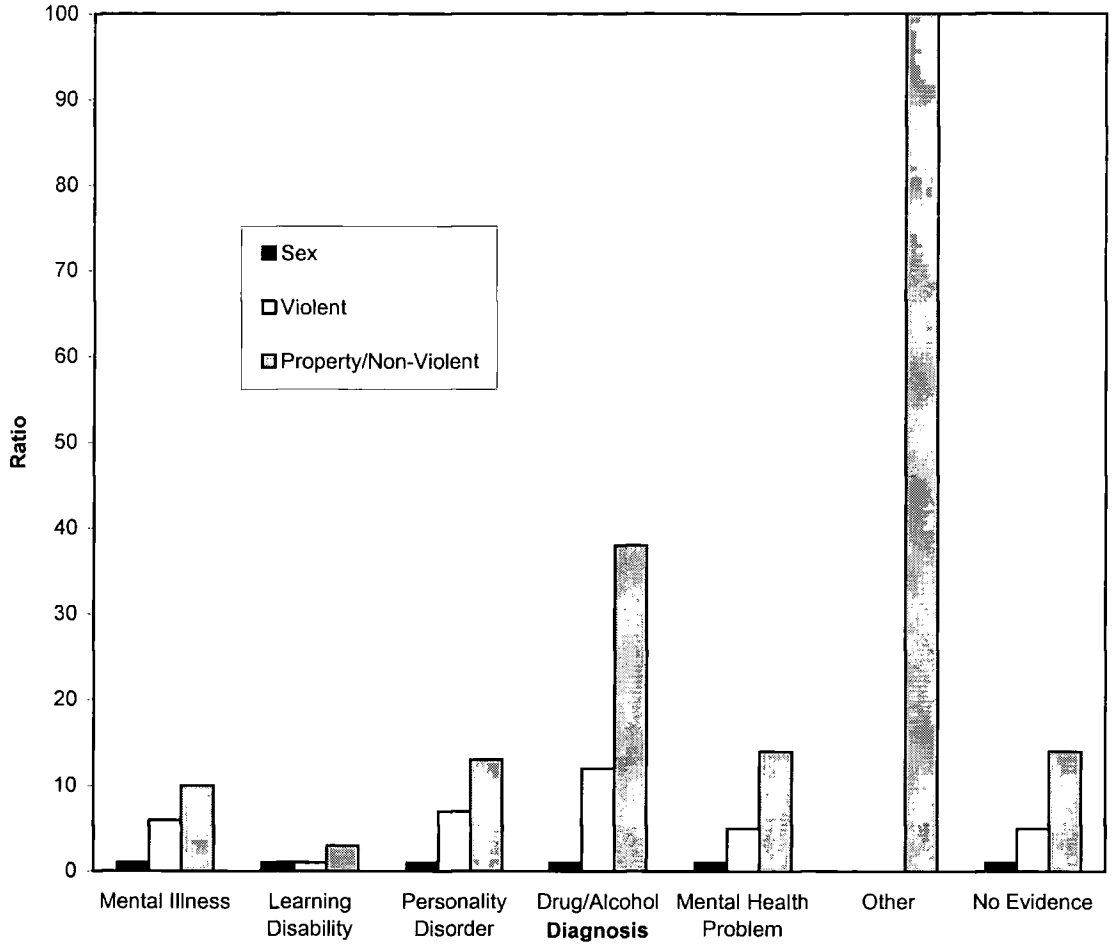
Offenders in England and Wales were seven times more likely to commit a violent than a sex offence and over 38 times more likely to commit a non-violent than a violent crime. It was the case therefore that a higher proportion of those committing sex or violent offences were referred to the Cleveland Diversion Team, perhaps as a function of the nature of the offence. However it was also possible that this was reflective of some relationship between mental disorder and offence type (Table 7.5).

Table 7.5 : Percentage of Individuals Referred to the Cleveland Diversion Team by Diagnosis Category and Offence Type

	Sex	Violent	Property/Non-Violent
Mental Illness	6	33	61
Learning Disability	22	22	56
Personality Disorder	5	32	63
Drug/Alcohol	2	23	75
Mental Health Problem	5	26	69
Other	0	0	100
No Evidence	5	26	69

As Table 7.5 shows, those with a learning disability were on average four times more likely to have [allegedly] committed a sex offence when compared with other mentally disordered offenders referred to the diversion team. Those with a mental illness or personality disorder were more likely to have committed a violent offence than the other diagnosis categories. Finally the property/non-violent offence type was more likely to include those abusing drugs and/or alcohol (also least likely to have committed a sex offence), although within each diagnosis category all those referred were more likely to have committed a non-violent offence (See Chart 7.3).

Chart 7.3 : Within Diagnosis Offence Ratio



7.1.9 Diagnosis

A primary function of the Cleveland Diversion Team was to identify mental disorder within those referred. Assessments were joint wherever possible i.e. a community psychiatric nurse plus either a social worker or probation officer, however due to problems with staff shortages 51% were undertaken by a single practitioner – 18% by the social worker or probation officer without health service representation. Two thirds of those referred were assessed by the team and of these 8% were identified as showing no signs of a mental disorder (Table 7.6):

Table 7.6 : Primary Diagnosis Category Allocated Following Assessment by the Cleveland Diversion Team

Primary Diagnosis Category	Percentage
Mental Illness	17
Learning Disability	9
Personality Disorder	11
Drug/Alcohol Misuse	27
Mental Health Problems	25
Other	3
No Mental Disorder	8

People with a drug/alcohol or mental health problem accounted for over half of all referrals assessed by the Cleveland Diversion Team. In addition, drug/alcohol problems were implicated as a secondary diagnosis in a further 21% of cases, meaning that almost half of those assessed by the diversion team were abusing drugs and/or alcohol.

7.1.10 Risk Assessment

Risk was described by the diversion team as one of the following categories: 'none', 'mild', 'moderate' or 'severe'. Information provided by the diversion team indicated that 2% of individuals referred posed a severe risk of causing harm to themselves and 4% a severe risk of causing harm to others.

Less than half of those at severe risk of self-harm were known to the health and social services despite the fact that most had a history of self-harming. Similarly less than half of those posing a severe risk of harm to others were known to health or social services, despite the fact that the majority had a history of violence and were identified by the diversion team as mentally ill.

As might have been expected the number of individuals within each category decreased as the severity of risk increased:

Risk of Harm to Self:	none indicated/mild	90%
	moderate	8%
	severe	2%
Risk of Harm to Others	none indicated/mild	88%
	moderate	8%
	severe	4%

Ninety percent of those referred to the diversion team were at little or no risk of self harm (one third of whom were known to health or social services). Eight percent were described as at moderate risk of self harming and only two percent presented a severe risk. The proportion offering some considerable risk to others is actually double than that for self-harm, with 4% posing a severe risk of harm to others. The number of people already known to health or social services increased in each category as the risk of self-harm increased. However the opposite effect occurred with the 'risk to others' categories where the numbers already known to health or social services decreased as risk increased. Perhaps this reflected the nature of generic health and social services whereby aggressive or potentially 'dangerous' individuals are increasingly labelled 'forensic' and therefore for their service. Alternatively it may have been a function of the diversion team client group which includes disproportionately high levels of serious offenders for whom attempts to access services may not have been made in the past and who prior to the Cleveland Diversion Team may have been dealt with solely within the criminal justice system.

7.1.11 Cleveland Diversion Team Reports

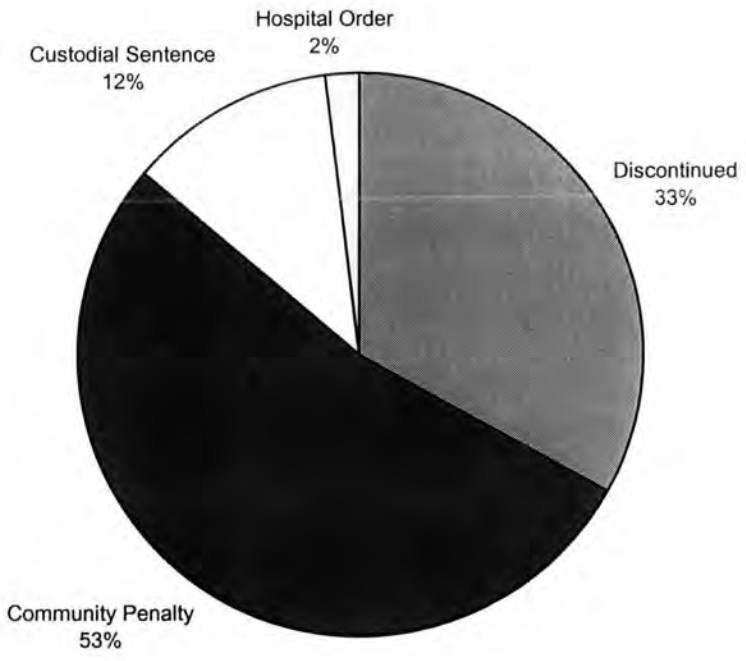
An important activity undertaken by the diversion team was the provision of information to a variety of people, much of which was informal and therefore not recorded. The team submitted a formal report in 6% of cases mainly to inform bail decisions and in the majority of instances bail was granted.

Other forms of report, either produced directly by the diversion team or elicited by them on behalf of their clients, included Probation Service Pre-Sentence Reports (provided in 11% of cases) and Psychiatric Reports to Court (3% of cases).

7.1.12 Outcomes from the Criminal Justice System

Outcomes from the criminal justice system for those individuals referred to the diversion team are summarised as follows (Chart 7.4). Criminal charges were discontinued for a third of diversion team clients and over half of those sentenced received a community penalty e.g. one of the various Probation Orders. Only 12% received a custodial sentence although most of those referred were never at risk of a prison sentence. It would therefore be inappropriate to suggest that diversion from custody could be a gross measure of success and that the diversion team had successfully diverted 88% of their clients. In addition the team's aims did not include diversion from custody, instead they endeavoured to ensure that sentences were 'appropriate' by providing information and advice and alternatives accordingly. For instance, for those referred who were not identified as mentally disordered and who had committed a sufficiently serious offence a custodial sentence might be considered appropriate. However, bearing in mind that a significant number of diversion team clients had committed violent or sex offences, accounting for 27% of offences, few went to prison and instead most were available to receive the care and treatment arranged for by the diversion team.

Chart 7.4 : A Summary Of Criminal Justice Outcomes



7.1.13 Needs Assessment

Of the 1011 individuals referred to the Cleveland Diversion Team during the 2½ years under scrutiny, a third had one or more health or social care needs identified. These could be broken down as follows:

Table 7.7 : The Health and Social Care Needs Identified By The Cleveland Diversion Team

Need		Percentage
Accommodation		8
Hospital Admission	voluntary	2
	compulsory	6
Advice and Information		6
Further Assessment		33
Community Care and Support		48

The need category 'accommodation' generally referred to the identification of people living in inappropriate housing at the time of referral to the diversion team. The majority of the 8% of people needing alternative accommodation were living in bed and breakfast or lodgings, of no fixed abode or in a night shelter, in hospital or a special needs/resettlement unit.

The diversion team identified 8% of those referred needed to spend some time in hospital – for further assessment, treatment or a period of asylum. Two percent of people agreed to this assessment and were admitted to hospital voluntarily and the remainder were admitted under a section of the Mental Health Act 1983.

The provision of advice and information to individual clients, as well as to those involved in their case, was needed in 6% of cases. The types of advice and information needed by clients related to, for example benefits and finance, services available and how to access them. Advice to other professionals included accessing information and services from other agencies.

One third of people required further assessment to identify problems and determine solutions. Although the Cleveland Diversion Team did not carry cases or provide treatments long-term, the majority of further assessments were carried out by members of the diversion team. Some people referred presented with complex problems and needs which could only be identified over a number of assessment sessions. In particular, the diversion team had ready access to a psychiatrist and a psychologist as they were members of the team, whereas in other circumstances accessing a psychiatric or psychological assessment may have taken some time to arrange.

Almost half of those referred to the Cleveland Diversion Team needed care and support in a community setting and almost half of these were already known to a psychiatrist, community psychiatric nurse or psychologist. For these people community care would continue; for those unknown to the health services a community care package would be required.

7.2. The Results of Cluster Analysis

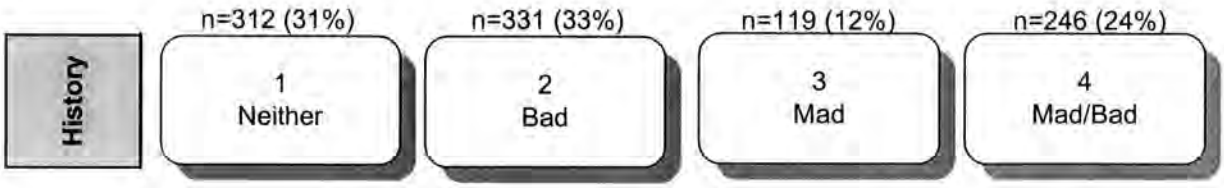
Prior to the identification and mapping of any careers experienced by the people referred to the diversion team, cluster analysis was needed in order to identify groups of people with similar experiences at each key stage. The analysis would involve all of the information covered in Section 7.1 as it described each of the individual 1011 people. It would be through the use of these key stage clusters that careers would be identified i.e. clustering the clusters. Each person would belong to one cluster at the history stage, another at the first referral input stage, another at the throughput stage, and so on. Case membership of this longitudinal cluster string would be the basis of a final cluster analysis that would identify any common patterns or groupings i.e. shared careers.

First each of these key stage clusters will be considered in turn.

7.2.1 History

Four history clusters i.e. four groups of people who shared similar psychiatric and criminal histories, were identified in the first of the key stages that make up the careers of mentally disordered offenders referred to the Cleveland Diversion Team, as follows (Figure 7.2):

Figure 7.2 : The Four History Clusters



The first cluster groups together those individuals who had neither a psychiatric or criminal history. The question then must be why were these people selected for referral to the Cleveland Diversion Team – what was it that lead the referrer to suspect these people might be mentally disordered? The second, which is the largest cluster, groups those people who had previous convictions but no psychiatric history. These are referred to as 'bad'. These two clusters accounted for approximately two thirds of all people referred to the diversion team, none of who had a psychiatric history but half of whom were known to the criminal justice system. In this respect it would seem that no evidence existed to support the claim that a general criminalisation of mentally disordered people was occurring in Cleveland. Instead it would be more plausible to suggest that, at least since the introduction of the policy of diversion for mentally disordered offenders and the creation of the Cleveland Diversion Team, some types of people had become likely to be medicalised. In this respect it was important to describe why these people had

been selected for referral to the mental health team, in other words what particular types of career they experienced, for example what offences they had committed, what psychiatric diagnoses were applied, what input was provided by the diversion team and with what results?

Forty five percent of people in the second cluster had committed violent offences, 5% a sex offence and the remaining 50% property or non-violent offences, which translates into a ratio as follows:

Sex	Violent*	Property/Non-Violent
1	9	10

*Includes robbery, arson and violence against the person.

This represents a very high proportion of people with previous convictions for either violent or sex offences. The ratio calculated from the figures reported by the Home Office for all offenders in England and Wales was 1:6.25:292 Perhaps it was the case that those who had previously committed violent or sex offences were more likely to be referred to the diversion team because of the very nature of their offending history regardless of the fact that they had no previous history of mental disorder. This would reflect a popular opinion that in order to have committed certain offences the individual must have been mentally disordered – the offence becomes evidence of the illness. The test of this position is to ask what happened after these people were referred to the Diversion team: what, if any mental disorder was identified (although it could be that the diversion team unknowingly colluded with this popular misconception), what actions did the team take and with what effect? These questions could only be explored once clusters had been identified at each of the key stages and careers mapped based on the cluster outcomes.

The fourth cluster also included people who had a history of prior convictions. This cluster, which included almost a quarter of those referred to the diversion team, grouped together people who had experienced not only previous convictions ('bad') but also previous psychiatric contacts ('mad'). When compared with those grouped together in cluster 2, an even higher proportion had been convicted of a violent offence or a sex offence: 55% had previous convictions for violent offences and 7% for sex offences, leaving 38% whose most serious type of previous conviction was property/non-violent. The ratio this translates into is striking:

Sex	Violent*	Property/Non-Violent
1	8	5

*Includes robbery, arson and violence against the person.

People in this group were almost twice as likely to have committed a violent or sex offence than they were to commit a non-violent offence. However these people also had evidence of a history of mental disorder, just over half (52%) had details of a diagnosis recorded as follows:

Table 7.8 : Previous Diagnoses of People in History Clusters Three and Four

Diagnosis	Cluster Three (%)	Cluster Four (%)
Mental Illness	43	31
Learning Disability	2	4
Personality Disorder	19	20
Drug/Alcohol Misuse	14	20
Mental Health Problems	11	13
Other (organic)	11	12

Half of those identified as previously mentally ill, two thirds of those with a personality disorder and 40% of those abusing drugs/alcohol had committed a violent offence.

Could this cluster provide evidence of a relationship between mental disorder and violent offending? Or does it instead reflect a process of selection whereby referrers were more likely to refer mentally disordered people with a history of violence against others, rather than those with a history of non-violent offences? A comparison with Cluster 3 is useful here. Cluster 3, the smallest cluster by far containing only 12% of people referred, consisted of people with a psychiatric history and no previous convictions. This would be the group on whom any claims regarding criminalisation would centre. When compared with Cluster 4 they were more likely to be mentally ill and less likely to be misusing drugs/alcohol (refer to Table 7.8).

The question would be why were these mentally disordered people selected for referral? i.e. what current offences had they been charged with? If they were of a non-violent nature, perhaps public disorder type offences, it might suggest that these people were being criminalised. They had no history of violence, unlike Cluster 4, which could explain their referral, and current charges were minor suggesting a need for health or social service input. Again answers to these questions, as well as others including whether diversion team input acted to maintain or prevent any process of criminalisation, would rely on the identification of the careers experienced by these people.

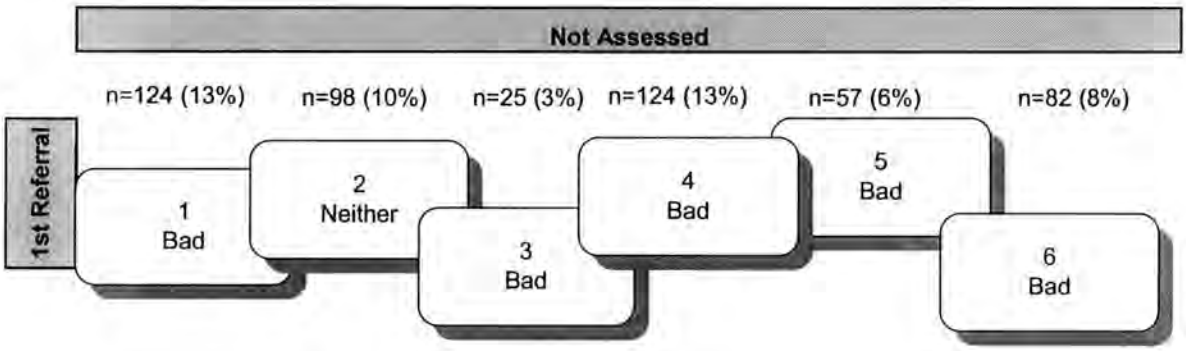
7.2.2 First Referral Input

Individuals referred to the Cleveland Diversion Team were either assessed or not, depending upon a decision taken jointly by the referrer and diversion team. This was

an important distinction because it was only at assessment that a current diagnosis was recorded; for those not assessed no mental disorder could be indicated in the data returned, despite the fact that such a disorder may have been present.

Six first referral input clusters were identified for those people not assessed by the diversion team, as follows:

Figure 7.3 : The Six First Referral Input Clusters for People Not Assessed

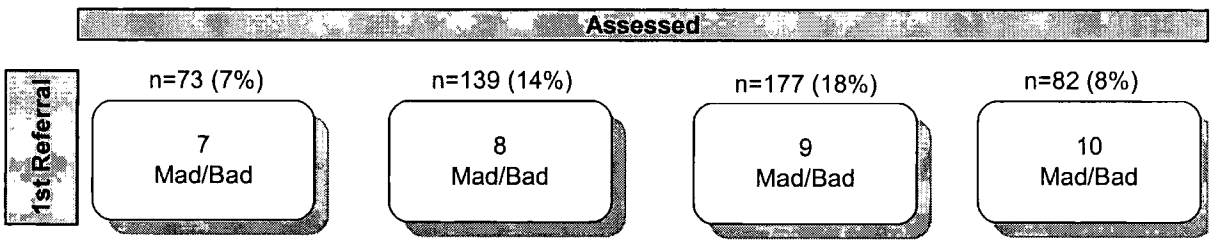


No one had a mental disorder recorded. Cluster 2 had no offence and no mental disorder recorded and the remainder had offences only. Cluster 1, one of the two largest clusters, seemed a strange outcome as it grouped together people at either end of the offending spectrum: those committing violent offences with those committing property/non-violent offences. However closer examination showed that clusters 1 and 2 represented people for whom the diversion team had very little contact (classed as 'for information only' referrals). These people were clustered around the fact that the diversion team recorded their current alleged offence (cluster 1) or they recorded nothing (cluster 2). The remaining four clusters represented people with whom the team had significant contact but who for various reasons were not assessed by them. Cluster 5 groups together those committing property/non-violent offences and cluster 6 those committing violence against the

person. The largest cluster, cluster 4, seems to be an axis around which those charged with other types of offence group. For instance, a high proportion was charged with violent offences but all of those charged with sex offences were grouped in this category, together with most of those alleged burglars. Category 3, the smallest, consists of assorted different offence types.

Four first referral input clusters were identified for those people who were assessed by the diversion team, as follows:

Figure 7.4 : The Four First Referral Input Clusters for People Assessed



Those involved in these clusters had both a mental disorder and a criminal offence recorded by the diversion team. These clusters were very similar to those identified above (numbers 3-6) in terms of the types of offences around which they were grouped. Cluster 7 (as cluster 5) was property/non-violent; cluster 8 (as cluster 6) was violent; cluster 9 (as cluster 4) represents the axis around which other offences are grouped – for instance all of those charged with sex offences were grouped in this category, together with all alleged burglars and thieves – and finally cluster 10 (as cluster 3) which collects together the remaining individuals assorted offences.

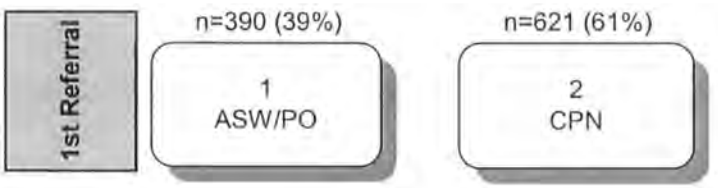
In addition to offences these clusters also grouped around descriptions of the mental disorder reported by the diversion team during assessment. The overwhelming majority of people referred to the Cleveland Diversion Team had mental health problems or were abusing drugs and/or alcohol (Table 7.6, p.256) and as such were

represented in each cluster. Clusters 7 (property/non-violent offences) and 10 (assorted offences) were mainly drug/alcohol and mental health problems. Cluster 8 (violent offences), while mainly drug/alcohol and mental health problems, also included people with a personality disorder and those with a mental illness. Cluster 9 (sex, burglary and theft), again while mainly drug/alcohol and mental health problems, also included people with a learning disability as well as those with a mental illness.

7.2.3 First Referral Throughput

All referrals accepted by the diversion team were allocated a primary worker, that is a team member who would be responsible for all activities to be taken by the team intended to influence outcomes. Clusters identified at this stage of the careers of individuals grouped around the nature of the professions of the primary workers as follows:

Figure 7.5 : The Two First Referral Throughput Clusters



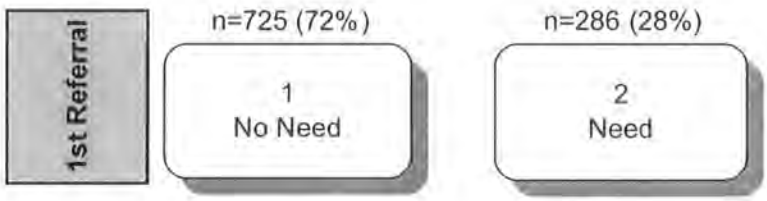
Generic activity undertaken by the team included the provision of information in various forms, including formal reports to court. Any member of the team, regardless of profession, could and would perform these tasks, so what did each do to set them apart for one another in such a way that cluster identification would revolve around them? The Approved Social Worker and the Probation Officer had roles which were particular only to their profession i.e. the social worker had the

power to assess people under the Mental Health Act 1983 and probation officer provided Pre-Sentence Reports to courts. The Community Psychiatric Nurses were more likely to have been involved in the assessment and identification of health and social care needs.

7.2.4 First Referral Outcomes

If one important outcome was the criminal justice sentence, then the outcome most likely to have impacted upon it was the assessment and provision for health and social care needs. Indeed such needs were so important that the clusters identified at this stage revolved around their existence as follows:

Figure 7.6 : The Two First Referral Outcomes Clusters



The nature of these needs is described earlier in Section 7.1, but it was the identification and provision of services to meet them that mattered at this stage. Although court sentences were not important in defining the clusters, it was evident that while 4% of those in cluster 2 were given a custodial sentence, whereas more than twice that number (10%) served a prison term in cluster 1.

What happened to the people grouped in each of these outcome clusters would go some way to answering the question 'what impact did the diversion team have on the careers of those referred to them?' Did they maintain the mentally disordered person as an offender or in some other way as a revolving door client? Who were the

20% re-referred to the team two or more times (two thirds of whom had allegedly committed another criminal offence), and what was different about the 80% who were referred once only (who may or may not have re-offended but who did not become part of an additional revolving door)? Was the 20% re-referred evidence of a process of criminalisation? These questions could only be answered by using the clusters identified so far to map the total careers experienced by people referred to the diversion team.

7.3. The Results of Total Career Mapping

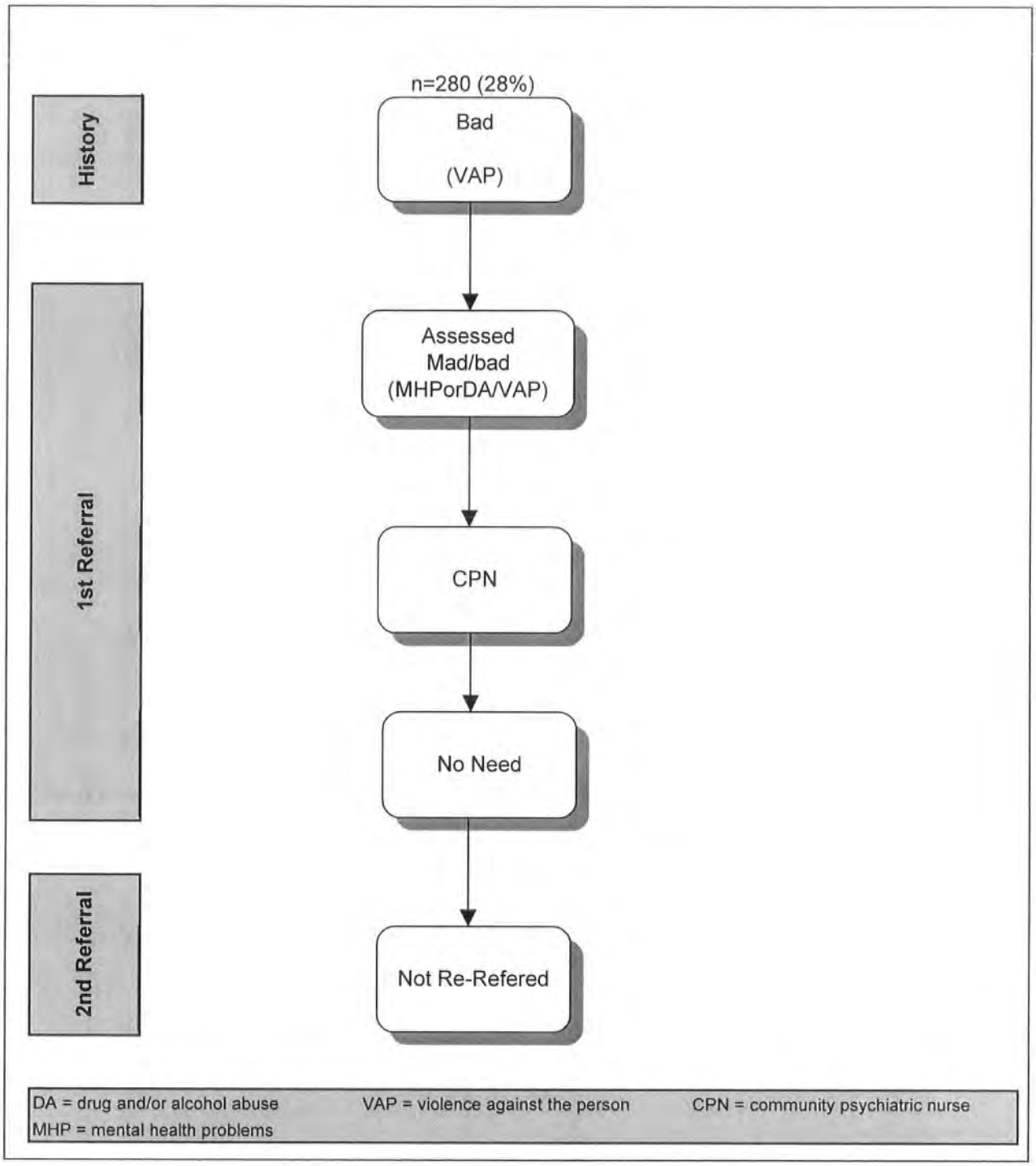
Each of the 1011 individuals referred belonged to four clusters, one at each key stage: history, first referral input, first referral throughput and first referral outcomes. In addition they also belonged to one of two groups, either 're-referred a second time' or 'not referred'. A final cluster analysis was performed using individual case membership of all of these cluster memberships to explore the existence of shared careers. A total of five careers was identified and these will be described in detail in this section.

7.3.1 Career One: An Experience of Medicalisation #1

This was one of the largest career types identified, involving over one quarter of people referred (Figure 7.7). In the main the people concerned had no previous psychiatric history but almost all had a criminal record. A quarter were under 18 years of age when they were first convicted of an offence and all had on average six previous convictions. Most of the convictions were for violence against the person, but other offence types included theft and burglary. Forty two percent had spent some time in prison – 43% of them had served one prison sentence and 39% between 2 and 4 sentences. Two thirds had been convicted for an offence within the 12 months prior to referral to the team. These people it seems were straightforward

criminal offenders prior to their selection for referral to the diversion team, albeit overwhelmingly violent offenders.

Figure 7.7 : Career One: An Experience of Medicalisation #1



The majority of these individuals (73%) were referred by the police (33%) or probation service (40%), reflecting their status in the criminal justice – 83% had yet to be convicted of their current offence(s). A significant proportion of current offences were violent or sex offences (38% or 6%), which explains the high proportion remanded in custody (51%).

Each person referred was assessed by their diversion team primary worker, in this case one of the community psychiatric nurses. The majority (55%) were identified as substance misusers or having some other 'mental health problem' – neither of which could be classed as a significant mental disorder. A further 11% were described as personality disordered and 13% had no mental disorder detected. Of those remaining 15% were reported as mentally ill. Records were blank in 6% of cases. The overwhelming majority therefore had either some vague disorder, or a disposition not accepted as a disorder by some in that it is described as 'not treatable', or no mental disorder at all. Therefore even at referral to this psychiatric service, the mental disorder free status of this group of people is confirmed.

There seems little reason to sustain the referral of these people to the diversion team – they had no history of psychiatric problems and little evidence of mental disorder following assessment by the team. This argument is supported by the fact that no health or social care needs were identified by the nurses based on their assessment and what they considered the psychiatric services could and should become involved with. The majority (70%) was assessed and discharged within a month of referral, with no further input from the diversion team. Twenty percent ended up serving another prison sentence, 49% a community or other sentence, and 31% had charges discontinued.

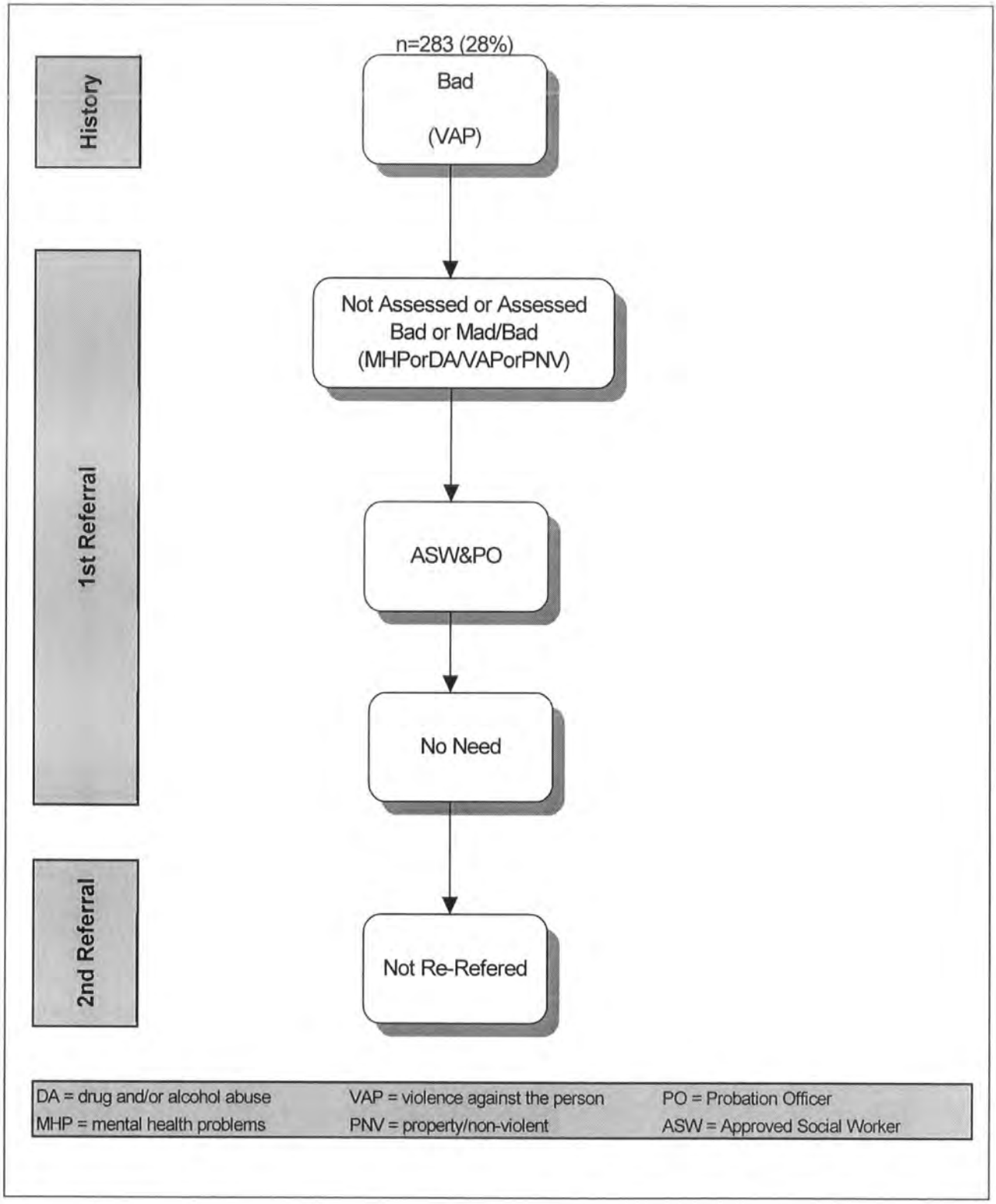
No one experiencing this career was re-referred to the diversion team. This by no means suggests that these people did not re-offend, in fact it is likely they would being more like career criminals than mentally disordered offenders. However it was clear that a psychiatric referral was inappropriate and as such they did not become part of a mental health revolving door.

7.3.2 Career Two: An Experience of Medicalisation #2

Career Two (Figure 7.8) mirrors that of Career One in many ways. It contains the same number of people, a quarter of those referred to the diversion team. These people had no previous psychiatric history but did have a criminal record. Almost a third (31%) were under 18 years of age when they were first convicted of an offence and all had on average five previous convictions, mostly for violence against the person among various other offence types including theft and burglary. Forty five percent had spent some time in prison – 34% of which served one prison sentence and 41% between 2 and 4 sentences. The majority (79%) had been convicted for an offence within the 12 months prior to referral to the team. These people, as those in the previous career, were simply criminal offenders prior to their selection for referral to the diversion team, although again overwhelmingly violent offenders.

These people, as those experiencing the previous career, were simply criminal offenders prior to their selection for referral to the diversion team, although again overwhelmingly violent offenders.

Figure 7.8 : Career Two: An Experience of Medicalisation #2



Again the majority were referred by the police (29%) or probation service (53%), reflecting their status in the criminal justice – 77% had yet to be convicted of their current offence(s). A significant proportion of current offences were violent or sex offences (27% or 5%). This is not quite as high as that experienced in Career One, which might explain the lower proportion who were remanded in custody (39% rather than 51%) at the time of referral.

A major difference between Careers One and Two involves the allocation of primary worker; whereas Career One was influenced by the community psychiatric nurses in the diversion team, the people experiencing Career Two had been referred to the probation officer or social worker. Approximately half (52%) of those in Career Two were assessed and the remainder were provided information or advice. The majority of those assessed had a mental health problem or were otherwise abusing drugs and/or alcohol (58%); 7% were personality disordered and 4% had no mental disorder detected. Of those remaining, 14% had a mental illness and 12% were learning disabled – the largest cluster of people with a learning disability. Again then the overwhelming majority had some unspecific or minor disorder, confirming their offender-only status despite attempts to medicalise them.

As with Career One, there was little reason to sustain the referral of these people to the diversion team – they had no history of psychiatric problems and little evidence of mental disorder following assessment by the team. In the main, no health or social care needs were identified by the probation officer or approved social worker. The majority of people (63%) were assessed and discharged within a month of referral, with no further input from the diversion team. Twenty one percent ended up serving another prison sentence, 64% a community or other sentence, and 15% had charges discontinued.

No one experiencing this career was re-referred to the diversion team although given their previous history it was probable that they did re-offend.

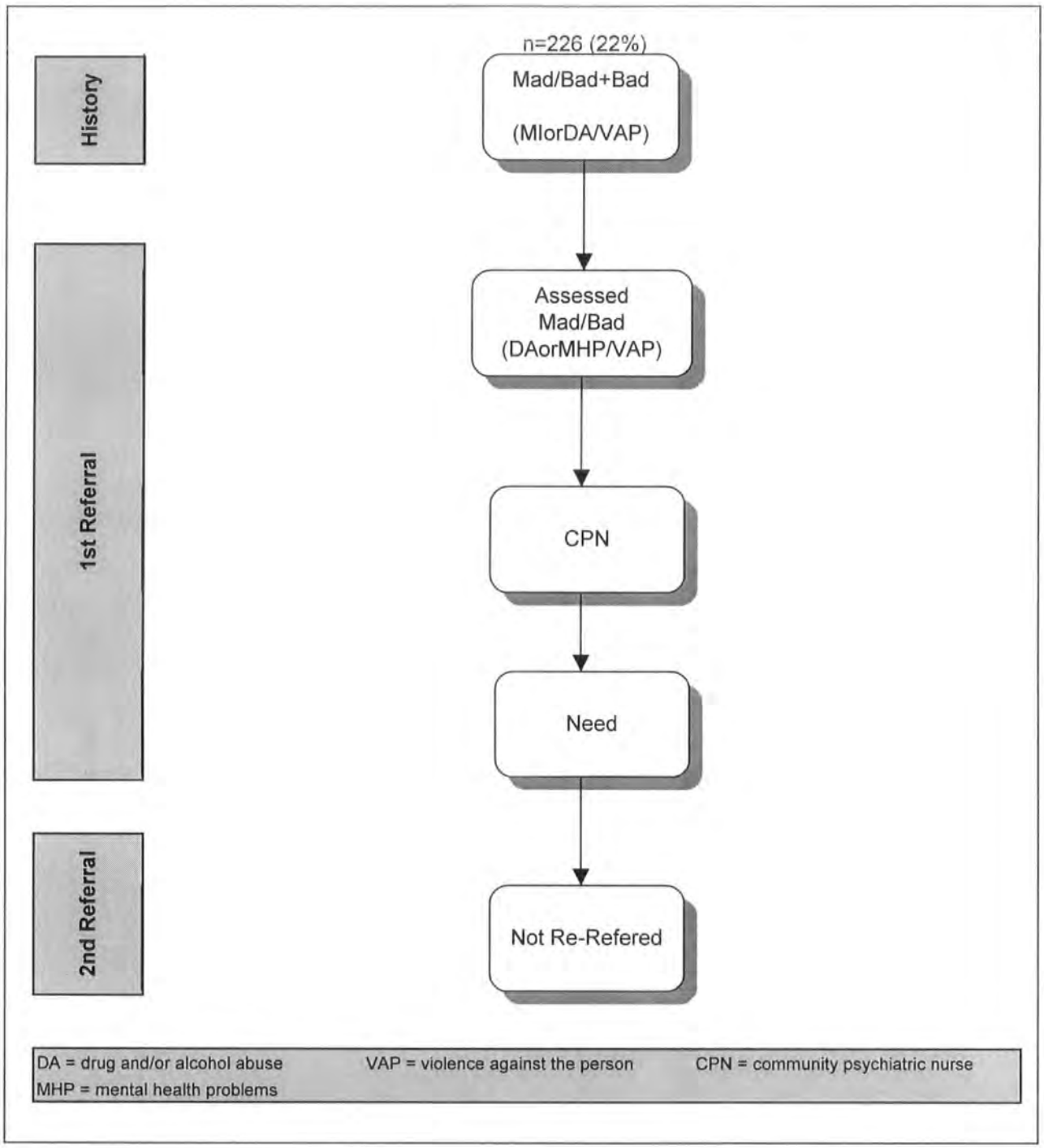
7.3.3 Career Three: An Experience of Criminalisation #1

This third career (Figure 7.9) includes people who had experienced a process of criminalisation. Approximately half (47%) of those referred had some record of a psychiatric history as well as previous convictions. Almost a third (29%) involved a previous mental illness and an additional third (33%) drug/alcohol misuse. Just over a third (35%) were under 18 years of age when they were first convicted of an offence. Just over forty percent (41%) had convictions for violent offences and the remainder mainly burglary or theft. The average number of previous convictions was comparably high at nine offences/person. Forty two percent had served a prison sentence – 36% of which had served one sentence and a further 36% between 2 and 4 sentences. The majority (67%) had been convicted of an offence in the 12 months prior to referral to the diversion team. In 81% of cases, the psychiatric history pre-dated the criminal. Thirty nine percent had been admitted to hospital one or more times on a voluntary basis and 15% on a compulsory basis.

In the remaining cases, as with careers one and two, people had a history of criminal convictions but no psychiatric service contacts. Almost half (44%) were under 18 years of age when they were first convicted of an offence and all had on average six previous convictions, mostly for violence against the person among various other offence types including theft and burglary. Forty eight percent had spent some time in prison – 37% of whom served one prison sentence and 47% between two and four sentences. The majority (78%) had been convicted for an offence within the 12 months prior to referral to the team. This second group of people had a history that was more like that of Careers One and Two than it was like the first

group of people in this career. Meaning that this career, number three, covered people who had experienced either a process of medicalisation or criminalisation.

Figure 7.9 : Career Three: An Experience of Criminalisation #1



The majority (79%) of people experiencing Career Three were referred by the police (34%) or probation service (45%), again reflecting their status in the criminal justice system – 79% had yet to be convicted of their Current offence(s). A significant proportion of current offences were violent or sex offences (37% or 7%) – 51% of those with both a psychiatric and criminal history had been charged with violent offences, compared with 24% of the group with pre-convictions only. Two percent of those with both history types had been charged with sex offences compared with 15% of those with a history of offending only.

The majority were referred to one of the diversion team's community psychiatric nurses, who assessed almost all of those involved. Two thirds had a mental health problem or were abusing drugs and/or alcohol (66%), 6% were personality disordered and 6% had no mental disorder detected. Of those remaining, 11% had a mental illness and 10% were learning disabled. There was no significant difference between the two internal groups.

As with other careers, the majority of people in Career Three had some unspecific disorder identified at assessment by the diversion team. The main difference between this career and all other careers was that following the assessment the nurses involved identified one or more health or social care needs. This important act singled out Career Three from all five careers identified; this group received significant input from the diversion team because it included people whom they could expect to help and thereby impact on outcomes. The majority (64%) had one major need identified, with the remainder between two and six needs. Nearly three quarters of those with no psychiatric history (73%) had only one need identified, compared with those having a psychiatric and criminal history where approximately half had between one and six needs identified. The types of needs identified for both groups were very similar. The majority (48%) required some form of care or support

provided in a community setting. The next largest category was the identification of need for further assessment. Thirty three percent of those having Career Three were identified as requiring a specialist, more detailed assessment usually involving a psychiatrist or psychologist. The purpose would usually be to determine diagnosis and treatment or to revise current treatments. Fifty percent of those with a history of contacts with the psychiatric services were still in contact with a psychiatrist at the time of referral to the diversion team, the remainder had no contact with the specialist psychiatric services. A significant proportion of those with no previous psychiatric history were referred to the Drug and Alcohol services for support and treatment. Of the remaining needs identified, i.e. those requiring hospital admission, particularly compulsory admission under the Mental Health Act 1983, as well as those requiring assistance with accommodation, the overwhelming majority concerned those with a psychiatric history.

As would be expected, people included in Career Three remained clients of the diversion team for longer than those in Careers One and Two. Fifty four percent were discharged within a month of referral compared with 70% of those experiencing Career One and 63% Career Two. Fifty two percent of those with a psychiatric history were discharged within one month, whereas fewer (40%) of those without experienced a similar fate. A possible explanation is that few people in the second group had any contact with the specialist psychiatric services and arranging initial access to these services meant that cases took longer. The people with a psychiatric history took less time despite the fact they had a more complex set of needs because they were already in contact with other services.

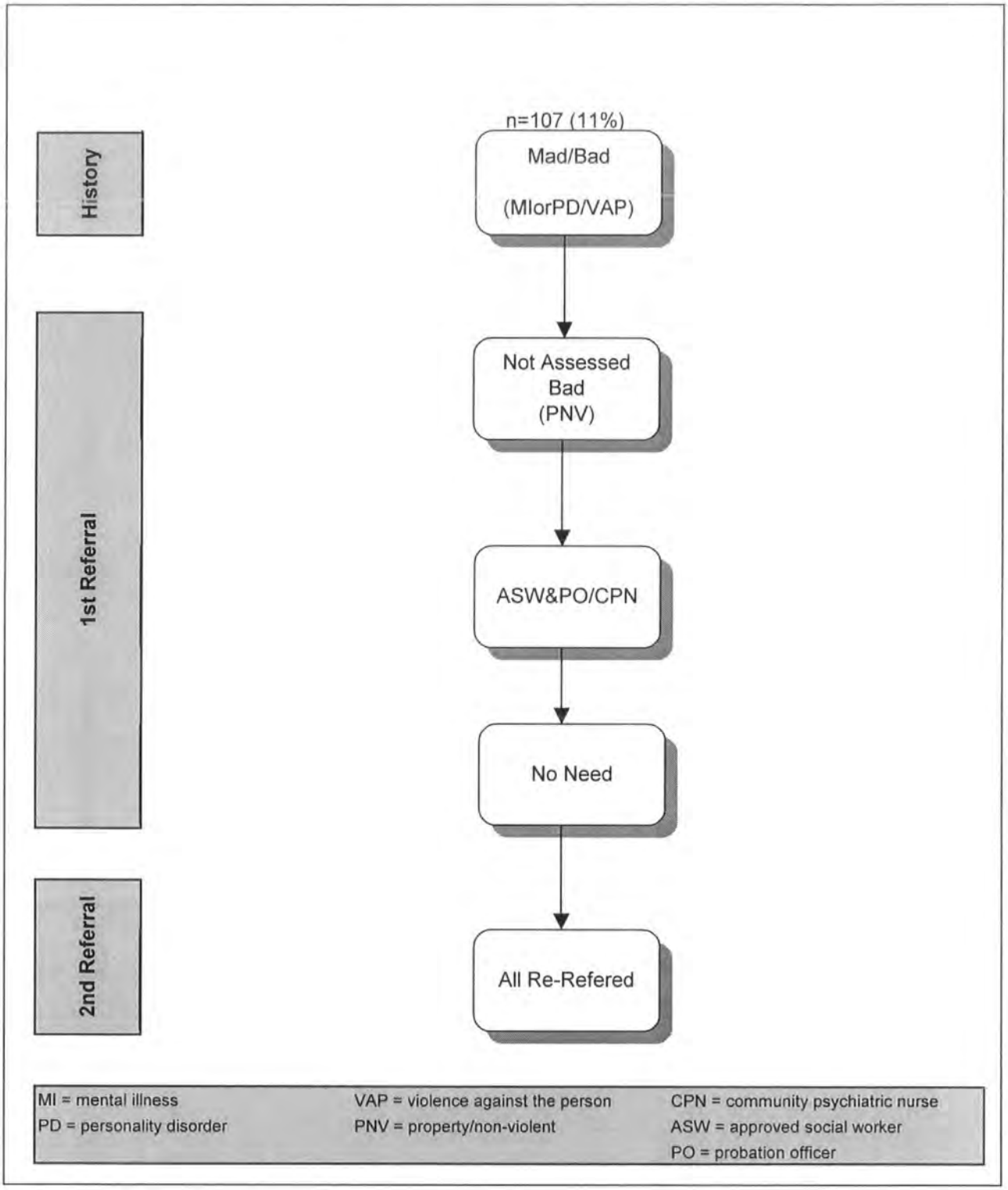
Based on their actions, the Cleveland Diversion Team clearly considered these people had been referred appropriately whereas those in Careers One and Two were perhaps less likely so. The people in this career required care and support from the

health and social services, regardless of their histories (i.e. half of whom had no previous psychiatric contacts). Reflecting this, fewer people were sentenced to prison (15% compared with 21% and 20% in Careers One and Two respectively), fewer had charges discontinued (10% compared with 15% and 21%) and more were given a community penalty (75% compared with 64% and 49%), which it could be argued provided an additional level of supervision and support in the community.

7.3.4 Career Four: An Experience of Criminalisation #2

Career Four (Figure 7.10) is one of the smallest involving only 11% of people referred. It represents those failed by the health and social care organisations, including the Cleveland Diversion Team, and instead picked up by the criminal justice system. Most of those involved had both a psychiatric and a criminal history. Almost a third (31%) had been diagnosed with a mental illness and a further 12% identified as personality disordered. A third (33%) had spent some time in hospital on a voluntary basis, and 6% as a compulsory inpatient. Over half (55%) had convictions for violent offences and the remainder mainly burglary. The average number of previous convictions was the highest recorded at 12 offences/person. This figure was skewed upwards because of the small number of people who had large numbers of pre-convictions, for example one person had 170 recorded convictions, another had 92, and another 69 and so on. Over (55%) half had spent some time in prison – 19% serving one prison sentence, and 14% between two and four sentences, leaving the two thirds majority (67%) serving over four prison sentences. Almost two thirds (63%) had had contact with the psychiatric services before they were convicted of a criminal offence. Twenty three percent were less than 18 years of age when they were convicted of their first offence. The overwhelming majority had been convicted of an offence within the 12 months prior to referral to the diversion team.

Figure 7.10 : Career Four: An Experience of Criminalisation #2



These people generally had a history which suggested they had been both significantly mentally disordered and had been convicted of a number of serious offences in the past. The majority (75%) were referred by the police (36%)

or probation service (39%) to either the diversion teams community psychiatric nurses (60%), or the approved social worker or probation officer (40%). Despite this these people were not assessed by the diversion team but instead were referred for the provision of advice or information to the referrer and/or to the individual concerned.

Because the majority were not assessed no records regarding the extent or nature of mental disorder present at the time of referral to the diversion team were available. However current alleged offence was recorded and the most serious offence allegedly committed by a quarter of people (25%) referred involved an offence of violence against the person, with an additional 5% being sex offences. Eighty one percent had yet to be convicted of the offence, 23% were remanded in custody and the remainder on bail. Eventually 17% were sentenced to prison, 20% had charges discontinued and the remainder (63%) a community penalty.

Two thirds of people experiencing this career were discharged by the diversion team one month after referral. The significant event on which this career turns is that, without exception, every single person involved was re-referred to the team following discharge. Re-referral implied either that people had re-offended or that in some other way the diversion team (by their action or inaction) had acted to maintain their (revolving door) deviant careers. This outcome set this career apart from the other careers identified because, despite the fact that careers differed significantly from one another, no one experiencing them was re-referred. In other words, despite significant variations, these other careers produced the same one important outcome: the diversion team played no part in maintaining the people involved as mentally disordered offenders – they did not become part of another revolving door. However in the case of Career Four the opposite was true, which makes this career the most important in terms of identifying a group of people for

whom referral to the diversion team had a negative effect. The question must be what was different about this career that produced this unwanted outcome? Could it have been predicted, or the people at risk identified early on so that the actions taken by the diversion team altered to produce a different (better) outcome?

Career Four was most similar to Career Three, at least at first sight. Both contained people who had a psychiatric as well as a criminal history. The most obvious difference between these two careers was the fact that everyone in Career Three was subject to a full assessment by the diversion team compared with no one in Career Four. As discussed in chapter five, the decision on receipt of a referral was 'to assess or not to assess'. The diversion team's assessment entailed a comprehensive evaluation of:

- previous psychiatric and offending behaviour
- current mental health status
- current offending
- current risk to self and others
- current health and social care needs

Based on which was formulated a plan of action to meet needs and otherwise inform and influence outcomes.

Clearly the decision to assess or not had important implications for Careers Three and Four, the question is can we determine what influenced the decision? Comparing the variables which describe these careers it seems that the people in Career Three had perhaps a more significant psychiatric history, as they were more than twice as likely to have been sectioned under the Mental Health Act 1983 and

spent time as a compulsory hospital in-patient when compared with those in Career Four.

Conversely, it seems that the people in Career Four were more likely to have been previously more 'criminal' than those in Career Three:

Table 7.9 : A Comparison of the Histories of Careers Three and Four

Variable	Career Three Criminalisation #1	Career Four Criminalisation #2
1st episode – Criminal or 1st episode - Psychiatric	19% 81%	36% 64%
Average number of Pre-Cons	7	12
Proportion of Violent Pre-Cons	40%	60%

At the point of referral to the diversion team the reverse tended to be true. A larger proportion of the people in Career Three had been charged with a serious offence of violence (40%) compared with only a quarter (25%) of those in Career Four. Indeed twice as many people in Career Four had been charged solely with public nuisance type offences, for example causing an affray – 32% compared with 18%. As those in Career Four were not assessed, no record regarding the extent or nature of mental disorder present at the time of referral to the diversion team were available and therefore no comparison was possible. However perhaps it was this apparent reduction in seriousness of offending (along with a less significant psychiatric history) which persuaded the diversion team that despite a psychiatric as well as a criminal history, a full assessment was not warranted.

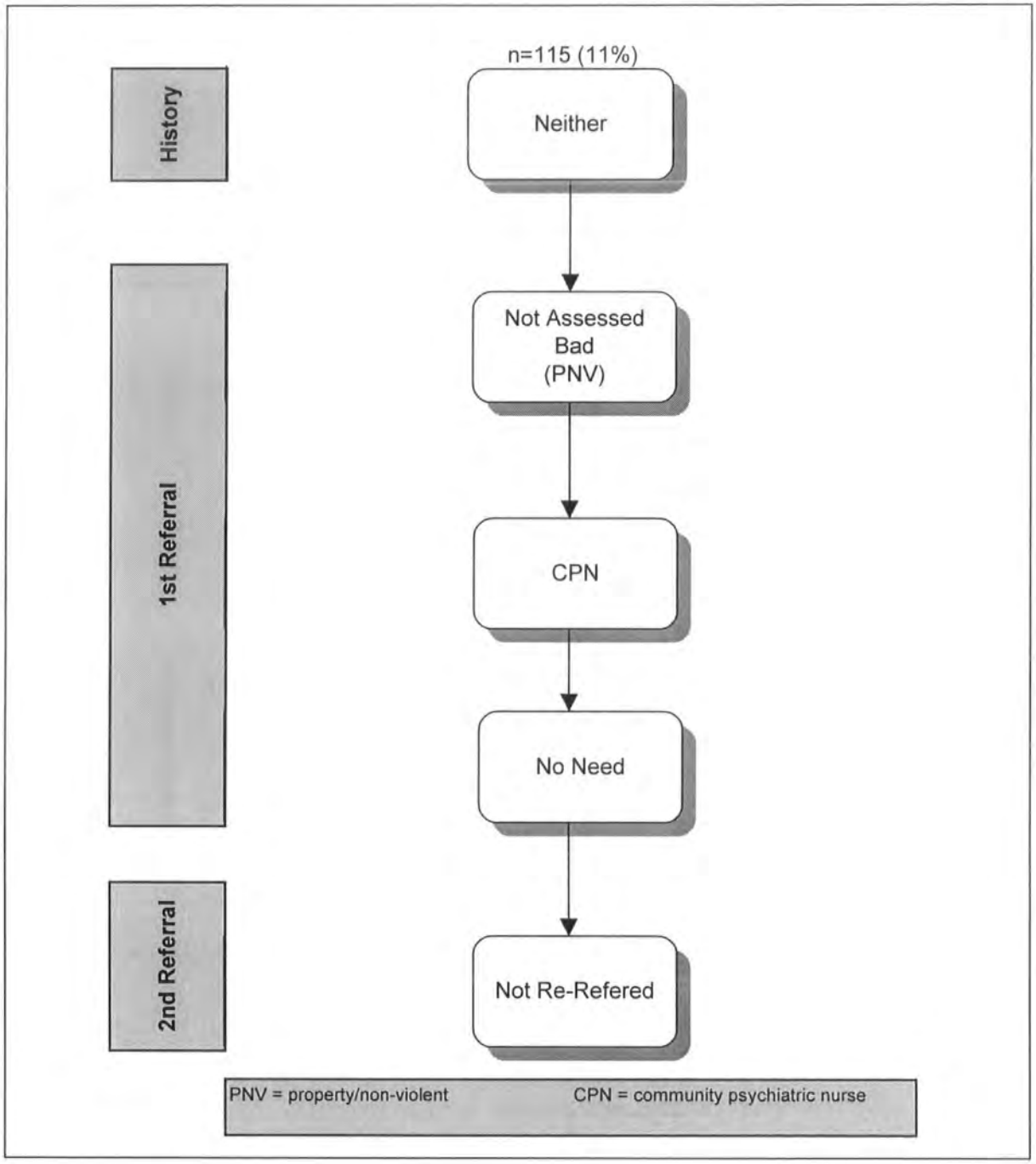
7.3.5 Career Five: Neither Criminalised or Medicalised

This final career (Figure 7.11) is made up of people referred to the community psychiatric nurses in the Cleveland Diversion Team in order that the referrer could ask for information or advice. A significant proportion (33%) of these referrers were health service professionals – the remainder mainly police 37% or probation service 21%.

Very little information describing these referrals was recorded by the diversion team. There is no record of either a criminal or psychiatric history, although this does not mean they had not experienced one. On referral they were not assessed by the nurses and therefore no current mental disorder was recorded. However almost 60% had a current alleged offence reported: 26% were for violent offences, 5% sex offences, and the remainder, 69% for property/non-violent offences. Career Five included the highest proportion of people whose most serious alleged offence was a public nuisance type offence, for example causing an affray (39%).

Minimal further information is recorded for the people in Career Five. No health or social care needs were identified. It is not known what sentences they received from the criminal justice system. Almost all (90%) were discharged within a month of referral, over 60% on the same day the referral was received. Importantly however, no one experiencing this career was re-referred to the diversion team implying that the approach adopted by the nurses was appropriate in this case.

Figure 7.11 : Career Five: Neither Criminalised or Medicalised



7.4. Summary

Five mentally disordered offender careers were identified by this research (see Figure 7.12, p.289). To summarise:

1. The first career was described as an example of medicalisation. People had violent previous convictions but no psychiatric history. They had gone on to commit a further, often violent, offence. On referral to the diversion team they were assessed by a community psychiatric nurse and identified as misusing drugs and/or alcohol or having mental health problems. No health or social care needs were identified. People were discharged and not re-referred.

2. The second career, also referred to as an example of medicalisation, was very similar to Career One. The main difference was the profession of the diversion team member of staff responsible for the assessments. Whereas above it was the community psychiatric nurses, in this case it was the approved social worker or probation officer.

3. Career Three was referred to as an example of criminalisation. People had both violent previous convictions and a psychiatric history with diagnoses including 'mental illness or drug/alcohol misuse'. They had gone on to commit further violent offences. On referral to the diversion team they were assessed by a community psychiatric nurse and identified as misusing drugs and/or alcohol or having mental health problems. They each had health and/or social care needs identified and met. Following discharge none were re-referred.

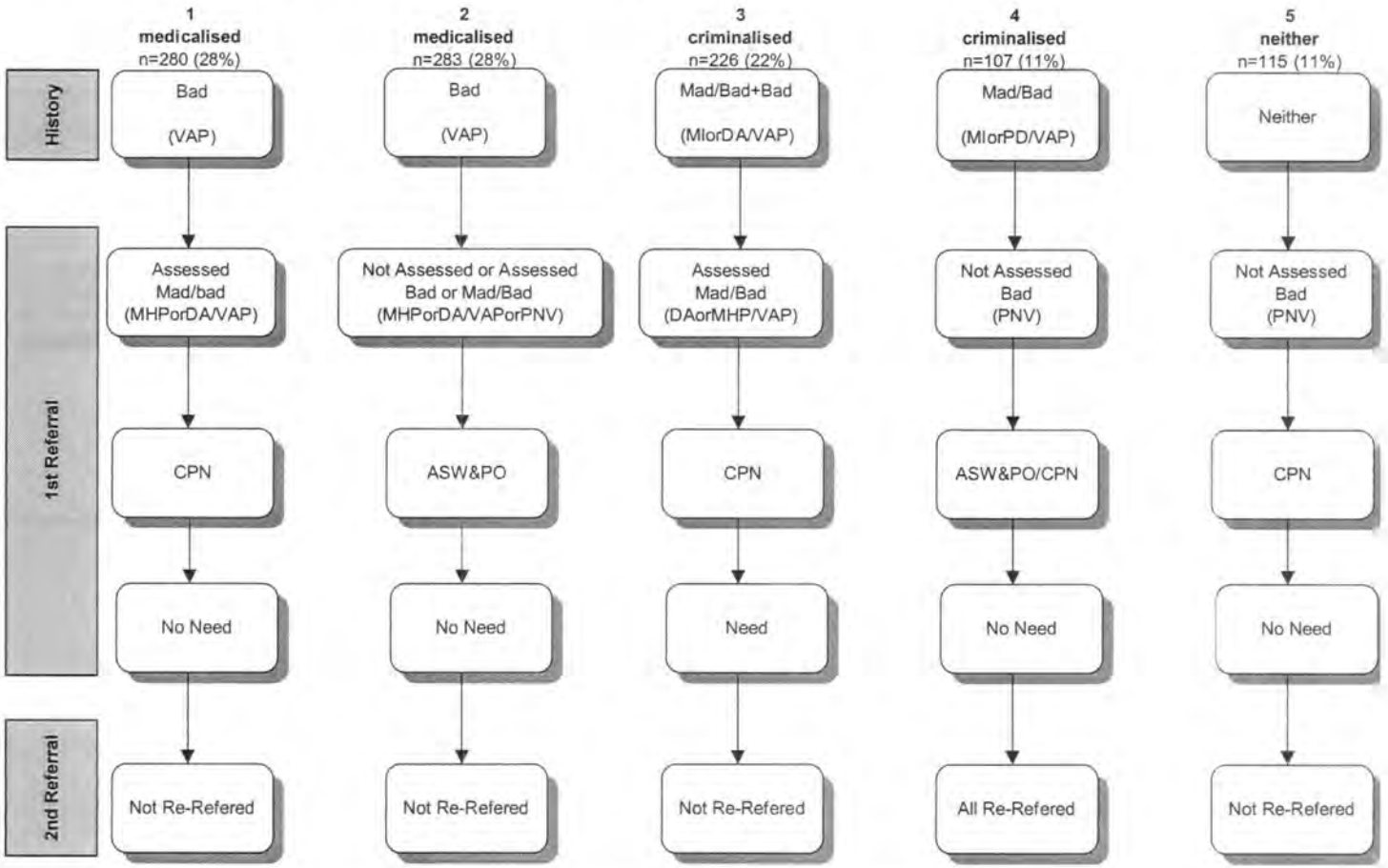
4. The fourth career, another example of criminalisation, appeared at first sight as if it was going to be similar to Career Three. However despite having a psychiatric history and previous convictions no-one was assessed, no needs were

identified and everyone was re-referred. This was a significant career because it appeared as if the Cleveland Diversion Team were acting to maintain these mentally disordered people as offenders.

5. The fifth career was described as neither criminalised or medicalised. These referrals were requests for information from the team's community psychiatric nurses. No further actions were taken and minimal information was recorded. Although this type of referral for information only was considered a valuable part of the overall service provided the team.

The following chapter interprets and discusses these five careers in more detail.

Figure 7.12 : Career Typology of Individuals Referred to the Cleveland Diversion Team for Mentally Disordered Offenders (n=1011)



8. DISCUSSION

Two quite distinct but related themes run through this thesis. The first examines issues relating to mentally disordered offenders, in particular what kind of psychiatric and criminal careers were experienced by those individuals referred to the Cleveland Diversion Team. It discusses what the identification of the careers might mean for the policy of diversion. The second remarks on the theory and methodology which makes the conceptualisation and identification of these careers possible. It considers where the application of the types of methodology used in this research might lead in the future exploration of large and complex data sets.

8.1. Mentally Disordered Offenders and Custody Diversion

The policy of diversion from custody and/or the criminal justice system was introduced because of a growing concern, fuelled over the years by a number of research publications, that a large proportion of the sentenced and remand prison populations were mentally disordered. In addition it had been suggested that this proportion was growing post deinstitutionalisation, due to a process of criminalisation (or the more extreme claim of transcarceration) which had developed because of the failures of community care (or according to the transcarceration hypothesis, a natural shift of deviants from the hospital to the prison). At the same, time increasing public attention was being focused on the often very serious crimes being committed by a small number of mentally disordered people, who it was generally claimed afterwards had 'fallen through the community care net'.

Custody diversion was going to counter this situation by actively encouraging the use of existing powers to redirect people to care and treatment by the health and social services. In addition specialist teams would act as a focus, coordinating efforts

to identify mentally disordered offenders at risk, or posing a risk, and inform or influence criminal justice and health/social care outcomes.

Custody diversion then seemed a straightforward solution to the situation but in order to explore the effectiveness of custody diversion teams, a number of questions needed answering. Following this, consideration needed to be given to future development of the teams and the policy of diversion.

8.1.1 The Research Questions

This section deals with the questions raised in the Problematic (chapter 2) step by step, beginning with an exploration of the types of mentally disordered offender careers identified.

Research Question 1: What types of psychiatric/criminal careers did individuals referred to the Cleveland Diversion Team experience?

a) Did those referred to the Cleveland Diversion Team exhibit career characteristics suggestive of a tendency towards increasing involvement with the criminal justice system and the risk of prison sentences, therefore supporting the premise for the policy, i.e. were they being criminalised? Or were there significant differences suggesting that concerns were unnecessary at least for Cleveland's residents or alternatively that the Cleveland diversion service was being targeted at different people?

If the policy of diversion was set up to counter a process of criminalisation, where mentally disordered people becoming involved with the criminal justice system reflected a failure of the health and social care systems, we could expect that the people referred to the Cleveland Diversion Team would:

- have a significant psychiatric history (the transcarceration hypothesis would expect this to involve a significant period of hospitalisation) and few, if any, minor previous convictions;
- have a significant current mental disorder i.e. a mental illness rather than a mental health problem or drug/alcohol misuse;
- be charged with a minor criminal offence perhaps involving bizarre behaviour because of the nature of their psychiatric symptoms;
- be at risk of being held in custody by the police or remanded into custody by the courts due to a lack of alternative, more appropriate accommodation.

In spite of this premise, only 12% of people referred to the Cleveland Diversion Team had a psychiatric history only and no previous convictions. Although of these over 40% had a significant diagnosis of mental illness, 55% had spent some time in hospital as voluntary in-patients and 22% on a compulsory basis. However, although this 12% of people with a psychiatric history only were automatically grouped together during the first stage cluster analysis, later on this cluster was not realised as part of any of the five careers identified by the final stage analysis. Instead these ex-psychiatric patients were spread throughout three of the five careers, in particular Careers One to Three. However because they appear in such small numbers they have no impact on the description of these careers. So, for example, Careers One and Two each begins with a history of violent pre-convictions only and Career Three begins with people who have a history of mental illness or drug/alcohol abuse and previous convictions for violent offences. This means that the careers of the people with a psychiatric history only were not sufficiently dissimilar to those of the people in Careers One to Three to be grouped separately, making up an additional career on their own. Importantly however, no-one fitting this description of 'criminalised' or 'transcarcerated' was included in Career Four, the career where

everyone involved was re-referred to the diversion team. This suggests that the diversion team did not act to maintain these criminalised mentally disordered people as offenders. The difference between Careers One to Three and Four and Five was that the majority of people in Careers One to Three (where the people with a psychiatric history only were grouped) were assessed by the diversion team and any health/social care needs identified, while those in Careers Four and Five were not assessed by the team.

To summarise then, the answer to question (a) is no. Mentally disordered people were not being criminalised in a simplistic sense – there was no evidence to support the concern that growing numbers of psychiatric patients were being charged with minor offences in order to access health and social care. There was however evidence in the shape of Careers Three and Four, discussed later, to support a more complex approach to the criminalisation process as part of the transcarceration hypothesis. A number of those referred had a psychiatric history but were also committing serious violent offences. They were therefore more likely to cross-institutional experiences.

b) Gunn et al (1991a) reported that most studies of sentenced prisoners reported a high level of disorder but a low level of psychosis. Would the same be true of those referred to the Cleveland Diversion Team? Were these people victims of this medicalisation process or were the diagnoses being justifiably applied and the issue was one of a lack of suitable treatment facilities or, in the case of personality disorder, disagreement among doctors about treatability?

Rather than criminalisation (which to recap was described by Abramson 1972 as 'nuisance behaviours by ex-mental patients resulting in criminal charges in order to confine persons who were being disruptive as a result of the mental disorder, but for

whom no state hospital beds were available'), it seems the majority of people referred to the Cleveland Diversion Team were more likely to be subject to a process of medicalisation (described by Conrad 1981 as 'the defining and labelling of deviant behaviour as a medical problem, an illness, and mandating the medical profession to provide some type of treatment for it'). This situation is evident particularly with mentally disordered offender Careers One and Two (the two largest career types identified), which include people who prior to referral to the diversion team have no history of mental disorder or contacts with the psychiatric services.

Emile Durkheim noted in the Division of Labour in Societies (1933) that as societies develop from simple to more complex, sanctions for deviance change from repressive to restitutive i.e. from punishment to treatment or rehabilitation. There is also a corresponding change in the definition or conceptualisation of deviant behaviour. For example, alcohol misuse (one of the largest diagnosis categories for those referred to the Cleveland Diversion Team) has been defined as sin, moral weakness, crime and most recently, illness. Alcohol misuse is only one among many varieties of deviance which have been treated with medical jurisdiction, others include: crime generally and violence in particular, drug abuse, suicide, hyperactive children, obesity, learning disabilities, child abuse etc. Kitterie (1971) called this change the 'divestment of criminal justice and the coming of the therapeutic state' and Rieff (1966) the 'triumph of the therapeutic'. Concomitant with medicalisation has been a change in imputed responsibility for deviance: with badness the deviant was considered responsible for the behaviour, with sickness he/she is not, or at least the responsibility is diminished. As Szasz (1970) observed:

> "With the transformation of the religious perspective of man into the scientific, and in particular the psychiatric, which became fully articulated during the nineteenth century, there occurred a radical

> shift in emphasis away from viewing man as a responsible agent acting in and one the world and toward viewing him as a responsive organism being acted upon by biological and social forces [i.e. free will vs. determinism]" (p.114)

In terms of the policy of diversion for mentally disordered offenders, it could be claimed that the introduction of a process of re-medicalisation was necessary to counter the impact of criminalisation which was said to be an unintended consequence of the move to care in the community. However, the imposition of this process seems no more likely to have been necessary for those in Careers One and Two than it would be for everyone else involved in the criminal justice system, in prison or serving a community sentence, where a high level of disorder but a low level of psychosis has been reported time and again. Careers One and Two were experienced by people who, prior to referral to the diversion team, had what might be described as straightforward criminal careers. However on closer examination these careers were not perhaps typical of the majority of offenders because of the large proportion of people (about a third in each case) who had committed and continued to commit violent offences (including violence against the person, sex offences and robbery). This would also account for the proportion (approximately 25% in each case) who had already served one or more prison sentences prior to referral to the diversion team. The reported age of onset of offending for Careers One and Two peaked at age 17, somewhat older than that reported by criminal career research on onset using official records which generally shows a peak age between 13 and 15 (for example, Farrington 1994), but matching the indication that people convicted for violent offences are generally older. Levi (1994) however suggests that violent offenders are not 'specialists' but are instead 'frequent, generalist' offenders who are as likely, if not more likely, to be convicted of non-violent as well as violent crimes. While to a large extent the findings of Careers

One and Two support this, with the overwhelming majority of those with previous convictions for violence also having convictions for other offences including burglary and theft, Levi's argument that the majority of offenders are not convicted of more than one violent offence was not reflected by Careers One and Two. Therefore ideas such as 'careers of violence' might be more useful in this context where 74% of those with a violent pre-conviction went on to commit further violent offences. In addition, the majority of violent offences committed by those referred to the Cleveland Diversion Team concerned personal violence rather than instrumental violence where financial gain is the motive, i.e. robbery. It is therefore probable that overall the people experiencing Careers One and Two were selected for referral to the diversion team to a large extent because of the nature of their offending, i.e. persistent offences of violence against the person.

This process of medicalisation, of crime in general and violent crime in particular, was emphasised by the fact that even though everyone in Career One and most of those in Career Two were assessed by the diversion team's nurses in the first case and the social worker or probation officer in the latter, most were described as abusing alcohol or drugs or as having some ill-defined mental health problem rather than a severe and/or enduring mental illness. The relationship between substance misuse and violent crime is well documented (Field 1990; Fagan 1990; Frieze and Browne 1989; Tuck 1989). Most importantly however it is very rare for individuals to be violent every time they consume these substances which means that it cannot be claimed for example that alcohol is a sufficient or even a necessary explanation of violent offences. Therefore, in terms of the search for causes and treatments, alcohol or drugs cannot be used to explain violence, instead both deviancies are medicalised.

For the people in Careers One and Two referral to the Cleveland Diversion Team represented a first successful exposure to the medicalisation process in so far as they each received a diagnosis following assessment. This legitimated their involvement with the mental health services and offered the possibility of a medical explanation for their offending behaviour or at least some level of mitigation and therefore the option of treatment rather than punishment. Despite this however no-one in either mentally disordered offender career had the possibility of any such 'treatments' identified or recorded by either the nurses in the case of Career One or the social worker or probation officer in Career Two. The Courts were supplied with formal reports[35] by the diversion team prior to sentencing decisions in only 10% of cases in Career One. Those experiencing Career Two faired a little better with 47% receiving mainly a Probation Pre-Sentence Report or in a much smaller number of cases a formal report following a Mental Health Act 1983 assessment. In other words, no health or social care needs were identified by the diversion team and so apart from this one period of assessment and diagnosis, the diversion team did not become further involved in the careers of these people nor did they arrange for the intervention of others.

To summarise the answer to question (b) is yes. The people referred to the team generally had a high level of disorder but a low level of psychosis. They were also committing significant offences, including violence against the person. The suggestion here is that a process of medicalisation of crime in general and violent crime in particular is underway for some people.

Whilst the medicalisation process proceeded no further with the diversion team, how the careers of those in groups one and two developed following discharge would be one important follow-up to this research. However the debate about whether these

[35] These reports could contain details of assessment and diagnosis and treatment recommendations.

people should have been referred to the diversion team in the first place and what impact referral had on the development of their careers is part of the bigger question about how we define deviance.

c) Was it possible to sustain a simple transcarceration model where one form of institutional setting had simply been substituted for another with many former mental hospital patients being reinstitutionalised directly from hospital to prison?

There was no evidence in Cleveland to support either the idea that a direct transfer of populations had occurred from hospital to prison, in other words transcarceration, or the alternative assertion that significant numbers of mentally disordered people were currently being criminalised as a result of failures of the policy of care in the community. The people referred to the Cleveland Diversion Team had not come directly from a psychiatric hospital. Whilst some people had a psychiatric history, most had received treatment in the community or brief periods of hospitalisation. Equally, the majority of those referred to the diversion team were not seriously mentally ill, but rather were identified with a vague mental health problem or as misusing drugs and/or alcohol. A significant proportion had not been charged with minor public disorder type offences as would be predicted by the criminalisation hypothesis, but instead had [allegedly] committed an offence of 'violence against the person'.

d) Was there evidence to support the rather more sophisticated view of the transcarceration hypothesis involving a peno-juridical, mental health, welfare and tutelage (guardianship) complex which can only be examined by appreciating cross-institutional arrangements and dynamics.

In comparison with Careers One and Two, the people grouped together in Careers Three and Four had both a psychiatric as well as a criminal history at the time of referral to the Cleveland Diversion Team. This was significant because it meant that unlike those in the first two career types these people already had experience of the medicalisation process. Their careers offered support for the proposition that a more sophisticated version of the transcarceration hypothesis was occurring, characterised by cross-institutional movement of people between systems. They had a psychiatric diagnosis - over a third mental illness and 25% drug/alcohol abuse in Career Three, and a third with mental illness and a further third personality disorder in Career Four – and many had spent a period of time in hospital. The overwhelming majority had contact with the psychiatric services before their first official criminal conviction. However the fact that a significant proportion had subsequently gone on to commit violent crimes (in the main violence against the person and to a lesser extent sex offences and robbery) and serve prison sentences, suggests that some prior period of anti-social behaviour would be evident leading up to any criminal conviction which might account for the initial involvement of the mental health services. In other words a first official conviction is usually preceded by a period of offending behaviour which does not come to the attention of the police or is not prosecuted. Therefore these people may have been committing criminal offences 'unofficially' before their first psychiatric contact, indeed it may have been this behaviour which brought them to the attention of the psychiatric services.

The people grouped together in Career Four were more seriously violent than those in Career Three or even Careers One or Two. This coupled with the fact that these people were in the main referred with a known mental illness or personality disorder makes it perhaps surprising that, regardless of who within the diversion team they were referred to, the people in Career Four were not given a full assessment. This is all the more surprising in light of the recent moral panic regarding people with a

personality disorder. Why the team took this decision is not clear at this stage, and should be the focus of follow-up research. One possible explanation might have involved the existence of psychiatric contacts already in place. However, and again surprisingly, the people in Career Four were the least likely (with the exception of those in Career Five) to have contact with the health or social services at the time of referral to the diversion team. They were also less likely (with the exception of Career Five) to have current contact with the probation service. As a consequence of the decision not to assess, no health or social care needs were identified and the team did not become further involved with the careers of these people. This meant that despite some previous period of medicalisation the people in Career Four were not currently in receipt of psychiatric care or treatment and this situation did not change following referral to the Cleveland Diversion Team. To add to this, everyone experiencing this career was re-referred to the diversion team following discharge. For this particular group of people the consequences of the decision of non-involvement taken by the diversion team acted to maintain them as offenders (Watson, 1993) rather than as 'material for medical attention' (Penrose, 1939). Re-referral (for one individual up to six times) was not a beneficial outcome of referral to the diversion team. People were re-referred because either they had re-offended or there was concern that a health or social care or other need had not been met. For instance a person may be re-referred because a previous referral did not produce the required result – e.g. an individual is referred by a police officer but not assessed by the team, meaning no diagnosis is applied and no needs identified; subsequently the defence solicitor (who it may be argued has some interest in having their client 'medicalised') re-refers emphasising their concerns and requesting an assessment.

Research Question 2: What impact does the Cleveland Diversion Team have on the psychiatric/criminal careers of individuals referred to them?

Compared with Career Four, the people experiencing Career Three (most of whom also had both a psychiatric as well as a criminal history) were not re-referred to the Cleveland Diversion Team following discharge. They differed initially because they were referred to and assessed by the Cleveland Diversion Team's community psychiatric nurses. They were perhaps selected for assessment because their psychiatric history was more serious. They were more than twice as likely to have been compulsorily detained in a psychiatric hospital when compared with those in Career Four. In addition, although the criminal history of those in Career Three was somewhat less violent than Career Four, by the time they were referred to the diversion team they had become more likely to be charged with a violent offence suggesting their offending behaviour might be escalating. Following assessment it was also the case that, whilst historically over a third had a mental illness and a quarter drug and/or alcohol misuse (developing from a very first diagnosis of a third mental illness and a quarter personality disorder), the nurses identified a third with drug and/or alcohol misuse and a third with mental health problems. This apparent reduction in the level of seriousness of diagnoses would fit with an agenda whose aim was to underplay the need for medical attention. However this is the only career identified which involves people for whom the diversion team documented health and/or social care needs, suggesting a recognition of medical implications.

For example, one important social need which might have been identified involved accommodation. A large number of people referred to the diversion team were living in hostel accommodation. This was significant for two reasons: i) because the stress associated with living in temporary or inappropriate accommodation, homelessness or the threat of eviction had been linked with the onset of an episode of acute mental illness; ii) access to 'appropriate' accommodation could mean the

difference between a remand on bail or a remand in custody (where individuals who were homeless or living in temporary accommodation would be seen as a bad bail risk).

In the first instance, Bebbington et al (1993), Brown and Birley (1968) and Brown et al (1973), among others, confirmed that there was a significant link between 'life events' and both psychotic and depressive episodes leading to hospital admission. Time and again research has pointed to a correlation between housing problems and offending behaviour and the onset or exacerbation of mental health problems.

In the second instance, for the Cleveland Diversion Team whose aim was to access health and social care for clients and avoid inappropriate custodial remands and sentences, the problem accessing appropriate services was acute and, for the 41% living in temporary accommodation or homeless, housing was no exception. Such access could mean the difference between a remand on bail and a remand in custody (where individuals who were homeless or living in temporary accommodation would be seen as a bad bail risk), or could promote a return to offending or exacerbate mental health problems. Overall, eighty four percent of people referred to the diversion team were referred prior to conviction and sentence and therefore a significant amount of input from the team would have involved seeking a bail placement as opposed to a remand in custody where appropriate. Burney and Pearson (1995) had argued that more basic forms of social support, including a reliable degree of security in terms of accommodation and personal finances, might in many cases offer the best guarantee of diversion from custody.

The people with whom the Cleveland Diversion Team were involved presented with a complex set of needs and problems which did not easily fit into one category of

accommodation or another within the current structure of provision. Freeman and Roesch (1989) argued:

> "The mentally ill ex-offender presents with a complex set of needs and problems, ranging from basic requirements for food, shelter and employment, to the need for mental health treatment. Responsibility for the provision of such a range of services seldom falls to a single agency, and the mentally ill are poorly equipped to untangle the skein of disparate and at times competitive jurisdictions. Too often they fall between the cracks of the social net." (p.114)

Work undertaken in the inner London area of Hammersmith by the Revolving Doors Agency (1993) described the difficulties that the mentally ill had in coping with the housing allocation procedures and the corresponding problems experienced by professionals trying to fit 'hard to place' tenants into the over-stretched social housing sector. Lack of long term support once a tenancy had been achieved was one factor contributing to frequent breakdowns resulting form rent arrears and neighbour disputes.

In response to these problems the Reed Committee (1992) had concluded that:

> "Services for homeless mentally disordered offenders need to be enhanced. There must be speedy access to accommodation and effective assessment arrangements...People with mental health problems or learning disabilities should, wherever possible, be able to live in ordinary housing with support services. However there may also be a need for specialised accommodation. It is important that a wide variety of accommodation is made available to meet a range of needs...Staff working with mentally disordered offenders

> in a range of agencies should be aware of possible accommodation routes in the area. A local or national database listing beds available in a wide range of accommodation would be helpful." (p.89)

A number of issues arose from these Reed Committee recommendations including the need for:

- an evaluation of local services willing/able to provide accommodation to mentally disordered offenders, the admission criteria and speed of access to them;
- an assessment of the local accommodation needs of mentally disordered offenders and identification of gaps in existing service provision;
- an assessment of problems leading to tenancy breakdown and what support if available could minimise this;
- consideration of the creation and maintenance of a local directory/database detailing the range of available accommodation and a specialist worker identified whose responsibilities include mentally disordered offender accommodation.

Cleveland had begun to explore a number of these accommodation issues beginning with the first of the Reed Committee recommendations: an evaluation of local services willing/able to provide access to them (Dyer, 1996c), followed by an examination of local strategies for accommodation to mentally disordered offenders, the admission criteria and speed of the provision of a full range of accommodation types (Dyer, 1996c).

To recap, whereas the diversion team did not become further involved with those in Career Four with the result that everyone was re-referred to them, they did become

involved with an otherwise similar group of people in Career Three, identifying needs such as accommodation, and as a consequence no-one was re-referred. The important question is not should these people have been referred to the diversion team in the first place because unlike those in Careers One and Two, they did present with a significant psychiatric history. It could be argued that the people in Careers Three and Four had been subject to the same medicalisation process as the people in Careers One and Two just a little sooner and before they were first referred to the diversion team. Whilst this may be the case, it is clear that Careers One and Two exhibit little if any impact resulting from referral to the diversion team compared with the people in Career Three who have their needs identified and those in Career Four who are repeatedly re-referred. The question instead is should the diversion team have become similarly involved with the people in Career Four as they had with those in Career Three whereby they might not have become part of a revolving door, being re-referred to the team time and again?

Career Five is the least controversial, representing the small number of people referred to the diversion team for information or advice only, and therefore for whom little if any information was recorded. They appear to have neither a psychiatric or a criminal career but that is because this information was not collected by the diversion team. No-one in this group was re-referred to the team. The provision of information only was considered an appropriate function of the team from the outset.

Based on the identification of these five careers the following section asks 'how should the Cleveland Diversion Team specifically, and the policy of diversion for mentally disordered offenders generally, develop in the future?'

8.2. Future Developments

An obvious first comment on what future developments the Cleveland Diversion Team should consider based on the research findings described here, involves re-focusing on who the service should be usefully and appropriately aimed at and what that service should involve, with what effect.

The Cleveland Diversion Team had adopted a broad definition of their client group and offered a wide ranging service from arrest to sentence. This meant that referrals did not necessarily fit neatly with the original diversion policy whose aim was to divert individuals away from the criminal justice system and custody, and into a psychiatric hospital. Many of those referred to the diversion team did not have a severe mental disorder – a significant proportion were 'misusing drugs and/or alcohol' or had a 'mental health problem' – and did not require admission to hospital. Despite the fact that many were committing significant offences (violence against the person, burglary, theft etc) they were not at risk of a custodial sentence. A discontinuation of criminal proceedings was also not appropriate for most, being neither ill enough and committing fairly serious offences.

The two careers identified which are the most important and relevant to the service provided by the Cleveland Diversion Team are Careers Three and Four. Career Three involved people who had both a psychiatric and criminal history, were referred to the team, assessed, had their health and social care needs identified and met, and were not re-referred to the diversion team again. This career is akin to an 'ideal type' – a model of what it was hoped a typical referral would look like. In comparison, Career Four referrals, who also had a psychiatric and criminal history, were not assessed by the diversion team and as a consequence had no health and social care needs identified and were all re-referred to the team again at a later date. This 'revolving door' outcome is not one which could be considered positive or

beneficial. Indeed in the case of these people, the Cleveland Diversion Team could be charged with maintaining them as 'mentally disordered offenders'. To avoid this outcome the simplest measure might be that everyone referred with a psychiatric and criminal history are assessed by the team and their needs identified and met, regardless of the nature of their offending or the existence of current care packages.

Arguments about appropriate referrals i.e. who should be referred to the Cleveland Diversion Team in the first place, needs to be weighed against the concerns voiced in the literature about the potential impact of stigmatisation. If, as seems to be the case with Careers One and Two identified by this research, referral to the diversion team has no significant beneficial impact on the careers of those involved then what can be the justification in accepting them as clients of this psychiatric service? The people involved had no psychiatric history, and whilst they were assessed by the team, had vague disorders identified but importantly no health or social care needs. The benefit of referral to the diversion team for these people is not obvious however the potential detriments are real, in the form of stigmatisation and discrimination.

Equally in terms of cost benefits, if the Cleveland Diversion Team no longer accepted referrals for people who had no history of psychiatric problems and no clear current significant symptoms, they could ensure that everyone referred with a history and/or significant symptoms received the inputs required and were therefore not re-referred. In other words making the best, or better use of existing resources.

Originally the Cleveland Diversion Team adopted a broad definition for referrals in order to ensure that they offered a service to as wide a range of people as possible. Whilst the sentiment may have been admirable it may no longer be appropriate as not everyone referred seems to have needed or benefited from their service. The results of this research based evaluation of the Cleveland Diversion Team suggests

the need to re-focus their efforts on a smaller, better defined range of people who will benefit from their input.

In terms of the generalisabilty of these findings, it is clear that a second diversion team with a different operational policy may not have identified Career Four. If, as is the practise of various other diversion schemes across the country, everyone identified is subsequently assessed, then all relevant health and social care needs should be identified. If the identification of these needs is key to breaking the cycle of re-offending and/or re-referral for the category of people experiencing Career Four, then Career Four will not emerge as a part of a career typology, or at least not in the same form as that experienced by those referred to the Cleveland Diversion Team. Therefore the findings and recommendations presented here should only be generalised to other localities which operate a similar service under similar circumstances. They can only be generalised to a multiagency team which reacts in one of two ways (basically assessment or no assessment) to referrals from a variety of agencies which fall within a broad definition of 'mentally disordered offender'.

This kind of limited generalisability, taking into account Realistic Evaluation's emphasis on context and Complexity Theory's reference to 'sensitivity to initial conditions', has much in common with Williams' (2000) description of *moderatum* generalisations as follows:

> "in their simplest form [*moderatum* generalisations] are the basis of inductive reasoning in what Schutz (1972) called 'the lifeworld'; they are the generalisations of everyday life" (p.215)

Williams maintains that the basis for these everyday generalisations is the cultural consistency which makes social life possible. In other words we can generalise from one situation to another because of the prior existence of the shared world of

meaning or the baseline practices which are intersubjective and which form the most general level of shared meaning. This idea that social reality is more robust than suggested by Chaos Theory's reference to 'extreme sensitivity to initial conditions' permits the albeit moderate generalisations I am suggesting here.

8.3. The Analysis of Large and Complex Data Sets

My search for an alternative methodology was informed by an early interest in the concept of 'deviant careers' – an idea which implied:

- time – a career unfolds over time as part of a life course,
- change – a career consists of key periods when an act or decision causes a change of direction down one of a number of alternative paths,
- prediction – if a career could be mapped or charted, and if it could be shown that this career was shared by others, then it suggested the possibility of prediction.

Cause and effect – but not simple cause, it had always seemed clear that what impacted upon people's lives causing them to unfold or develop in a particular way was complex rather than singular or linear. Whilst it was never my intention to join others and indulge in a superficial and ignorant dismissal of the quantitative possibilities of sociology, I had to agree with Byrne (1998) that much of what was going on in social statistics at the time was reductionist, positivist and linear and therefore unable to deal with the complex or non-linear factors or transformations with which I was interested. What I needed to do was to think about the tools that had been developed for the analysis of data about the real world in complex terms.

Complexity theory provided the framework within which to situate this understanding of what the world is like and to reformulate the tools through which I could know it. But not only complexity theory, Realism (c.f. Pawson and Tilley

1998) was the position from which I initially started, each theory in the end complimenting one another in important ways. As Reed and Harvey (1992) argued it is by combining 'complexity' as a scientific ontology and critical realism as a philosophical ontology that we can understand the social world and use our understanding to act within the social world. This complex realist approach meant that I could and in fact needed to:

- describe the system i.e. institutional careers of those referred to the Cleveland Diversion Team, as a whole rather than in terms of their parts. In other words it was not enough to analyse the individual variables describing those referred and subsequent diversion team activity. Instead I needed to explore all of the information available to me which described context and action, in order to identify emergent patterns;
- plot the way the system or careers changed - systems were temporal and dynamic. Careers existed in time and they changed through time;
- concentrate on the identification of changes of kind - in phase shifts in which the systems or careers underwent radical transformations. Referral to the Cleveland Diversion Team indicated a multifurcation point in the careers of those referred. Depending on the interaction of causal factors, these people would be directed down one of a number of alternative career paths each leading to a different type of outcome. Almost without realising it this approach was describing what impact the Cleveland Diversion Team had on the people referred to them, and therefore what difference the policy of diversion for mentally disordered offenders made to the institutional careers of those concerned. In other words it was evident that such a technique would provide a sound basis for an evaluation of the Cleveland Diversion Team and the policy it aimed to implement.

Whilst complex realism provided the framework, cluster analysis provided the means by which I was able to achieve the results I desired. The central principle of numerical taxonomy is simple: to establish classifications which minimize within group variation among cases in the categories and to maximize between group variation i.e. variation among the categories as such. It is worth contrasting this approach with analysis of variance - a variable centred technique which deals with variation. In clustering the focus is on the cases. In analysis of variance the focus is on the variables with the actual category structure being determined by that of one or two of the variables themselves. Clustering techniques are case centred and case driven. I will pick up the importance of this idea of a case centred approach later in this chapter.

The techniques of numerical taxonomy are not new but have been generally under used in the social sciences, for a variety of reasons for this. As Byrne (2001, awaiting publication) suggests, one of the most important is that frequentist statisticians are deeply uneasy about clustering methods because in general they are not constructed around a central concern with inference from samples to universes. At one level this is a valid concern. There is no one set of categories which can be generated by clustering or neural net classification procedures[36]. Differences in choices about which variate traces are to be used in classification, about which clustering method (algorithm) is to be used, and in particular in the composition of the data set, can all generate somewhat different classifications. What look like meaningful classifications can be generated from random data. Plainly frequentist statisticians have a point when they worry about whether a different sample from the same population would produce a different classification and deplore the absence of anything resembling tests of significance in the most commonly used clustering procedures.

[36] This idea is discussed in more detail in Chapter 6. Methodology.

However, meaningful emergent classifications have one important quality which reflects the character of complex systems from which they are generated - they are robust. Basically if there is a real underlying taxonomy to be found then different clustering methods will produce essentially similar classification account when applied to the same data set. Validity is established by process rather than by inference. Of course another important process in the establishing of validity is triangulation of the account derived from measured data with that derived from other processes of social investigation. The importance of comparative investigation and triangulation will be discussed further later in this chapter.

Everitt pointed out that:

> ' ... any classification is a division of the objects or individual into groups based on a set of rules - it is neither true nor false (unlike say a theory) and should be judged largely on the usefulness of the results.' (1993, p.4)

As Byrne rightly suggests we might well consider that the usefulness of results is to a considerable extent a function of the degree of correspondence of our classification with real divisions in the world - a realist qualification of Everitt's pragmatism - but the usefulness of my results certainly mattered to me.

Once identified, I could describe my cluster results both in terms of the variate traces which were selected as clustering principles and in terms of all other variate traces for which I had measurements. This is rather important in relation to exploring possible 'control parameter sets' - starting to see if I could say something about the character of causal mechanisms.

Whilst cluster construction was important, the real art lay in the interpretation of the results. Everitt argued:

> 'Interpreting the results from a cluster algorithm is often dominated by personal intuition and insight. If the investigator can make sense of the clusters produced, the cluster analysis is frequently deemed to have been a success.' (1993, p.142)

It was important that the outcome of my cluster analysis had resulted in the identification of five careers which, given knowledge of the Cleveland Diversion Team, were plausible. In other words the findings did not offend the framework of facts (Williams 2000). This procedure, where findings are more likely to be right than wrong, is known as inference to the best explanation (Couvalis, 1997; Williams 2000).

He then goes on to say: 'This may however, be unsatisfactory ...' (ibid.) and discusses some procedures which have been suggested to establish whether the clusters observed are the consequence of any real structure in the data, which is supposed to correspond to reality, or are rather merely products of the application of the computing algorithm to that particular set of data. In terms of moving on my research this would be an important next stage. Two practical approaches would be the partitioning of the data set (split in two randomly and clustered again to see if the same sets of clusters emerge) and the deletion of variables. The deletion of variables would also be a useful method to employ for exploring control parameters or causal mechanisms.

Two important issues have emerged from this thesis, the use of a complex realist framework and the application of a numerical taxonomic method. The first, which has already been mentioned, involves amongst other things, the move to a case

centred approach and away from the variable as the focus of analysis, and the second concerns the implications of such an approach for evaluation.

8.3.1 A Case Centred Approach

The technique which Ragin (1987) called 'Qualitative Comparative Analysis' (QCA) and Huber and Garcia (1991) called 'Qualitative Configuration Analysis' offers an interesting and very relevant approach to the analysis of patterns of causation using qualitative data. Fielding and Lee (1998) suggest the following example:

Suppose we are interested in worker resistance to plant closures in manufacturing industry. Detailed examination of qualitative case materials such as documents, media reports and interviews might suggest that resistance was linked to the availability of various institutional supports e.g. (a) the early involvement of national trade union officials following the announcement of closure (ETU), (b) a plant location within a monoindustrial region (MIN), (c) high local support for parties of the left (LPS), (d) the availability of funds for regional development (RDF). Each row of the table (see Table 8.1) represents a particular case. Data requires input in the form of dichotomous variables - binary attributes in which a condition is absent or present. For example, the last column of the row shows the input variable, worker resistance where 1 equals resistance occurred and 0 indicates the absence of resistance.

Table 8.1 : Worker resistance to plant closures (hypothetical data) (Fielding and Lee, p.158)

Case	ETU	MIN	LPS	RDF	Resistance
A	1	1	1	0	1
B	1	0	1	0	1
C	0	1	1	1	0
...					
n	0	0	1	0	0

This Table looks remarkably similar (though somewhat smaller) to the binary data matrix I constructed which described each individual referred to the Cleveland Diversion Team. Unlike other quantitative research where the analytic focus is on the variables displayed in the columns of the table, it is the rows in the table which are important in QCA and my own research. What is being examined for each row is the configuration of causes associated with the presence or absence of the outcome for that case. Ragin (1994) points out that focusing on configurations of conditions and outcomes has a number of implications. First it allows for the possibility that different combinations of conditions can generate the same general outcome. Second, contradictory patterns of causation can be accommodated, i.e. in combination with some variables a particular condition might generate a positive outcome and with some other variables a negative one. Third it is possible to eliminate irrelevant causes.

The aim of the QCA technique involves the simplification of the 'truth table' or binary data matrix, above Table 8.1 (compare this with the discussion in Chapter 6. Methodology, that one of the main aims of cluster analysis is data reduction). According to Fielding and Lee the method for simplifying configurations is based on a well established procedure known as the Quine-McCluskey algorithm. Each configuration or row or case is systematically compared with all other

configurations. The aim of this procedure is to simplify the data matrix by removing configurations through combination. The rule for doing this is as follows:

> "If two rows of a truth table [the data matrix] differ on only one causal condition yet result in the same outcome, then the causal condition that distinguishes the rows can be considered irrelevant and can be removed to create a simpler combination of causal conditions (a simpler term). (Ragin, 1994 p.125)

So for example, if we consider the configurations in cases A and B in Table 8.1, which can be presented as follows:

CASE A: ETH·MIN·LPS·rdf = RESISTANCE

CASE B: ETH·min·LPS·rdf = RESISTANCE

where upper-case letters indicate the presence of a condition and lower case that it is absent. The dot [·] between the terms signifies an AND relation (as in Boolean algebra).

To summarise, in Case A, worker resistance occurs in the presence of early involvement of national trade union officials, where the plant is located in a monoindustrial region, where there is local support for a left party and where regional development funds are unavailable. In Case B, worker resistance occurs in the presence of early involvement of national trade union officials and where there is local support for a left party and where the plant is not located in a monoindustrial region and where regional development funds are unavailable. Therefore resistance occurs when the plant is located in a monoindustrial region in one case but not in the other. Consequently, it was not necessary for a plant to be located in a monoindustrial region for resistance to occur. As a result QCA combines the two

configurations by excluding location in a monoindustrial region as a condition as follows:

$$ETH \cdot LPS \cdot rdf = RESISTANCE$$

Using this procedure, as many rows of the table would be combined as possible.

The ideas behind the application of QCA are fundamentally similar to those of cluster analysis:

- each concentrates on cases rather than variables,
- each seeks to simplify complex data sets,
- each searches for complex cause,
- each allows for the fact that different causal combinations can produce the same outcome and the same combinations can at times produce different outcomes.

QCA shares a number of strengths with cluster techniques. Ragin (1987) stresses that QCA is a holistic strategy designed to produce complex yet intelligible formulations. In other words, QCA maximises causal complexity (Coverdill et al, 1994), as does cluster analysis, by recognising the conjunctural and context – specific character of causation. Both procedures are inductive, proceeding in a methodological stepwise manner, reducing the likelihood that 'inconvenient' cases will be dropped from the analysis or data forced into inappropriate theoretical moulds.

I have discussed QCA in detail here because the technique seems to employ the same case based approach as my method of time ordered clustering and to have the same objective of trying to elucidate the complex and continent causal pathways

which lead to outcomes. In particular, in common with my approach, it recognizes that we are not dealing with specific aetiologies - single and invariant causes which always generate particular outcomes - but that the same outcome may be the product of different causal paths and that outcomes are always complex and contingent. What is interesting for future consideration is the way the convergence of the case based quantitative and qualitative techniques, both being computer based, seems to indicate a breaking down of boundaries between the quantitative and qualitative programmes. Both are of course inherently concerned with elucidating causes and do reduce by coding but they are not reductionist in that they maintain the 'integrity' of the cases examined.

8.3.2 Evaluation

The second important issue to consider is what implications a complex realist approach supported in this thesis has for the philosophy and practise of programme evaluation generally? Whilst there is no one approach to the practise of evaluation, the methods which together constitute the experimental tradition have claimed a superior position based on its 'scientific' style. Summarising this approach briefly brief, one of two matched groups is 'treated' whilst the other is not. Both groups are measured before and after the treatment, and compared for changes. The basis of this approach is a theory of causation founded on a successionist understanding of causality. In short causation is unobservable and inferences can only be made on the basis of observational data. The key is to establish a controlled sequence of observations which differentiate the causal relationship from the spurious association. Therefore, if the two groups are identical to begin with, the only difference lies in the application of the initiative i.e. any difference in behavioural outcomes between the groups is accounted for in terms of the action of the 'treatment'.

If this approach had been applied to the evaluation of the impact of the Cleveland Diversion Team it would have been in the form of a quasi-experimental approach i.e. beginning from an assumption that people had been selected for referral to the service rather than randomly assigned to the team or a control group. The psychiatric and criminal nature of people would be analysed pre-referral and then again following discharge. Any change in behaviour, in particular a reduction in the criminality of those involved or a reduction in their contacts with the criminal justice system, would be accounted for in terms of referral to the diversion team. This being the case, the policy of custody diversion for mentally disordered offenders would be described as a success.

However there are a number of problems with this method which are emphasised by the complex realist approach I adopted in my research. These problems are described by Pawson and Tilley (1997) as follows:

- the experimental approach ignores the liabilities and powers of the subjects involved in the programme. Programmes do not produce outcomes but rather it is people co-operating and choosing to make them work. Programmes offer chances which may or may not be triggered. This it seems reflects the fundamental argument about the nature of cause which runs through this thesis. On the one hand, constant conjunction, where the cause, here the social programme for example the Cleveland Diversion Team, always leads to the effect: a+b=c, where 'c' is the outcome identified, for example a reduction in criminality/contact with the criminal justice system. On the other hand, 'transformation' (Pawson ad Tilley p.33) or complex contingent causation where whether the cause (the Cleveland Diversion Team programme), will lead to the effect (reduction in criminality/contact with the criminal justice system), is dependant upon a number of interactions including what those involved

understand is going on, what meanings they attach to it and what actions they take in accordance with their own purposes and meanings.

- the experimental approach ignores the differences between subjects – a programme may be salient for one person and not another. Programmes are made up of a series of different pathways, consisting of variety of modes of engagement with a course and a whole structure of opportunities offered by a course. Differently resourced subjects will make constrained choices amongst the range of opportunities provided. This reflects an approach to mapping trajectories, pathways or careers, using a theory of change suggested by complexity theory, adopted by the research carried out in this thesis. Byrne (1998) describes what happens at the crucial transformation points where the system seems to have two (bifurcation) or more (multifurcation) possible trajectories into which it can move, whereby it 'chooses' between them on the basis of very small differences in the values of controlling parameters at the point of change.
- the experimental approach reduces the programme to a set of mechanical operations – it is method driven rather than hypothesis driven, reducing everything to an input or an output. Experimental positivism insists that we can explain complex things in terms of simple things and simple things alone. It denies emergence. It absolutely cannot accept that wholes can be greater than the sum of their parts. This takes us back to a complexity account which runs throughout this thesis. The essentials of complexity emphasises anti-reductionism as a general account. Complex systems are to be understood not in terms of their parts - the analytical error, nor in terms of their wholes - the reverse holistic error, but in terms of parts, interactions among parts, the whole, and the interaction of the whole with the parts. The word 'interaction' is vitally important. In reality things work together and what they produce is not

predictable from the inherent character of the things themselves. Emergent properties contradict reductionism.

- the experimental approach ignores contextual conditions. Pawson and Tilley's (1997) fourth new rule of evaluation is 'Contexts':

> "Evaluators need to understand the contexts within which problem mechanisms are activated and in which programme mechanisms can be successfully fired." (p.216)

They argue that the operation of mechanisms is always contingent on context; subjects will only act upon the resources and choices offered by a programme if they are in conducive settings. Context refers to the spatial, temporal and institutional locations of social situations which include the norms, values and interrelationships found in them. A key act is to identify for whom and in what circumstances a social programme works. The implications of this localism or context as expressed mean that findings cannot be generalised beyond the exact conditions under they were identified. In other words, no covering law is possible. In this frame of reference experiments merely describe local and unique conjunctions. Hypotheses cannot be somehow summed into a general overarching account. Although this position should not be mistaken for complete relativism because despite the fact that there are no universals we can still know. We can know by modelling complex systems, in the same way that the research in this thesis modelled the institutional careers of the various types of people referred to the Cleveland Diversion Team. Such local findings/models can then be generalised to other locations with the same or similar context.

The problems with a traditional experimental approach to evaluation are the problems associated with a positivist, reductionist, linear understanding of how the

world works. Critical realism and complexity theory provided me with an alternative approach which allowed me to explore the complex, non-linear process involved in the psychiatric and criminal careers of mentally disordered offenders and the activities of the Cleveland Diversion Team, without the need to pay a grudging recognition to the interaction terms involved by forcing them into a linear equation or building a separate model to explain them away. The model offered by Pawson and Tilley (Figure 2.7, p.54) together with the ideas provided by Complexity Theory succeeded in enabling me to carry out this research as planned.

8.4. Where Can We Go Next?

There are a number of steps which would clearly form part of the follow up to the research already undertaken here. These include undertaking additional analysis to identify which of the many variables used in the initial cluster analysis and later when mapping the institutional careers of those referred, cause the patterns uncovered. In addition, it would be important to present the research findings to Cleveland Diversion Team directly in order to further test the robustness of the mentally disordered offender careers identified. This could be done in two ways. First the team members could be approached to give their informed opinion of the outcomes, using their experience and examples of cases which might confirm or undermine results. Second the cluster outcomes/careers could be tested against the additional four years of data the Cleveland Diversion Team have now accumulated in their database.

In addition to these more obvious next steps, there are a growing number of exiting new technologies which could be used to further explore the approach to and outcomes of this research.

Another way to further explore and test the outcomes of my research would be to use the power of modern computers and the software developments to produce a virtual model of the institutional careers of those referred to the Cleveland Diversion Team. There are two possible methods which might yield interesting results: simulation and neural networks.

8.4.1 Simulation

Simulation has two aims: as a tool of scientific understanding, the purpose of which is to produce models which assist us in scientific explanation; and as a tool for prediction, not in the sense of using predictions to validate a scientific theory, but rather in a pragmatic 'engineering' fashion so that all that matters is that the predictions are accurate without us having to know why they are accurate. Gilbert and Troitzsch (1999 p.17) consider that in fact all simulations have to be adequate both as aids to explanation and as devices for prediction.

There are numerous accounts of the general process of simulation but all follow much the same pattern. Troitzsch (1998) specifies six steps thus:

1. Identification of some part of reality as a discrete real system composed of different real elements. This system is generally called 'the target'.
2. Specification of causal links between the elements - this has much in common with the kind of specification which underpins the representation of a linear causal model as a flowgraph but here we can anticipate and cope with interactions.
3. Identification of the properties of the components of the model. In the most advanced forms of simulation - agent based simulation - these components are in a sense themselves systems with specific capacities to act.

4. Specification of the 'laws' governing the system - that is description of the form of relationships among elements in the system. Note these 'laws' are inherently local to the system.
5. Combination of the laws into a fully constituted model describing the system as a whole.
6. Running the model as a simulation.

8.4.2 Neural Networks

Neural networks offer us two things: a validating tool for our large scale stamp collecting i.e. a method of classification, enabling us to explore large amounts of quantitative information in the search for patterns; and a toolset for making predictions. The essence of the neural net approach is that a network is trained either to classify or to generate predictions on the basis of an inductive engagement with a data set where the classification or prediction of results is already known. Typically a neural net has three or more layers of nodes. There is an input layer which receives data and an output layer which renders results. Between these the hidden layers process by adjusting connection weights. The algorithms which drive virtual neural nets are not instructions about what to do to data. Rather they are instructions about how to learn from data. Neural nets are data management tools rather than explanatory models.

There is a variant of neural network approaches, Kohonen architecture (cf Garson 1998, Liebrand, Nowak and Hegselmann 1998), in which outputs are not specified in training. The network can be regarded as 'unsupervised' and the output is an emergent product of its perception and cognition. Kohonen approaches have been used in classification procedures although this approach requires that the number of classes be specified in advance. I could certainly combine my cluster analysis with

Kohonen approaches, as a mode of processual validation. If the two approaches yielded similar classifications, then I might think I hade found something real.

8.5. Summary

In this thesis I have attempted to use the technique cluster analysis within a Complex Realist framework to identify the careers of mentally disordered offenders and explore the impact of the policy of custody diversion. This methodology solved the problems posed by the complex nature of the social phenomenon under enquiry, in particular how to relate original differentiation in cases referred to the Cleveland Diversion Team to differentiation in outcomes as mediated through differentiation in the ways the team processed them.

I have demonstrated that the approach works by identifying five separate, detailed criminal and psychiatric career types. Not only does it work but it also produces interesting results. Half of the careers identified supported the introduction of the policy of diversion by describing a process of criminalisation and the other half challenged the premise by describing a process of medicalisation. The results also have practical significance. For example Career Four represents a 'revolving door' outcome, where everyone was re-referred to the team. Future developments might avoid this outcome simply by determining that everyone with a psychiatric and criminal history are assessed and their needs identified and met, regardless of the nature of their offending or the existence of current care packages.

Finally, this approach could have promising applications elsewhere, in other research which involves social processes including for example: the exploration of education programmes; the outcomes of child abuse enquiries; the impact of crime control policies, and so on.

APPENDIX 1

The Cleveland Diversion Team Documentation

CLEVELAND CUSTODY DIVERSION TEAM

FOR MENTALLY DISORDERED OFFENDERS

Guidelines overleaf

REFERRAL FORM

Ref. method
Ref. status

Client Details

Date _____

Full Name | AKA.

Address

Tel. No.

Gender | male | female

Date of Birth | age

Next of Kin

Tel. No.

Ethnic Origin | Solicitor

Current Alleged Offences

Presenting Behaviour/
Diagnosis (if known)

GP Name & Address

Referral Details

Name of Referrer | address

Agency | tel. no.

Reasons for Referral/
and Additional
Information

Currently on CPA | YES/NO (delete) | If Yes, indicate | Full | Minimal

Key Worker _____ Agency _____

GUIDELINES

Ethnic Origin:

White Great Britain
White European
Irish (North/South)
Black Caribbean
Black African
Black Other (specify)
Indian
Pakistani
Bangladeshi
Chinese
Asian Other (specify)
Mixed Race
Other (specify)

Additional Information

Include:

Any current contacts with statutory/voluntary agencies
Current concerns
Urgency of referral

Official Use Only

Date Received:

Received By:

Actioned By: Date:

Action Taken:

Discharge Date: Signature:

Summary of Outcome:

CLEVELAND CUSTODY DIVERSION TEAM

FOR MENTALLY DISORDERED OFFENDERS

Caution Advised
Schedule 1

INITIAL ASSESSMENT

Assessor Name 1: _____ Date: _____ Time: _____
Assessor Name 2: _____
Location: _____ Client Status: _____

CLIENT DETAILS

Remand Status: _____

Name
AKA.

Address
Tel. No.

Accommodation Type

Gender Male Female

Date of Birth Age

Next of Kin
Relationship:
Tel. No.

Ethnicity Country of Birth

Locality of Origin Religion

Marital status No. Dependants

Employment Status Occupation

Family / Social Support

Physical Disability / Illness

Referral Details

Referrer Name

Address

Agency

Tel. No.

OFFENCES

Preconvictions:

Date	Offence	Court	Result

Current Alleged Offence(s):

Date	Description of Current Offence(s)	Severity

Proposed Charge(s)

Official Charge(s)

Current Contacts

G.P.		Social Worker	
Probation Officer		Psychiatrist	
CPN		Psychologist	
Other		Solicitor	

Summary of Contacts

Currently on CPA YES/NO (delete) If Yes indicate Full | Minimal

Key Worker _____ Agency _____

MENTAL HEALTH ASSESSMENT

Psychiatric History

Date	Episode Type	Provider/Service	Length	Diagnosis

Current Evidence in Rank Order:

Mental Illness		Mental Health Problem	
Personality Disorder		Other	
Learning Disability		No Evidence	
Drug/Alcohol			

Symptoms

Primary Diagnosis (if known) _____

Secondary Diagnosis (if known) _____

Current medication

Complying With Medication: Yes ☐ No ☐ N/A ☐

History of Harm to Self

History of Harm to Others

Current Evidence of Risk:

Probability of Harm:

to self;	none		mild		moderate		severe	
to others;	none		mild		moderate		severe	

Clients Perception of Support Required

Other Relevant Information

Consent to Share Information: Yes ☐ No ☐

Signature 1 _____ Date _____

Signature 2 _____ Date _____

CLEVELAND CUSTODY DIVERSION TEAM

FOR MENTALLY DISORDERED OFFENDERS

Referral Outcomes

Name

DOB

Team Reports:

Date Requested	Date Provided	Author	Recipient	Outcome

Other Reports (PSR, Psychiatric, Psychological etc):

Date Requested	Date Provided	Report Type	Author	Court	Outcome

Court Appearances:

Date	Court	Offence	Outcome

Summary Of Care Package:

Date	Assessed Need	Actioned By	Referred To	Agency	Service Provided	Service Deficit

Care Programme Approach

Current to Psychiatric Services:

Key Worker	Agency	CPA Category	Date Contacted	Information Given

Not Current to Psychiatric Services:

CPA1 Form Completed? Yes/No

CPA Category Initiated	CDT Key Worker	Review Date	Key Worker/Agency Transferred to	Date

Changes to Relevant Information:

Discharge Statement:

Intensity of Support Provided:

Total Caseload Weighting ☐

Classification

low	
medium	
high	

Caseholder 1:

Name _____ Signature _____ Date _____

Caseholder 2:

Name _____ Signature _____ Date _____

APPENDIX 2

The 'Poincaré Map'

spans 13 pages

Psychiatric History							Previous Convictions							Clients
RecordID	ClientID	Date	Episode Type	Provider Service	Diagnosis	Length	RecordID	ClientID	Court Date	Court	Charge	Offence Category	Result	RecordID

This data scroll represents the minimum size of matrix which would be produced if the eight database domains were merged to create one flat file. This is the minimum size as it relies on each client having only one record in each domain (ie. one psychiatric history episode, one previous conviction, one referral, one Diversion Team report, one other report and one need identified in the care package). Consequently, for those individuals who have multiple entries in any of these domains the matrix would be increased again by the number of columns in that domain (eg. the individual with 170 previous convictions would increase the matrix '7 columns times 170 episodes' (equal to 1190 extra columns); those individuals who have been referred to the team six times would increase the matrix '72 columns times 6 episodes' (equal to 432 extra columns).

Surname	Forename	Address	Sex	DoB	Age	Origin	Next Of Kin	Ethnic	Accomodation	Marital Status	Emp Status	Occupation	Social Class	Number Dependants

								Referral		
Religion	Physical Disabilities	Family Support	Additional Information	Next Of Kin Details	Caution Advised	Schedule1	Date	RecordID	ClientID	Referrer Name

Referral Reason	Referral Method	Agency	Address	Telephone	Resp Officer1	Resp Officer2	Additional Info	Current Date	Referral Receipt Date	Date Actioned	Elapsed Time

Client Aware?	Discharge Date	Duration	Intensity of Support	Rank Mental Illness	Rank Learing Disability	Rank Personality Disorder	Rank Drugs/Alcohol

Rank Mental Health Problems	Rank Other	Rank None	Symptoms	Evidence Of Risk	Current Medication	Taking Medication?	Clients Perception Of Support Required

Probability Harm to Self	Probability Harm to Others	Location Of Assess	Current CJS Status	Consent To Share Info	Diag 1	Diag 2	History Of Harm	Assessor Name1

Assessor Name2	Assessment Date	Remand Status	GP	Probation Officer	CPN	Solicitor	Social Worker	Psychiatrist	Psychologist	Other	ElaspeTime	GP Status

Solicitor Status	Psychiatrist Status	Probation Status	Other Status	CPN Status	Psychologist Status	GP LastContDate	Solicitor LastContDate	Psychiatrist LastContDate

Probation LastContDate	Social Worker LastContDate	Other LastContDate	CPN LastContDate	Psychologist LastContDate	Social Worker Status	CPA	Keyworker	Agency

Current Alleged Offence									Cleveland Diversion Team Reports			
DateLastContacted	RecordID	ReferralID	Court Date	Court	Charge	Offence Category	Severity	Result	RecordID	ReferralID	Date Requested	Date Provided

Other Reports

Elapsed Time	Report Author	Recipient	Outcome	RecordID	ReferralID	Date Requested	Date Provided	Elapsed Time	Report Type	Author	Court	Outcome

Care Package

RecordID	ReferralID	Date	Assessment Needs	Actioned By	Provider Referred To	Agency	Service Provided	Service Deficit

APPENDIX 3

Data Management and Manipulation Details

Data Management and Manipulation Details

The aim of this appendix is to describe the very complex nature of the data involved in this research and provide an indication of the many stages involved in converting it into a form suitable for the intended exploration.

Information produced (cf. Dale et al, 1988, p.17) and recorded by the Cleveland Diversion Team for the purposes of administration, was held within a dedicated database created within the computer software Access (ref. Access). This relational database was programmed specifically to meet the needs of the team and management[37] by a private software company (Orchard House Software Development). As the team developed over time, the database was refined in order to continue to meet needs and reflect practice[38].

I concluded that analysis of this data would require the export of the information into the computer software the Statistical Package for Social Scientists (ref. SPSS) because:

1. the Access software is not a statistics package and does not support statistical analysis beyond basic aggregation;

2. the Durham University Information Technology (IT) department provides technical support for SPSS;

[37] The needs of the team and of management clearly differ. The team required access to clinical and social information about current cases and previous referrals, lists of cases that required discussion at weekly clinical meetings, details required on forms distributed by their own organisations and measuring team members activity and up to date information to inform the regular teaching sessions they provided to other organisations. Management on the other hand required regular, collated information in order to evaluate the service provided.

[38] The database is designed to reflect processes as experienced by clients and the practice of the team. People often have a psychiatric and criminal history, they are referred to the team at a particular instance, things are done to them and later there is an outcome.

3. the statistics functions within the computer spreadsheet software Excel (ref. Excel), which at the time I was most familiar with, are not tested or supported to the same standard as SPSS.

It is not possible however to import data directly into SPSS from Access. Instead data was exported from the Access database into Excel (a simple process as this function was programmed into the original database to aid the analysis of data involved in the production of reports presented to the Cleveland Steering Group for Mentally Disordered Offenders). It is important to note that at this initial stage the data exported as eight separate spreadsheets[39] (data matrices formatted in rows and columns) within eight Excel workbooks. The relationship function operating within the Access relational database could not be maintained in either Excel or SPSS, although records could be linked visually between spreadsheets using the network of ID numbers.

From Excel the eight spreadsheets could be imported into SPSS. First, because the spreadsheets had been exported from Access into Excel, SPSS did not recognise them as Excel files. The solution was to save each as an Excel 4.0 worksheet. Next, within SPSS the 'open data' window allowed the option to specify 'file type' as 'Excel [*.xls]'. It was important also to specify the option 'read variable names' otherwise the variable names in the first row of each Excel table would not have been recognised as such by SPSS but rather included in the main body of the data.

Once in SPSS the data within the eight data matrices had to be ordered. Variable names[40] often needed to become more meaningful and the type of variable[41] defined

[39] Reflecting the eight forms within the database which reflect the eight domains of team activity and overall the process experienced by those referred to them.

[40] The identifier by which a variable is known in SPSS; this may be up to eight characters long (Campbell, 1997, p.195).

reviewed. Variable labels[42] had to be described and value labels[43] assigned. Whilst the majority of this data is nominal[44], variable lists required organising - category names clarified and in some instances categories merged in order to make the data more meaningful. However I was unable initially to recode the data (i.e. define the value labels manually) as this function had become unavailable (the command was inactive) perhaps due to the complex way in which the data had to be imported into SPSS. The solution eventually offered by the University's IT department involved the use of the SPSS automatic recode syntax command as follows:

```
AUTORECODE VARIABLES = sex
    /into sex2.
    Execute.
```

This command automatically recodes individual column variables (e.g. sex) into a second column (e.g. sex2). More detailed coding and merging could then be achieved manually using the 'define value labels' function which had become operational.

This period of data organisation and recoding involved the eight separate data matrices and approximately 138 variables. Consequently and somewhat frustratingly, four months from the outset I was able to produce a dataset code book describing each variable and its values.

The aim of the next stage of the data management exercise was to merge the eight separate data matrices into one flat file or data matrix[45] in order to analyse the relationship between variables held in different matrices. This aim, based upon the

[41] For example a string variable is a variable which takes character values and a numeric variable is a variable which takes number values (ibid., 1997, p.195).

[42] A descriptive text string which describes the meaning of a variable. (ibid., 1997, p.195).

[43] A descriptive text string which describes the meaning of a value for a variable. (ibid., 1997, p.195).

[44] Categorical variables whose values have no ordering, but merely give names to the categories for example, gender, marital status, offence type, diagnosis. (ibid., 1997, p.194).

[45] Where one case (individual client) will equal one row in the matrix.

advice of one supervisor, seemed at the time to make great sense. My only concern initially was that some people had been referred to the team on a number of different occasions, so that if all of the incumbent information produced for each referral were then merged together it would produce an incredibly huge matrix. This aside, however, the suggestion seemed straightforward:

1. First, merge data from the five matrices: referrals; alleged offence; CDT reports; other reports; and care package, into one matrix using the ID network so that one row equals one referral.

2. Next add a variable to the referral matrix which indicates whether each case is a first, second, third and so on, referral for each individual.

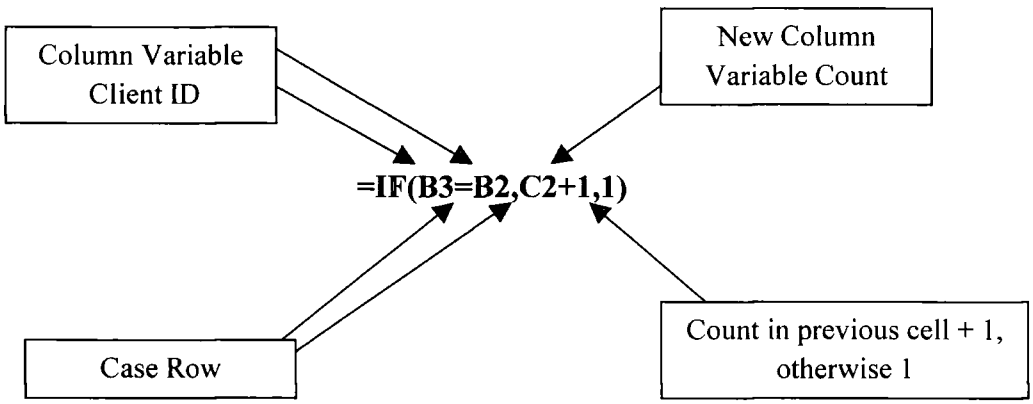
3. Then merge all first referrals into one matrix, all second referrals into another matrix and so on. For those individuals who did not have a second, third and so on referral, insert a blank row next to the record ID in the different referral matrices, with the code for missing data in each cell. I would then have a complete set of first referrals with all relevant data; a complete set of second referrals including all record IDs although some would only include missing data variables; a complete set of third, and so on.

4. Finally, all would be merged together into one matrix with the client, psychiatric history and pre-convictions matrices.

In order to achieve this, first I sorted the data matrices into ascending order using the relevant ID numbers. Cases with no relevant ID generated were deleted following consultation with the database programmer[46] as follows:

• Psychiatric history	client ID	11 deleted
• Pre-convictions	client ID	13 deleted
• Clients	record ID	--
• Referrals	client ID	35 deleted
• Alleged offence	referral ID	109 deleted
• CDT reports	referral ID	2 deleted
• Other reports	referral ID	--
• Care package	referral ID	2 deleted

Next, a variable indicating the number of the referral was generated within the software Excel (because it seemed more simple[47] and because I am more familiar with this software) as follows:



[46] The database has experienced a number of bugs and problems in the past which may explain the number of cases with no ID generated, as may the fact that for some time there was no delete function so that records inputted accidentally had to be ignored.

[47] The Information Technology Department suggested a separate table would have to be created in SPSS containing only the Client ID numbers from the referral matrix, then the following syntax used:

```
AGGREGATE
/OUTFILE='C:Awendy\AGGR.SAV'
/BREAK=clientid
/N_BREAK=N.

MATCH FILES
FILE*
/TABLE='C:Awendy\AGGR.SAV@
/by clientid. EXECUTE
```

This 'IF' statement declares 'if the value in cell B3 is equal to the value in cell B2, enter the value in cell C2 plus 1, otherwise enter 1'. This generated and inserted a column in the Excel referral spreadsheet indicating the referral count for each referral for each individual (i.e. 1,2 3 etc. up to the maximum of 6 referrals)[48]. I simply copied this column and pasted it into the referral matrix within SPSS.

After this however, the creation of one flat file or matrix began to cause major problems. Whilst the idea to merge all matrices seemed feasible in principle, in practice it became obvious that the reason the data was originally stored in a relational database was because it is complex and hierarchical. I had difficulty even trying to imagine what this data would look like as one matrix. My lack of clarity and conviction at this stage compounded the problems involved in explaining clearly the complexity of the data relationships (and therefore the problems involved in merging into one) to the people from whom I was seeking advice and assistance. Consequently for what seemed like forever (but was actually approximately four weeks) I examined possible solutions with a feeling of rising panic that the product of this endeavour - the one data matrix - would either be impossible to achieve, inaccurate, or if achieved, unmanageable.

Initially the University's IT department suggested it would be possible to merge the eight separate matrices within SPSS, although they had been unable to produce the exact commands required. They pointed out it may also involve 'changing the data'. They muted the Time Series (with Lag) would be the appropriate command to use, but suggested that they be allowed the time to examine the problem more closely. I was confused by this and remained convinced that I had been unable to explain the

[48] Five blank referral records were deleted: Client ID 70; 85; 125; 261; 358 (see footnote 10,p.3).

data and its structure clearly to them. I arranged to meet directly with an IT operator in order to satisfy myself that they had an understanding of the data issues. In the meantime, in order to clarify myself and to provide a demonstration tool for others, I devised a visual display (a 'scroll') representing the one merged matrix and including variables from the eight matrices.

During my meeting with IT I asked if SPSS was able to manage hierarchical data or query multiple tables - the idea being that if the software was able to act both as a database and statistics package then the problems involved with merging the eight data matrices would be solved. However IT confirmed that SPSS was unable to do this and they went on to point out none of the other statistics software supported by them was able to do this and neither were they aware of any other packages that could perform both tasks. IT suggested finally that it was probably not feasible to create one data matrix from the eight matrices. Instead it was suggested that the best way to analyse the data within SPSS was to temporarily combine matrices and analyse the relationships within these generated spreadsheets. The MATCH FILES command could be used to combine matrices (using the /KEEP subcommand to combine only the variables needed for the particular analyses).

Another suggestion offered by IT was to export the data back into Access via Excel (.xls) format files. However all of the variable labels I had created within SPSS would be lost. I would then have to decide which spreadsheets to analyse, combine them to create one spreadsheet, export back to SPSS via Excel, and carry out the statistical analyses there. IT recognised that I would be limited by the number of spreadsheets I could combine at any one time due to the complexity of the data. For example, it was suggested that I may need to merge the client spreadsheet and the previous convictions spreadsheet and analyse the relationships between them, and

then generate a second spreadsheet merging the client and psychiatric history spreadsheet, analyse the relationships here, and so on.

The SPSS Technical Support helpline[49] also confirmed that the SPSS software was not able to manage hierarchical data and agreed with the University IT department that one possible solution would be to combine the tables within Access (create an Access query table and save it as a .dbf file) before exporting to SPSS – all of my coding would again of course be lost. A second University IT advisor, discussing the SPSS Technical Support suggestion, advised that it may be just as simple to undertake the merging within SPSS and therefore retain the codes.

In the meantime, I had also e-mailed the Manchester University (MIDAS) resource for advice and to discuss the use of alternative software not supported by Durham University (for example, I had read briefly about the software 'Scientific Information Retrieval' (SIR)). However, they have not responded to my request for information.

My second supervisor, who had initially advised me regarding merging the eight matrices, did not however agree with the IT conclusions. He argued it was not impossible to generate a flat file from the data and that his original suggestion still seemed to be a description of a feasible procedure. In other words, I could match and merge the case descriptor files (client, psychiatric history and pre-convictions matrices) and first episode files (first referral and its related information: current alleged offence, CDT reports, other reports and care package matrices) with no difficulty given common IDs and the fact that everyone has a first episode. I would need to go through the referral matrix generating a variable which indicated the rank of the specific episode. I would then use SELECT IF to select all second episodes

[49] SPSS Technical Support, St. Andrews, Woking – 01483 719200

and write to a new file, all third episodes, and so on. These new files would be incomplete in terms of cases but again this could be resolved by editing, that is by going through each matrix and adding the ID and episode number variable and then the requisite number of blank lines. As long as I specified blank as a missing data code for the second, third and so on episode variables, then I would be able to merge all the files into a single flat file. I would have to give separate IDs to the variables in episodes after one but this could be easily done by adding a 2 for second episode variables, a 3 for third and so on[50].

In the meantime my first supervisor, having been subject to: descriptions of the conflicting advice I had received from the variety of sources; my understanding (and confusion) of the data complexities; and a demonstration of the 'scroll'; put me in touch with a Statistician. He suggested that if I hadn't spent four months re-coding and sorting the data in SPSS then running queries in Access in order to merge specific variables, as advised both by IT and the SPSS Technical Support, may have been the best data management solution. However, another possible way forward he suggested involved aggregating or summarising the data in order to simplify it before merging it to create a flat file. Some detail he went on would be lost, but he argued that if the aim was to produce a typology then this would have to be in the form of one row per client anyway. He argued that if he had been given the original data he would have undertaken as much of the analyses as he could on the separate data matrices and then merged things only as it became necessary.

Following this very useful meeting with the Statistician, I met again with my second supervisor. He pointed out, having looked again at the information and issues arising from it, that the data offers a representation of' real' dynamics and processes (and causal chain) impacting upon the individuals involved and of which they also

[50] In other words a repeat of the initial data management solution offered by him on pages 2-3.

impact. This we discussed does not necessarily support the notion of fact, objectivity or cause from a simple Positivist ontology/epistemology. Nor is Social Constructionism, as an ontological position, necessarily antagonistic to this Realist position. The ontological/epistemological basis for the discussion of this data will include: realism; social constructionism; and chaos/complexity. As a product of the administrative processes of the Cleveland Diversion Team, the data, when exported form the relational database, appears as eight separate data matrices or domains. Whilst this is a construct it is reflective of real processes, and is also a useful way to understand/analyse the domains of activity before relating them to other domains[51]. Consequently we decided upon two possible ways in which the data could be analysed from here:

1. classify cases using all available data from the eight domains (the merge solution);

2. classify within domains and then relate this to other domains (the Statistician's solution). For example:

    a. classify individuals within the clients matrix using cluster analysis;
    b. classify the psychiatric histories of people within the psychiatric history matrix using cluster analyses;
    c. within the referrals table transform the data in order that one row includes all of the referrals for an individual, then classify using cluster analysis.

The result of either of these analyses would be the creation of a cluster membership within each of the eight domains.

[51] We also discussed briefly the potential for a future project involving computer modelling/simulation.

I had already produced a Code Book (a description of variables) as described on page 2, now the next step was to produce a Case Book (a summary description of cases and the nature of the domains - for example, in the client domain how many clients are there?; in the psychiatric history table how many episodes are recorded and how many for each individual?). The Case Book would therefore detail each case or individual and what information is available for them[52].

Consequently the revised plan was rather than create one flat file, to typologise initially within domains and then relate these to one another. However, the first stage involving the production of a Case Book (summary description of information available for each individual), was not a straightforward task because of the 'one to many' data relations.

I began with the Psychiatric History, Pre-Convictions, and Referral domains as each relate directly to the Clients domain via a potentially 'many to one' relationship. Working within Microsoft Excel:

1. the data was sorted by client ID into ascending order;

2. a variable, 'count', was inserted using an 'IF' statement to identify the position of each episode, for example:

=IF(B3=B2,C2+1,1)

3. on a new worksheet another 'IF' statement was used to produce a maximum count of episodes in each domain for each client, for example:

[52] Along with this, my second supervisor and I also discussed the generation of new matrices merging information for all first referrals, another for second, and so on.

=IF(Referral! C4>Referral!C3,"" ,Referral!C3)

which states 'if the value in cell C4 is greater than the value in cell C3, enter a null value, otherwise enter the value in cell C3';

4. this column of maximum counts was then copied to the client domain using the 'vertical lookup' (VLOOKUP) formula in order to account for those clients where no data was available.

The expression 'VLOOKUP' searches for a value in the leftmost column of a table, and then returns a value in the same row from a column specified in the table.

Syntax:

VLOOKUP(lookup_value,table_array,col_index_num,range_lookup)

i.e.:

VLOOKUP(A2,'pre-cons ext'!$A$2:$B$586,2,FALSE)

Lookup_value is the value to be found in the first column of the array. Lookup_value can be a value, a reference, or a text string.

Table_array is the table of information in which data is looked up. The values in the first column of table_array can be text, numbers, or logical values.

Col_index_num is the column number in table_array from which the matching value must be returned. A col_index_num of 1 returns the value in the first column in table_array; a col_index_num of 2 returns the value in the second column in table_array, and so on.

Range_lookup is a logical value that specifies whether you want VLOOKUP to find an exact match or an approximate match. If TRUE or omitted, an approximate

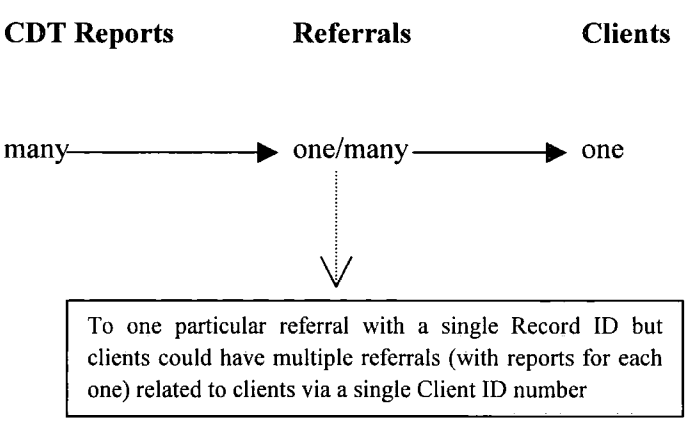
match is returned. In other words, if an exact match is not found, the next largest value that is less than lookup_value is returned. If FALSE, VLOOKUP will find an exact match.

In the case of my data I used the following vertical lookup expression:

=IF(ISNA(VLOOKUP(A2,'pre-cons ext'!$A$2:$B$586,2,FALSE)),0,VLOOKUP(A2,'pre-cons ext'!$B$586,2,FALSE))

This expression looks up the client Record ID number in the pre-convictions table, returning the corresponding number of pre-convictions given in the second column of this table. If no matching Client ID number is found then zero pre-convictions is returned.

The remaining domains: Care Package; Other Reports; and CDT Reports, were more complicated due to their indirect relationship with the Clients domain via the Referral domain, for example:

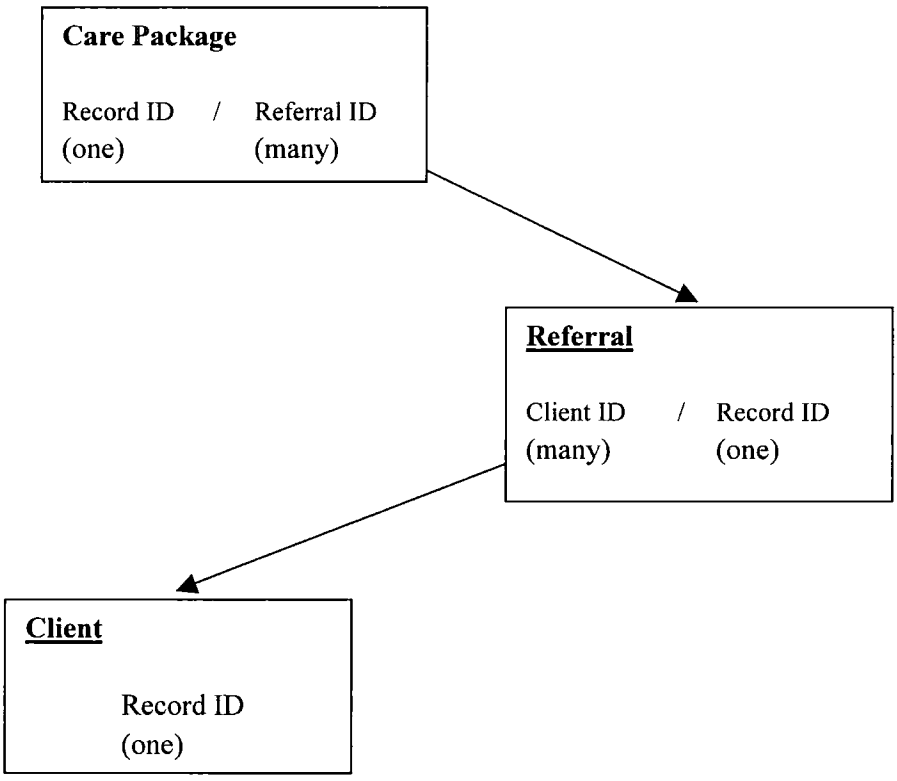


As the aim was to produce a total count of reports and care packages regardless of the number of referrals and the relationship between the data matrices under analysis is indirect, a programme created within Visual Basic was required as follows:

```
Public Sub compare()
Count = 0; rw = 2; col = 1
For b = 2 To 1400
        For a = 2 To 800
                If Cells(rw, col) = Worksheets("CarePack").Cells(a, col) Then
                        Count = Count + 1
                        If Worksheets("CarePack").Cells(a, col) > Cells(rw, col)
                Then
                                GoTo brkout
                        End If
                End If
        Next a
        brkout:
        Cells(rw, col + 3) = Count
        rw = rw + 1
        Count = 0
Next b
z = 3; addup = Cells(z, 4); increment = 2
For z = 3 To 1400
        If Cells(z, 2) = Cells(z - 1, 2) Then
                addup = addup + Cells(z, 4)
                Cells(z, 5) = addup
        Else
                Cells(z, 5) = Cells(z, 4)
                Worksheets("Clients").Cells(increment, 2) = addup
                addup = Cells(z, 4)
                increment = increment + 1
        End If
Next z
End Sub
```

This programme effectively returns the number of matches between Record ID in the Referral matrix and Referral ID in the Care Package matrix (i.e. the number of needs identified for each referral).It then identifies those individuals who have multiple referrals using the Record ID/Client ID relationship in the Referral matrix

and adds up the returns form the Care Package match (i.e. therefore providing the total number of needs identified for each individual regardless of the number of times they were referred to the team), as follows:



The data at this stage again required organising (see footnote 10, p.3). Five IDs in the Referral matrix could not be matched with IDs in the Client matrix. Consequently these records were deleted[53].

Manual checks to ensure accuracy using the Diversion Team database were performed regularly throughout this data management stage, but particularly

[53] Records with the following client IDs in the Referral matrix were deleted: 116
118
172
231

245

following these calculations and deletions a manual check of records was performed in order to ensure that the results produced were correct.

The next calculation involved in the production of the Case Book required the most complicated solution. The aim again was to produce an overall count of the number of current offences committed by each client regardless of the number of separate referrals. The current alleged offence data was the most complex because:

1. the relationship between this matrix and the Client matrix is indirect, going via Referrals, meaning there is a potential 'many to one to many to one' complex;

2. due to Cleveland Diversion Team activity and process, and the way data was inputted into the database, each individual offence could be the subject of multiple records. This is because at each court adjournment, remand into custody and so on, the offence and its outcome would be inputted again. As each client could be subject to a number of court appearances before the final sentence was given, the number of multiple entries is potentially huge. For example, out of a total of 4222 records in the current alleged offence matrix the following did not involve a final sentence:

• Police bail	65
• Police bail with conditions	8
• adjourned court bail	1046
• adjourned court bail with conditions	359
• adjourned remand into custody	826
• committal to Crown Court	197
• S.35 remand to hospital	5
• warrant issued	108
• blanks	140
• not known	137
• **Total**	**2891**

3. because an individual could be re-referred on a number of occasions, sometimes quite soon after discharge from the team, the same current alleged offence could be recorded again;

4. whilst a case is open to the team, an individual could have different offences heard in court on different dates. Some of these will have a final sentence recorded before discharge from the team, others may still be ongoing within the Criminal Justice System;

5. referral IDs were not generated for 108 offence inputs (see footnote 10, p.3), which were deleted as a consequence;

6. Court dates were not recorded for 251 records.

The first stage was to re-organise the data matrix:

1. data sorted into ascending order by referral ID;

2. records with no referral ID generated deleted - 108 cases;

3. records with no offence category recorded (and minimal if any other data) deleted - 27 cases.

After this, the first solution I considered involved counting those offences for each individual which have a final outcome from the criminal justice system (basically ignoring those with a remand status as listed above). This however would not include those offences for which no final outcome was recorded. Whilst it was the normal practice of the Team Administrator to follow all cases through court (regardless of discharge from the service) in order to record a final sentence, this

was not always possible[54]. Consequently this solution could have significantly underestimated the number of offences committed by individuals referred to the team. Instead, rather than working backwards from final outcomes through preceding court appearances, it seemed sensible to try and follow the process as it occurred from initial court appearance onwards, as follows:

1. group court appearances together by court date or blanks as they appear in the sequence of hearings;

2. count each offence in the first set of appearances, taking note of offence types and outcomes from the criminal justice system (a final sentence for any offence means that this offence has been dealt with and therefore if the same offence type appears later in the list of appearances then it represents an additional offence);

3. check the next set of court appearances - if offences appear here which have been counted in the previous section these should be ignored (but again, criminal justice outcomes should be noted for the above reason). Any additional offences should be added to the count;

4. each subsequent set of court appearances should be checked against all preceding sets - new offences added to the count and those with a final outcome removed from the check (refer to Excel spreadsheets).

It seemed the case to me that if I was able to imagine and describe the set of sequential steps required to perform this calculation manually then it would be relatively straightforward to write an expression in Excel or create a programme in

[54] Offences with no final sentence recorded could include: Initial cases referred to the team whilst processes where undergoing development; cases tried in courts in other areas; cases tried in Crown Court; and cases taking a long time to reach final sentence.

Visual Basic in order to generate the results quickly and accurately. However again this was not to be the case. Whilst the steps in this calculation seem sequential, they are in fact 'non-linear', looping backwards and forwards checking the current group of offences with all those preceding, as well as from side to side as the checking includes information provided within a number of columns (i.e. court date, offence type, offence severity and sentence). Consequently, I decided to undertake a manual calculation as follows:

1. records were sorted in ascending order by Referral ID in the Current Offence matrix;

2. a count of each individual offence was made in an additional column;

3. the Referral ID was then matched with the Record ID (and corresponding Client ID) in the Referrals matrix;

4. where multiple referrals were included, the number of offences from each was added together to produce a total number of current offences for each client regardless of the number of referrals made to the CDT.

Clearly it is possible to point to a number of possible problems with this system not least of all that described on page 11 c) *because an individual could be re-referred on a number of occasions, sometimes quite soon after discharge from the team, the same current alleged offence could be recorded again* – meaning the risk of double calculation is quite real.

The final calculation, the generation of a variable indicating the expected level of information available for each client is an important addition to the Case Book. Not all referrals receive the same treatment from the Diversion Team. Some receive a

full service, whilst others may have their details stored within the database for future reference or in case they appear in court or else where in the system, but may have no other service provided at the current time. These different levels of service provision are identified by the 'referral reason' category allocated to each referral. Each of these categories identify whether or not information should be available in each of the eight matrices or domains as follows:

Levels of Information

Info Level	Referral Reason	Psych Hist	Pre-Cons	Client	Referral	Current Offence	CDT Reports	Other Reports	Needs
1	Not Recorded	?	?	✓	✓	?	?	?	?
2	Other	?	?	✓	✓	?	?	?	?
3	AO[55] IO[56]	✗ [57]	✓ [58]	✓	✓	✓	✗	✗	✗
4	A+[59]	✗ [60]	✓ [61]	✓	✓	✓	✓	✓	✓
5	IAO[62]	✓	✓	✓	✓	✓	✗	✗	✓
6	IA+[63]	✓	✓	✓	✓	✓	✓	✓	✓

The aim is to identify the highest level of information available for each individual, checking each referral reason for those with multiple referrals and selecting the highest level. This would identify those with partial information available and those

[55] Advice Only – replaced December 1997
[56] Information Only – introduced December 1997
[57] in the main
[58] Pacit not the Police
[59] Advice Plus
[60] in the main
[61] Pacit + the Police
[62] Initial Assessment Only – replaced December 1997
[63] Initial Assessment Plus

for whom all information should be available. For instance, an individual referred for 'information only' would probably have no psychiatric history details recorded. This would not necessarily mean that they have had no contact with the psychiatric services in the past, but that this information is not usually sought or recorded for this level of referral.

The stages involved in the calculation of this new variable within the software Microsoft Excel were as follows:

1. data in the Referral matrix was sorted into ascending order using the Client ID;

2. a new column was inserted labelled Referral Reason Code using the following IF statement:

=IF(F2="Other",2,IF(OR(F2="Advice Only",F2="Information Only"),3, IF(F2="Advice Plus",4,IF(F2="Initial Assessment Only",5.IF(F2="Initial Assessment Plus",6,1)))))

3. the Client ID and Referral Reason Code columns were then copied to a separate sheet within Excel;

4. these columns were sorted so that the highest referral reason code (column B) was at the top of each group of Client IDs (column A) as follows:

A Client ID	B Referral Reason Code	C Client ID	D Maximum Referral Code
52	6	52	6
52	2	9999	
52	1	9999	
53	4	53	4
53	3	9999	

5. the highest code number was then selected using the above IF statements creating the new columns C and D;

6. these were sorted into ascending order so that all '9999's were grouped together at the bottom of the list and could then be deleted, leaving a single Client ID and maximum referral code for each client;

7. the Client ID (C) and Maximum Referral Code (D) columns were then copied and pasted into the main Clients Matrix;

8. checks were made to ensure a match between the Record ID (form the Client matrix) and the Client ID (from the Referral matrix)[64].

Finally all summary information was merged together into one matrix and manual checks performed for accuracy. A Case Book was then produced (Appendix Three)

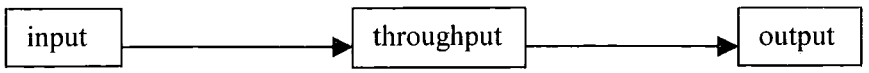
[64] Six sets of Client ID and Maximum Referral Codes were deleted as no matching Record IDs were found in the Client matrix as follows: 116
118
172
231
245
849

A number of IDs do not appear in either the Client or Referral matrices, e.g. 120; 219.

describing in its 27 pages the level and type of information available for each individual identified themselves by their Record ID.

Following completion of the Case File and accompanying book I was again left with the problem about where next to take the data. Analysis of the Case File could provide a macro impression of the systems and people involved but the loss of all detail could mean that any emergent patterns, which could lead to a more accurate of representative typology, would remain unidentified. The solution previously suggested involving the creation of one flat file from the eight matrices left me concluding that I had too much information to use it all at once. During discussions with my supervisor it became clear that I had again reached a point that I was constantly encountering involving data management problems. The solution was neither obvious nor simple because the data is of necessity complex, reflecting the processes experienced by the various 'clients' as they move in and between the different attractor states. Equally a simple solution is not forthcoming as researchers are only now beginning to realise that data of this nature is available in this 'complex' form and as such requires a particular understanding and approach to management and analysis. It is therefore very important that the issues I encountered in terms of the data, its construction, management and analysis, formed part of my thesis and would be described in detail within the methodology.

For me, this was the beginning, the dawning of an appreciation of the benefits the emerging theories of chaos and complexity could have for my understanding and grasp of this data and the process it represents. The data can perhaps more easily be understood as three separate states:



or:

In terms of chaos theory, the aim of this project is an *interpretation* of the *trajectories* described or reflected by the data. This will entail the search for a *strange attractor* – **nature constrained, disorder channelled** into a pattern with a common underlying theme, **stability.** The strange attractor lives in *phase space* – phase space gives a way of turning numbers into pictures (a *phase space portrait*), abstracting every bit of essential information from a system of moving parts and making a flexible road map to all its possibilities. Physicists have already worked with two simple kinds of attractors: fixed points and limit cycles, representing behaviour that reached a steady state or repeated itself continuously. In phase space the complete state of knowledge about a dynamical system a single instant in time collapses to a point. That point **is** the dynamical system – at that instant. At the next instant, though, the system will have changed ever so slightly and so the point will move. The history of the system can be charted by the moving point, tracing its orbit through phase space with the passage of time. Every piece of a dynamical system that can move independently is another *variable*, another *degree of freedom*. Every degree of freedom requires another *dimension* in phase space, to make sure that a single point contains enough information to determine the state of the system uniquely: one-dimension where only a single number is required to stand for temperature or population, and that number defined the position of a point on a one-dimensional line; two-dimensions where one variable is on the horizontal axis and the other on the vertical – if the system is a swinging, frictionless pendulum, one

variable is position and the other velocity, and they change continuously, making a line of points that traces a loop, repeating itself forever; **Lorenz's** system of fluid convection (*butterfly attractor*) was three-dimensional, not because the fluid moved through three dimensions, but because it took three distinct numbers to nail down the state of the fluid at any instant; the most complex systems have many independent variables needing spaces of four, five or more dimensions.

Making pictures of strange attractors is not a trivial matter:

> "The points wander so randomly, the pattern appears so ethereally, that it is hard to remember that the shape is an attractor. It is not just any trajectory of a dynamical system. It is the trajectory towards which all other trajectories converge. That is why the choice of starting conditions does not matter. As long as the starting point lies somewhere near the attractor, the next few point will converge to the attractor with great rapidity[65]." (re. **Henon's** *'banana shaped attractor'* – the first strange attractor was discovered in 1963 by Edward Lorenz – the butterfly attractor).

Typically orbits wind their ever more complicated paths through three dimensions or more, creating a dark scribble in space with an internal structure that could not be seen from the outside. To convert these three dimensional skeins into flat pictures the technique is to make a *return map* or a *Poincaré map*, in effect taking a slice from the tangled heart of the attractor, removing a two dimensional section just as a pathologist prepares a section of tissue for a microscopic slide. The Poincaré map removes a dimension from an attractor and turns a continuous line into a collection of points, implicitly assuming that much of the essential movement can be

[65] James Gleick (1997) Chaos: The Amazing Science of the Unpredictable. Minerva. (p.150).

preserved. The process corresponds to sampling the state of a system every so often, instead of continuously. When to sample - where to take the slice from a strange attractor – is the question that gives a researcher some flexibility. The most informative interval might correspond to some physical feature of the dynamical system, or to a regular time interval, freezing successive states in the flash of an imaginary strobe light. It is such pictures that can finally reveal the fine *fractal* structure guessed at by Edward Lorenz.]

The production of the three matrices: input, throughput and output, could be described in terms of a Poincaré map. Each of the matrices represents a sample of the dynamic system. When to sample is a question answered to a large extent by the very nature of the process itself and by the structure of the hierarchical dataset. [The above discussion makes clear the reasons why initial management of this hugely complex database was so overwhelmingly difficult to negotiate. The inclusion of all variables would have required a phase space with a minimum of 138 dimensions, which as **Gleick** argues five or more would tax the visual imagination of even the most agile topologist. The importance of the Poincaré mapping technique is evident.]

My next step was then to create another dataset or map of not more than 100 variables which would describe the first state including:

1. face sheet (demographic/personal info);
2. psychiatric background;
3. criminal background;
4. current offence.

It should include the case book summary variables and the most recent of each event, as well as the most serious (it was acknowledged that the most recent event may not accurately reflect the seriousness or otherwise of previous events e.g. the

most recent pre-conviction may be non-violent following a string of violent offences). The aim was to produce a dataset which described clients as they existed at the point of referral to the Cleveland Diversion Team. Analysis of this set would produce a typology of individuals referred to the team. These steps would then be undertaken for the two remaining states, 'throughput' and 'output'.

The first decision I had to make were which variables should be included in the Input matrix. It soon became obvious that this was not going to be a straightforward case of transferring variables in their original state from the separate matrices and merging them to produce the Input matrix. Very many of the important descriptors which I was interested in and which I wanted to be included in the production of any typology were not included in the original database, but instead required calculation using two or more existing variables (for example, age at first conviction was calculated using date of birth and date of first previous conviction). Equally a number of existing variables could not be used in their original format (for example, physical disability and illness had to be coded into separate variables).

Neither was it always obvious which variables to include in the Input matrix, describing individuals as they existed at the point of referral to the CDT, and which to leave to the Throughput matrix. During discussions with my supervisor about the 71 variables I had decided initially to include, he expressed concern about the absence of the variable 'current diagnosis'. I had originally included this along with a number of other variables including 'reason for referral', 'current diagnosis' – multiple in some cases, 'history of harm', 'current contacts with other agencies', until the spreadsheet consisted of 150 variables rather the original specification of 100 maximum. It was at this point I decided that some variables could and should be left to the later 'Throughput' matrix – current diagnosis could after all be considered a process of allocation negotiated during the assessment process undertaken

following referral to the CDT. However 'diagnosis' also forms part of or indicates the way in which an individual *presents* which may impact on whether or not they are referred to the CDT in the first place, and could therefore equally be seen as part of the 'Input' matrix.

An important point to arise from these discussions was the existence of what we termed *'liminal' variables*. Despite the fact that the construction of the Poincaré maps is described as self evident, that is not quite the whole story. The three matrices are more likely an *idealisation* of the process as there are a number of variables which could fit into more than one matrix. [This, if not before now, begs the question **'can the theories of chaos and complexity be applied equally to the wilful subjects of sociological analysis as to the 'stuff' of physicists, cosmologists, geologists and mathematicians?**] Things are not so clear in the spaces which exist between the maps – the areas where interaction and change occurs, these areas of becoming or *phase transitions* (in relation to physics, the changes from solid to liquid, from non-magnet to magnet, from conductor to superconductor). Gleick points out that like so much of chaos itself, phase transitions involve a kind of macroscopic behaviour that seems hard to **predict** by looking at the microscopic details. Something is introduced – increased energy, stress, whatever – but at first the change is gradual, incremental, predictable, until the *critical point* is reached when change becomes sudden, discontinuous, and the object enters a new realm.

The existence and content of these phase transitions was clarified by the discussion in point one i.e. the extent to which variables such as current diagnosis and reason for referral belonged to one or other of the Poincaré maps. Such variables could be seen to belong to a period describing change. As the discussion continued it was

proposed that these areas of transition are not limited but are characterised by *bounded liminality*

For instance, phase transition 1 may be bounded by the variables current diagnosis and reason for referral. In this liminal transition it may be the case that a diagnosis is arrived at which then sets the trajectory, or acts as a control parameter, for a relatively long period These areas of change may produce some of the most interesting interpretations and therefore the contents of the phase transition maps will require some thought, debate and explanation. It is such periods of transformation which offer the most interesting sociological insights.

The discussion then turned to the more general concerns of sociological research methods and the ever present epistemological question "how can we know the world?" this becomes mute point when according to *Realism* the world is constantly making itself known to us. The job of the Sociologist is to *interpret* this most complex of information. Information available or constructed about/reflecting the real world must be by its very nature complex and chaotic. The CDT database is both hierarchical and relational in its attempt to reflect real process. Little attempt has been made to interpret such data beyond simple aggregation and linear analysis. The new theories of chaos and complexity are developing in order that we can move beyond this level of analysis:

aggregation ⟶ **summarisation**

analysis ⟶ **interpretation**

Complexity theory allows us to '*see*' the *whole* picture, to get to grips with the *shape* of the data, rather than simply rely on a *reductionist* analysis. This must not however be confused with an entirely *holistic* approach – it would be a mistake to

think that this refers to the whole of the data at the exclusion of its parts. Instead complexity and chaos seeks to understand the whole as it is arrived at from the *interactions* of its parts – which takes us full circle back to the mapping project: Poincaré and phase transitions.

The final idea discussed was one which was not fully explored during this meeting but one which intrigued me when I read about it and that is *'self similarity'* or *similarity of scale*. The standard model for plotting variation is the *bell-shaped curve*. In the middle where the hump of the bell rises, most data cluster around the average. On the sides the low and high extremes fall off rapidly. This *normal distribution curve* makes a statement about the nature of *randomness*. The point is that when things vary they try to stay near an average point and they manage to scatter around the average in a reasonably smooth way. However not all data can be made to fit this *normal law of error*. Mandelbrot had the idea that other laws, with different behaviour, could govern random, stochastic phenomena. He made a study of cotton-price data over the last century (which could not be made to fit normal distribution). Economists shared the conviction that small, transient changes in price had nothing in common with large, long-term changes. Fast fluctuations came randomly. The small scale ups and downs during a days transactions are unpredictable and uninteresting. Long-term changes are a different species entirely. The broad swings of prices over months or years or decades are determined by deep macroeconomic forces, the trends of war or recession, forces that in theory should give way to understanding. On the one hand the buzz of short-term fluctuation; on the other the signal of long-term change. However this dichotomy had no place in the picture of reality Mandelbrot was developing. Instead of separating small changes from large ones, his picture bound them together. He was looking for patterns not at one scale or another, but across every scale. The picture he knew would need a symmetry, not of right and left, top and bottom, but rather a symmetry

of large scales and small. When he examined the cotton-price data he found that these numbers which produced such aberrations from the point of view of normal distribution, produced **symmetry from the point of view of scaling**. Each particular price change was unpredictable and random, but the sequence of changes was independent of scale – curves for daily price changes perfectly matched those for monthly price changes. Examined this way the degree of variation had remained constant over a tumultuous sixty-year period, including two World Wars and a depression. **Within the most disorderly reams of data lived an unexpected kind of order**. Mandelbrot went on to examine electronic transmission noise (producing a pattern equal to the *Cantor set* or dust) and records of floods from the Nile (the *Noah and Joseph effects*), the length of coastlines (*fractals or fractal dimensions as a measure of irregularity*, and as a way of seeing infinity!) – the intellectual intersection of these studies of irregular patterns in natural processes and exploration of infinitely complex shapes is a quality of *self-similarity*: above all **fractal meant self-similar**. Self-similarity is symmetry across scale: the price charts displayed self-similarity because not only did they produce detail at finer and finer scales, they also produced detail with certain constant measurements. A naive notion of self-similarity is however misleading. It does not for example imply, as was believed, that sperm are tiny but fully formed humans. Nor does it support a simple form of reductionism – understand the whole by breaking it apart and examining the pieces or adding together one or two bits is complication enough. The power of self-similarity begins at much greater levels of complexity. It is a matter of looking at the whole.

I was not clear at this point what if anything this idea of fractal scale could offer my interpretation of the careers of mentally disordered offenders but it was something I wished to think about and explore further.

I began the Input Matrix with the Case summary variables as follows:

1.	Record ID	unique identifier
2.	Maximum Referral Code	the level of information available
3.	Psychiatric History	number of previous contacts with the psychiatric services
4.	Previous Convictions	number of previous convictions
5.	Referrals	number of referrals to the CDT
6.	Current Offence	number of current offences
7.	CDT Reports	number of reports produced by the CDT
8.	Other Reports	number of reports produced by other professionals
9.	Needs Identified	number of needs identified by the CDT

Descripter variables from the Client matrix were then transferred as follows:

10.	Sex	gender
11.	Age	in years
12.	Origin	area of residence within Cleveland
13.	Ethnicity	categories as specified in the Code Book
14.	Accommodation	type of accommodation as specified in the Code Book
15.	Marital Status	as specified in the Code Book
16.	Employment Status	as specified in the Code Book
17.	Occupation	as described
18.	Dependants	number of dependants, generally children
19.	Religion	as specified in the Code Book
20.	Caution Advised	indicating possible risk to CDT member
21.	Schedule 1	previous offences against children
22.	Disabled	describing physical disability/illness: 1 for no; 2 for yes
23.	Disability Code 1	described below
24.	Disability Code 2	described below
25.	Disability Code 3	described below
26.	Disability Code 4	described below

The original variable describing any physical disability or illness experienced by clients of the CDT was qualitative. In order to make use of it in the Input matrix I transformed it into a quantitative, categorical set of variables stating whether each client was or was not physically disabled /ill, and the nature of the same (up to four

categories – the maximum described in the original data for any one individual – ordered as they appeared in the qualitative descripter):

1.	cardiovascular	angina; conjestive cardiac failure; ischaemic heart disease
2.	dermatological problems	birth marks; dermatitis
3.	gastrointestinal	
4.	infection	hepatitis C
5.	injury	burns; road traffic accident; fall
6.	metabolic	diabetes; liver; thyroid
7.	muscularskeletal	hand/wrist; arthritis; back pain; Perths disease
8.	neuralogical	epilepsy; cerebral palsy, Multiple Sclerosis; traumatic brain injury
9.	respiritory	asthma; bronchitis; COPD
10.	sensory impairment	sight; speech; hearing
11.	malignancy	

Although trauma, such as a road traffic accident or a fall or involvement in a fight leading to head injury, is not a physical disability itself as such, I wanted to be able to identify the apparently large number of people whose injuries were caused in this way. Consequently where this was the case, variable 23 'Disability Code 1' indicates a 5; the following variables describe more specifically the actual injury (generally an 8 or 7).

The next set of variables included describe the psychiatric history of CDT clients. In particular these histories describe previous contacts with psychiatric services. A number of these variables required calculation, but even where no calculation as such was required, merging data from the original psychiatric history matrix into the Input matrix required the use of formulas because again the data is hierarchical, complex and non-linear.

27. First Episode Type describes the first psychiatric episode type

In order to return the first episode only (a number of clients had experienced multiple contacts with the psychiatric services in the past – up to a maximum of 13)

the logic was to select all episode number 1's in the psychiatric history matrix and return the corresponding episode type. The actual method entailed first naming the range of columns B-E in the psychiatric history matrix as follows:

Column	Variable name	New Range Name
B	Client ID	variable27
C	Episode Number	
D	Date	
E	Episode Type	

The first episode was then returned to the Input matrix using a nested vertical lookup[66] formula as follows:

=IF(ISNA(VLOOKUP(A4,variable27,4,FALSE)),"",VLOOKUP(A4,variable27,4,FALSE))

This expression looks up the Client ID number in the variable27 range within the psychiatric history matrix and returns the first record (the VLOOKUP formula always returns the first record in a range of records) in column 4 – the episode type. If no matching Client ID number is found then the first psychiatric episode type is left blank (ISNA…"").

28. Elapsed Time First Episode — time elapsed between first psychiatric episode and first referral to the CDT

The variable 'elapsed time' did not exist as such but required calculation. The logic ran: in psychiatric history matrix select all episode number 1's and return the corresponding date. In referral matrix select all referral 1's and return the corresponding referral receipt date. Then calculate the time elapsed between the two dates.

[66] the VLOOKUP syntax is explianed on pages 7-8.

The actual method again entailed first the naming of the data ranges involved. In the psychiatric history matrix:

Column	Variable name	New Range Name
B	Client ID	
C	Episode Number	**V28_first_date**
D	Date	

and in the referral matrix:

Column	Variable name	New Range Name
B	Client ID	
C	Referral Count	
⋮	⋮	**V28_last _date**
E	Referral Receipt Date	

The elapsed time was then calculated and returned to the Input matrix using the following nested vertical lookup formula:

=IF(AA4="","",IF(OR(VLOOKUP(A4,v28_first_date,3,FALSE)=0,VLOOKUP(A4,v28 _last_date,
14,FALSE)=0),"",DAYS360(VLOOKUP(A4,v28_first_date,3,FALSE),VLOOKUP(A4,v 28_last_ date,14,FALSE),TRUE)/30))

This expression leaves the cell blank if the previous column in the input matrix, 'first episode type', is blank, or if the first episode date is blank or the first referral receipt date is blank. Otherwise it looks up the Client ID number in the v28_first_date27 range within the psychiatric history matrix and the v28_last_date range in the referral matrix and returns the number of days between the two

corresponding dates based on a 360-day year (the DAYS360 function). This calculation was then divided by 30 to return the elapsed time in months.

Negative values: An anomaly occurring following this calculation involved the appearance of negative values. Twenty individuals are identified with a psychiatric history beginning after their first referral to the CDT. Initially I assumed this was a product of multiple re-referrals for the individuals concerned and of the hierarchical and relational data structure[67]. However eight of these individuals had been referred to the CDT once only. The explanation provided by the CDT Administrator responsible for data inputting suggested that if people are subject to for example an assessment by a Psychiatrist or admission to hospital during the period their case remains active to the CDT, this information is inputted into the Psychiatric History in order that if the person is re-referred this information is immediately evident. Therefore these individuals do not actually have a psychiatric history recorded at the point of referral to the CDT.

29. First Diagnosis the first diagnosis allocated during the first psychiatric episode

A similar action to that in variable 27 'first episode type', whereby all episode 1's are selected in the psychiatric history matrix and the corresponding diagnosis returned. First the range involved was named, then the following formula applied:

=IF(ISNA(VLOOKUP(A4,variable29,6,FALSE)),"",VLOOKUP(A4,variable29,6,FALSE))

30. Age at First Episode how old a person was when they first contacted the psychiatric services

[67] Each client has one psychiatric history shared by the first and subsequent referrals.

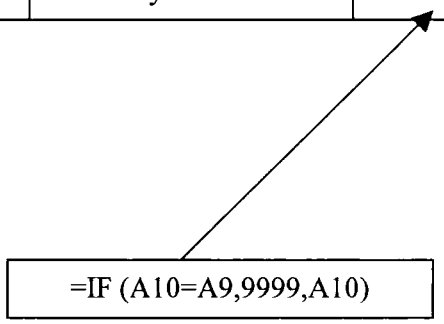
The calculation involved here was similar to that in variable 28 'elapsed time'. All first episodes were selected in the psychiatric history matrix and the corresponding date returned. In the clients matrix date-of-birth was returned, and the time elapsed between the two calculated. Again first the ranges involved were named, then the following nested vertical lookup and days 360 formula was applied:

=IF(AC4="","",IF(OR(VLOOKUP(A4,v30_dob,6,FALSE)=0,VLOOKUP(A4,variable27,3,FALSE)=0),"",DAYS360(VLOOKUP(A4,v30_dob,6,FALSE),VLOOKUP(A4,variable27,3,FALSE),TRUE)/360))

31. Most Recent Episode Type most recent psychiatric episode type

This variable appeared straightforward however, because the vertical lookup formula automatically returns the first value in a set of records, and the first value in the original records was the first or earliest psychiatric episode rather the most recent, it required some data manipulation. First data in the psychiatric history matrix copied to a new matrix and sorted into descending order so that the highest referral count (indicating most recent referral) was at the top of each group of Client IDs:

A Client ID	B Referral Count	C Date	D Episode Type	E **Client ID**
53	4	01/01/83	Community	53
53	3	01/01/93	Community	9999
53	2	01/01/94	Community	9999
53	1	01/01/95	Community	9999
56	1	01/01/95	Compulsory Admission	56
57	5		Out-Patient	57
57	4		Out-Patient	9999
57	3		Out-Patient	9999
57	2		Out-Patient	9999
57	1	08/09/94	Voluntary Admission	9999



An additional Client ID column was calculated using the above IF statement which returned the highest (most recent) Client ID record, otherwise it returned a 9999. The records were again sorted into ascending order using this new ID column, so that all most recent records appeared first and all those with 9999 attached were sorted to the bottom where they could be deleted. This new matrix – range name v31-37 – could then be used to return the most recent psychiatric episode type by applying a straightforward vertical lookup formula:

=IF(ISNA(VLOOKUP(A4,v31_37,4,FALSE)),"",VLOOKUP(A4,v31_37,4,FALSE))

32.Elapsed Time Last Episode — time elapsed between the most recent episode in each psychiatric history and first referral to the CDT

As variable 28 but using highest episode number in the psychiatric history rather than 1's:

=IF(AE4="","",IF(OR(VLOOKUP(A4,v31_37,3,FALSE)=0,VLOOKUP(A4,v28_last_date,14,
FALSE)=0),"",DAYS360(VLOOKUP(A4,v31_37,3,FALSE),VLOOKUP(A4,v28_last_date,14, FALSE),TRUE)/30))

33. Most Recent Diagnosis diagnosis allocated at the latest contact with psychiatric services

As variable 29 but using highest episode number in the psychiatric history rather than 1's:

=IF(ISNA(VLOOKUP(A4,v31_37,5,FALSE)),"",VLOOKUP(A4,v31_37,5,FALSE))

34.Age at Latest Episode how old a person was when they last contacted the psychiatric services

As variable 30 but using highest episode number in the psychiatric history rather than 1's:

=IF(AG4="","",IF(OR(VLOOKUP(A4,v30_dob,6,FALSE)=0,VLOOKUP(A4,v31_37,3,FALSE)
=0),"",DAYS360(VLOOKUP(A4,v30_dob,6,FALSE),VLOOKUP(A4,v31_37,3,FALSE),TRUE)
/360))

35.Diagnostic Uncertainty indicates changes in the diagnostic category allocated

This variable calculates changes over time between first and most recent diagnoses. It uses the variables created in the Input matrix which identify first diagnosis (variable 29-column AC) and most recent diagnosis (variable 33-column AG),

comparing the two and recording change by returning 'yes' (no change or a blank entry in either first or most recent diagnosis results in a blank return):

=IF(AC4=AG4,"",IF(OR(AC4="",AC4="Not Recorded",AG4="",AG4="Not Recorded"),"",
"Yes"))

36. Voluntary Admissions number of previous voluntary hospital admissions

This variable calculates the total number of previous voluntary hospital admissions for each client. First each episode in the original psychiatric history matrix involving a voluntary hospital admission needed to be coded. The following formula states if the episode type (column E) is a voluntary admission return a number one in the new column variable otherwise leave the cell blank:

=IF(E2="Voluntary Admissions",1,"")

Next a running total had to be calculated in order to produce a total number of voluntary admissions for each individual. These additions were performed manually and inputted directly into the Input matrix as only 362 CDT clients had any previous psychiatric service contacts recorded (the original 631 psychiatric history records were recorded for the 362 individuals as a number of them have multiple episodes).

37. Compulsory Admissions number of previous compulsory hospital admissions

This variable calculates the total number of previous compulsory hospital admissions for each client. First each episode in the original psychiatric history matrix involving a compulsory hospital admission (which includes admission to a Special Hospital) needed to be coded. The following formula states if the episode type (column E) is a compulsory admission return a number one in the new column variable, or if the episode type is a Special Hospital admission return a one, otherwise leave the cell blank:

=IF(E2="Compulsory Admission",1,IF(E2="Special Hospital In-Patient Compulsory",1,""))

Again, as with variable 37 a running total had to be calculated in order to produce a total number of compulsory admissions for each individual. These additions were performed manually and inputted directly into the Input matrix.

The following set of variables describe the criminal histories of those referred to the CDT. In particular these histories describe the previous convictions of CDT clients. All of variables included in this section either do not exist in the form required or do not exist at all in the original data and each therefore involved a more or less complex calculation.

38. First/Most Serious Offence Type the first offence committed, or if multiple first offences, most serious first offence

The logic ran: first code each pre-conviction indicating level of severity[68] in the original pre-cons matrix as follows:

violence against the person	1
sex	2
robbery	3
burglary	4
drug	5
fraud	6
theft	7
criminal damage	8
motoring	9
property/non-violent	10

Those individuals having only one previous conviction, return the corresponding offence category in the Input matrix. For those with multiple pre-convictions, select

[68] As determined by the CDT Probation Officer

the first and return the corresponding offence category unless court dates indicate multiple offences on the same date. In this case the most serious offence should be returned, indicated by the severity code.

It appeared at first that the non-linear nature of the data manipulation involved to return this variable was such that formulas within Excel were not sufficient and a Visual Basic programme was needed instead. However, on closer examination the data revealed that a structure of ascending sorts would provide the answer, as follows:

- ascending order by Client ID
- ascending order by Court Date
- ascending order by Offence Severity

This three way sort ensured that for each individual the first record in the pre-convictions matrix was their first offence (and in the case of multiple first offences, the most serious). Each of these first records was returned into a new variable column using the following IF statement:

=IF(A2<A3,H3,"")

This states is the current Client ID (A3) is greater than the previous (A2) – i.e. is a different client – return the Offence Category (H3).

Data was then filtered on nonblanks and copied into a new worksheet. This new range was named 'first_worst_offence' and data returned into the input matrix using the following formula:

=IF(VLOOKUP(A4,first_worst_offence,2,FALSE)=0,"",VLOOKUP(A4,first_worst_offence,2,
FALSE))

This formula states look up the client in the first offence matrix – range name first_worst_offence. If there is nothing recorded in column 2 – offence category – return a blank cell, otherwise return the offence category.

39. Elapsed Time First PreCon time elapsed between first pre-conviction and first referral to the CDT

Logic dictates, first in the pre-convictions matrix select all first offences and return the court date. Next in referral matrix select all first referrals and return referral receipt date. Finally calculate the time elapsed between the two dates.

First each individuals pre-convictions were numbered 1,2.....n, as follows:

=IF(B3=B2,C2+1,1)

which states, if the current client ID (B3) is equal to the previous client ID (B2) – i.e. is the same client - then add a one to the count in the current cell (C2+1) otherwise return a one.

A vertical lookup formula was the used to calculate elapsed time and return the answer in months into the Input matrix (remembering this formula always selects the first record). The VLOOKUP was preceded by an OR statement in order to weed out those first pre-convictions or referrals with no date attached, as follows:

=IF(OR(VLOOKUP(A4,precons,3,FALSE)=0,VLOOKUP(A4,v28_last_date,14,FALSE)=0),"",
DAYS360(VLOOKUP(A4,precons,3,FALSE),VLOOKUP(A4,v28_last_date,14,FALSE),TRUE)/30)

This formula reads if the client's (column A) pre-conviction (named range-precons) date (column 3) is blank, or if the clients referral (named range-v28_last_date) date (column 14) is blank, return a blank cell (" "); otherwise, using the DAYS360

formula (which as explained earlier returns the number of days between two dates based on a 360-day year (twelve 30-day months), calculate the time elapsed between the clients pre-conviction and referral. Finally divide this by 30 to return the answer in months.

40.First/Most Serious Sentence — the first sentence passed, or if multiple first offences, most serious first sentence

The logic ran, in the original pre-convictions matrix create a new variable 'Sentence Severity'[69], indicating the severity of each sentence passed as follows:

Life Imprisonment	1
Detained S53(2)	2
Hospital Order	3
Extended Sentence	4
Custodial Sent. > 12 months	5
Youth Custody > 12 months	6
Custodial Sent. < 12 months	7
Youth Custody < 12 months	8
Part Suspended Sentence	9
Care Order to Local Authority	10
Suspended Sent. S.O.	11
Suspended Sentence	12
Comb.Order, Comm. Serv.	13
Comb.Order, Probation	13
Probation with 40 Day Order	14
Prob.Ord.WthCond>12mths	15
Probation > 12 Months	16
C&YP Supervision Order >12	17
CSO	18
Prob.Ord.WithCond<12mths	19
Probation < 12 Months	20
C&YP <12	21
Attendance Centre Order	22
Guardianship Supv. Order	23
Wardship Supv. Order	24
Disqual. From Driving	25
Compensation	26

[69] As determined by the CDT Probation Officer

Money Payment Supv. Order	27
Fine	28
Licence Endorsed	29
Conditional Discharge	30
Boundover	31
Costs	32
Absolute Discharge	33
Caution	34
Discontinued	35
Charges Withdrawn/Dropped	35

Then, as with variable 38 First/Most Serious Offence, those individuals having only one previous conviction, return the corresponding sentence into the Input matrix. For those with multiple pre-convictions, select the first and return the sentence unless court dates indicate multiple offences on the same date. In this case the most serious sentence should be returned, indicated by the severity code.

The data manipulations required to return this variable were similar to those employed in variable 38 First/Most Serious Offence, the only difference being rather than the final part of the three way sort involving offence severity it involved data into ascending order by sentence severity. Data was then filtered, selected and copied into a new sheet in the same way and this new range named 'first_worst_result'. Data returned into the input matrix using the following formula:

=IF(VLOOKUP(A4,first_worst_result,2,FALSE)=0,"",VLOOKUP(A4,first_worst_result,2,
FALSE))

This formula states look up the client in the first sentence matrix – range name first_worst_result. If there is nothing recorded in column 2 – result – return a blank cell, otherwise return the sentence recorded.

41. Age at First Offence age (years) when the first criminal offence was committed

The calculation involved here was similar to that in variable 30, Age at First Psychiatric Episode. All first episodes were selected in the pre-convictions matrix (range name-precons) and the corresponding date returned. In the clients matrix (using the range name-v30_dob) date-of-birth was returned, and the time elapsed between the two calculated using the DAYS360 formula:

=IF(OR(VLOOKUP(A4,v30_dob,6,FALSE)=0,VLOOKUP(A4,precons,3,FALSE)=0),""
,DAYS360
(VLOOKUP(A4,v30_dob,6,FALSE),VLOOKUP(A4,precons,3,FALSE),TRUE)/360)

First the OR statement weeds out those clients with no date of birth or first pre-conviction date recorded – in either case a blank cell is returned . Next the DAYS360 calculates elapsed time which is then divided by 360 to give the answer in years.

42.Most Recent/Serious Offence Type	the most recent offence committed, or if multiple recent offences, most serious recent offence

Similarly to variable 38 First/Most serious Offence, those individuals having only one previous conviction, return the corresponding offence category into the Input matrix. For those with multiple recent pre-convictions, select the most recent and return the corresponding offence category unless court dates indicate multiple offences on the same date. In this case the most serious offence should be returned, indicated by the severity code.

As with variables 38 and 40, the answer was to be found in a three way data sort although this time it required mix of ascending and descending manipulations as follows:

- ascending order by Client ID
- descending order by Court Date
- ascending order by Offence Severity

This three way sort ensured that for each individual the first record in the pre-convictions matrix was their most offence (and in the case of multiple recent offences, the most serious). Each of these first records was returned into a new variable column using the following IF statement:

=IF(A2<A3,H3,"")

This states is the current Client ID (A3) is greater than the previous (A2) – i.e. is a different client – return the Offence Category (H3).

Data was then filtered on non-blanks and copied into a new worksheet. This new range was named 'most_recent_offence' and data returned into the input matrix using the following formula:

=IF(VLOOKUP(A4,most_recent_offence,2,FALSE)=0,"",VLOOKUP(A4,most_recent_offence,2,
FALSE))

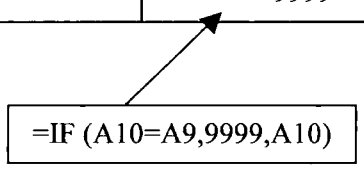
This formula states look up the client in the most recent offence matrix – range name most_recent_ offence. If there is nothing recorded in column 2 – offence category – return a blank cell, otherwise return the offence category.

43. Elapsed Time Most Recent Offence	time elapsed between the most recent episode in each criminal history and first referral to the CDT

Similarly to variable 31 Most Recent Psychiatric Episode Type, this variable appeared straightforward however, because the vertical lookup formula automatically returns the first value in a set of records, and the first value in the original records was the first or earliest criminal episode rather the most recent, it

required some data manipulation. First data in the pre-convictions matrix was copied to a new matrix and sorted into descending order so that the highest offence count (column B indicating most recent offence) was at the top of each group of Client IDs:

A Client ID	B Offence Count	C Date	D Offence Category	E **Client ID**
52	1	05/07/93	Violence against the person	52
53	3	29/02/96	Motoring	53
53	2	29/02/96	Motoring	9999
53	1	03/11/95	Theft	9999
67	1	10/03/94	Sex	67
68	5	21/2/78	Property/Non-violent	68
68	4	10/10/67	Property/Non-violent	9999
68	3	10/10/67	Property/Non-violent	9999
68	2	10/10/67	Property/Non-violent	9999
68	1	01/11/66	Fraud	9999



An additional Client ID column was calculated using the above IF statement which returned the highest (most recent) Client ID record, otherwise it returned a 9999. The records were again sorted into ascending order using this new ID column, so that all most recent records appeared first and all those with 9999 attached were sorted to the bottom where they could be deleted. This new matrix – range name variable43 – could then be used to return the elapsed time between most recent offence and first referral to the CDT by applying a straightforward vertical lookup formula:

=IF(OR(VLOOKUP(A4,variable43,3,FALSE)=0,VLOOKUP(A4,v28_last_date,14,FALSE)=0),"",
DAYS360(VLOOKUP(A4,variable43,3,FALSE),VLOOKUP(A4,v28_last_date,14,FALSE),TRUE)/ 30)

First the OR statement weeds out most recent offences and first referrals with no dates recorded. Then the DAYS360 formula calculates time elapsed between most recent offence (named range-variable43) and first referral (named range-v28_last_date), dividing the answer by 30 to return the time in months.

44. Most Recent/Serious Sentence — most recent sentence, or if multiple recent offences, most serious recent sentence passed

Similarly to variable 40 First/Most serious Sentence, those individuals having only one previous conviction, return the corresponding offence category into the Input matrix. For those with multiple recent pre-convictions, select the most recent and return the corresponding sentence unless court dates indicate multiple offences on the same date. In this case the most serious sentence should be returned, indicated by the severity code.

The data manipulations required to return this variable were similar to those employed in variable 42 Most Recent/Serious Offence, the only difference being rather than the final part of the three way sort involving offence severity it involved data into ascending order by sentence severity. Data was then filtered, selected and copied into a new sheet in the same way and this new range named 'most_recent_result'. Data returned into the input matrix using the following formula:

=IF(VLOOKUP(A4,most_recent_result,2,FALSE)=0,"",VLOOKUP(A4,most_recent_result,2,

FALSE))

This formula states look up the client in the most recent sentence matrix – range name most_recent_result. If there is nothing recorded in column 2 – result – return a blank cell, otherwise return the sentence recorded.

45.Age at Most Recent Offence age (years) when the most recent criminal offence was committed

The calculation involved here was similar to that in variable 34, Age at Most Recent Psychiatric Episode. The matrix created for the variable 43 calculations (range name-variable 43), consisting only of the most recent pre-conviction episodes, was used in order to return the most recent date. In the clients matrix (using the range name-v30_dob) date-of-birth was returned, and the time elapsed between the two calculated using the DAYS360 formula:

=IF(OR(VLOOKUP(A4,v30_dob,6,FALSE)=0,VLOOKUP(A4,variable43,3,FALSE)=0)
,"",
DAYS360(VLOOKUP(A4,v30_dob,6,FALSE),VLOOKUP(A4,variable43,3,FALSE),TR
UE)/360)

First the OR statement weeds out those clients with no date of birth or most recently court date recorded – in either case a blank cell is returned . Next the DAYS360 calculates elapsed time which is then divided by 360 to give the answer in years.

46.Most Serious Offence describes the most serious pre-conviction recorded

The logic runs; in the pre-convictions matrix select the lowest number in the Offence Severity variable (column H) and return the corresponding offence category (column G).

1. Data was sorted into ascending order by Client ID (ensuring each clients pre-cons were grouped together in the matrix) and ascending order by Offence

Severity (ensuring that the most severe offence – indicated using the lowest number in the offence severity code available for each individual – occurred at the top of each individuals group of records).

2. The Record Count was then sorted into ascending order so that each first record was numbered 1, and the matrix then filtered using Record Count 1.

3. These first records were copied into a new worksheet and the range (indicating each individuals most serious previous conviction) named variable46.

4. Information was then returned into the Input matrix using the following formula:

=IF(ISNA(VLOOKUP(A4,variable46,6,FALSE)),"",VLOOKUP(A4,variable46,6,FALSE))

This formula states look up each client (column A) in the most serious pre-con range (variable 46). If there is no information recorded return a blank cell (" "), otherwise return the offence recorded (column 6).

47.Violent (n) sum the number of violent pre-convictions

All of the pre-conviction category variables included below do not exist in the form required and therefore each involved a calculation in order to produce the variables required. I wanted to include the total number of each type of pre-conviction recorded for each individual. For instance, here how many violent offences each person had been convicted for previously:

a new column variable was created for violent offences and coded using the following formula:

=IF(G3="violence against the person",1,"")

which states if the offence category is 'violence against the person' (column G) return a 1 otherwise return a blank cell (" ").

The same procedure was used to calculate the following previous convictions:

48.Sex (n)	sum the number of sex pre-convictions
49. Robbery	sum the number of robbery pre-convictions
50.Burgalry	sum the number of burglary pre-convictions
51.Drug	sum the number of drug pre-convictions
52.Fraud	sum the number of fraud pre-convictions
53. Theft	sum the number of theft pre-convictions
54. Criminal Damage	sum the number of criminal damage pre-convictions
55. Motoring	sum the number of motoring pre-convictions
56.Property/Non-Violent	sum the number of property/non-violent pre-convictions
57.Most Serious Sentence	describes the most serious sentence served
58. Prison Sentence (n)	sum the number of previous prison sentences
59.Hospital Order (n)	sum the number of previous hospital orders

The following set of variables were described as miscellaneous in the Input matrix. Each is a calculation describing the relationship between each clients psychiatric history and record of pre-convictions.

60. First Incident	identifies the nature of the first episode, psychiatric or criminal.

The calculation required here involved the identification of the earliest recorded date and accompanying episode type in each persons history. The simplest method involved the use of the 'elapsed time' variables in the Input matrix – i.e. variable 28 'elapsed time first psychiatric episode' (time elapsed between the first psychiatric episode and first referral to the CDT), and variable 39 'elapsed time first pre-conviction' episode' (time elapsed between the first pre-conviction and first referral to the CDT). The formula used was as follows:

=IF(AND(AB4="",AM4=""),"",IF(AB4>AM4,"psychiatric","criminal"))

which states if the 'elapsed time first psychiatric episode' (column AB) and the 'elapsed time first pre-conviction' (column AM) are both blank (" ") then return a blank cell, otherwise calculate if 'elapsed time first psychiatric episode' (column AB) is greater than (i.e. occurred before) the 'elapsed time first pre-conviction' (column AM) return the term 'psychiatric' otherwise return 'criminal'.

61.Elapsed Time first episodes — calculates the time elapsed between psychiatric and pre-convection

This variable needed to identify which episode was identified as the first incident in the previous variable 60 and the depending on that, subtract the remaining episode as follows:

=IF(OR(AB4="",AM4=""),"",IF(BH4="psychiatric",AB4-AM4,AM4-AB4))

Again using the 'elapsed time' variables to perform the calculations, this formula states if either 'elapsed time first psychiatric episode' (column AB) or the 'elapsed time first pre-conviction' (column AM) is blank (" ") then return a blank, otherwise if the first incident, variable 60 (column BH), is psychiatric subtract the 'elapsed time first pre-conviction' (column AM) from the 'elapsed time first psychiatric episode' (column AB), otherwise reverse the subtraction.

62. Co-Careers indicates if people have both a psychiatric and a criminal history

This variable makes use of the Case Book variables Psychiatric History (variable 3, Input matrix column C) and Pre-Convictions (variable 4, Input matrix column D). The logical steps followed the following path:

- If both C4 and D4 > 0, return 'both'
- If C4 = 0 and D4 > 0, return 'criminal'
- If C4 > 0 and D4 = 0, return 'psychiatric'
- If both C4 and D4 = 0, return 'neither'

The actual formula required to perform this calculation was as follows:

=IF(AND(C4>0,D4>0),"both",IF(AND(C4=0,D4>0),"criminal",IF(AND(C4>0,D4=0),"psychiatric","neither")))

63. Co-Incidence

The following set of variables describe the current offences with which clients of the CDT were charged at the time of their first referral. All of variables included in this section either do not exist in the form required or do not exist at all in the original data and each therefore involved a more or less complex calculation.

64.Violent (n) sum the number of violent offences at first referral

Initially I began with the data set created using manual calculations for the Case Book totals, as follows:

1. records were sorted in ascending order by Referral ID in the Current Offence matrix;
2. a count of each individual offence (avoiding multiple records of the same offence) was made in an additional column;

3. next a Main Count variable was added, indicating the total number of offences committed by each individual;
4. then 10 columns were added – one for each offence category;
5. a count of number of offences in each offence category was made adjacent to the Main Count variable for each client;
6. rows with the relevant data was selected and pasted into a separate worksheet;
7. the Referral ID in the offence matrix was matched manually with the Record ID (and its matching Client ID) in the referral matrix;
8. data was then sorted into ascending order by Client ID in referral matrix (which links with the Record ID in the clients matrix) – making those clients with multiple referrals readily identifiable as evidenced by the multiple Client ID inputs;
9. each referral was given a count using the following 'if' statement, where B refers to Client ID and C to the Referral Count:

=IF(B3=B2,C2+1,1)

10. all first referral were then selected using the Referral Count variable and pasted into a separate sheet. This new matrix - range name variable57 – could then be used to return the number of each offence committed at first referral to the Input matrix using variations on the following statement:

Lookup the Client ID (A4) in the offence matrix (variable57). If it is not found (i.e. the client has no current offences recorded at first referral) return a blank cell.

=IF(ISNA(VLOOKUP(A4,variable57,13,FALSE)),"",IF(ISBLANK(VLOOKUP(A4,variable57,13, FALSE)),"",VLOOKUP(A4,variable57,13,FALSE)))

Lookup the Client ID (A4) in the offence matrix (variable57). Return the corresponding value in column 13 (i.e. the number of violent current offences recorded at first referral).

Lookup the Client ID (A4) in the offence matrix (variable57). If the corresponding cell in column 13 is blank (i.e. the client has no violent current offences recorded at first referral) return a blank cell.

65.Sex (n) sum the number of sex offences at first referral

As above using the following statement, but where column 14 refers to the number of sex offences:

=IF(ISNA(VLOOKUP(A4,variable57,14,FALSE)),"",IF(ISBLANK(VLOOKUP(A4,variable57,14,
FALSE)),"",VLOOKUP(A4,variable57,14,FALSE)))

66. Robbery sum the number of robbery offences at first referral

As above with variable 64 using the following statement, but where column 15 refers to the number of robbery charges:

=IF(ISNA(VLOOKUP(A4,variable57,15,FALSE)),"",IF(ISBLANK(VLOOKUP(A4,variable57,15,
FALSE)),"",VLOOKUP(A4,variable57,15,FALSE)))

67.Burgalry sum the number of burglary offences at first referral

As above with variable 64 using the following statement, but where column 16 refers to the number of robbery charges:

=IF(ISNA(VLOOKUP(A4,variable57,16,FALSE)),"",IF(ISBLANK(VLOOKUP(A4,variable57,16,
FALSE)),"",VLOOKUP(A4,variable57,16,FALSE)))

68.Drug sum the number of drug offences at first referral

As above with variable 64 using the following statement, but where column 17 refers to the number of drug offences:

=IF(ISNA(VLOOKUP(A4,variable57,17,FALSE)),"",IF(ISBLANK(VLOOKUP(A4,variable57,17,
FALSE)),"",VLOOKUP(A4,variable57,17,FALSE)))

69.Fraud sum the number of fraud offences at first referral

As above with variable 64 using the following statement, but where column 18 refers to the number of fraud charges:

=IF(ISNA(VLOOKUP(A4,variable57,18,FALSE)),"",IF(ISBLANK(VLOOKUP(A4,variable57,18,
FALSE)),"",VLOOKUP(A4,variable57,18,FALSE)))

70. Theft sum the number of theft offences at first referral

As above with variable 64 using the following statement, but where column 19 refers to the number of theft charges:

=IF(ISNA(VLOOKUP(A4,variable57,19,FALSE)),"",IF(ISBLANK(VLOOKUP(A4,variable57,19,
FALSE)),"",VLOOKUP(A4,variable57,19,FALSE)))

71. Criminal Damage sum the number of criminal damage offences at first referral

As above with variable 64 using the following statement, but where column 20 refers to the number of charges for criminal damage:

=IF(ISNA(VLOOKUP(A4,variable57,20,FALSE)),"",IF(ISBLANK(VLOOKUP(A4,variable57,20,
FALSE)),"",VLOOKUP(A4,variable57,20,FALSE)))

72. Motoring sum the number of motoring offences at first referral

As above with variable 64 using the following statement, but where column 21 refers to the number of motoring offences:

=IF(ISNA(VLOOKUP(A4,variable57,21,FALSE)),"",IF(ISBLANK(VLOOKUP(A4,variable57,21,
FALSE)),"",VLOOKUP(A4,variable57,21,FALSE)))

73.Property/Non-Violent sum the number of property/non-violent offences at first referral

As above with variable 64 using the following statement, but where column 22 refers to the number of property/non-violent offences:

=IF(ISNA(VLOOKUP(A4,variable57,22,FALSE)),"",IF(ISBLANK(VLOOKUP(A4,variable57,22,
FALSE)),"",VLOOKUP(A4,variable57,22,FALSE)))

74. Number of Current Offences sum the number of current alleged offences at first referral

This variable is different to the 'total offences' case book variable which counts the total number of offences regardless of number of referrals - e.g. client number 130 was referred 3 times, he was charged with seven offences at his first referral, five at his second and two at his third referral, amounting to 14 in total over the three referrals. This calculation is much more simple than that involved in the case book calculation, and employs the following formula:

=SUM(BM4:BV4)

This formula simply sums the previous 10 cells in each row which contain the count for each offence category.

75. Most Severe indicates the most serious[70] offence recorded at first referral

The most serious offence recorded at first referral for each individual was selected and returned manually.

76.Least Severe indicates the least serious offence recorded at first referral

[70] The level of severity applied to each offence category is described in variable 38, page 28.

The least serious offence recorded at first referral for each individual was selected and returned manually.

77.Severity Variance measures the difference between the most serious and least offence

The variance is measured simply by subtracting the least severe (variable 77 – column BV) from the most severe offence (variable 76 – column BW) recorded at first referral as follows:

=BW4-BV4

Variance therefore always appears as a negative measure, the greater the number the larger the variance.

The same logic was used to calculate the following variables:

78. Career Specialisation

79. Career Escalation

80. Primary Diagnosis primary diagnosis category recorded at first referral

This variable describes the primary diagnosis category recorded for clients at their first referral to the CDT. The information was manipulated into the form required as follows:

1. all first referrals were selected;
2. four new column variables were inserted described as primary, secondary, tertiary and quaternary diagnosis;
3. data was inputted manually into each column, depending upon the primary, secondary etc. diagnosis category described at assessment, and the range was then named diagnosis;
4. data was then returned into the Input matrix using the following nested vertical lookup formula:

=IF(VLOOKUP($A4,diagnosis,9,FALSE)=0,"",VLOOKUP($A4,diagnosis,9,FALSE))

This formula states look up the client in the first referral matrix – range name diagnosis. If there is nothing recorded in column 9 – primary diagnosis – return a blank cell, otherwise return the diagnosis category.

81. Secondary Diagnosis secondary diagnosis category recorded at first referral

As above with variable 81 using the following statement, but where column 10 refers to secondary diagnosis:

=IF(VLOOKUP($A4,diagnosis,10,FALSE)=0,"",VLOOKUP($A4,diagnosis,10,FALSE)
)

82. Tertiary Diagnosis tertiary diagnosis category recorded at first referral

As above with variable 81 using the following statement, but where column 11 refers to tertiary diagnosis:

=IF(VLOOKUP($A4,diagnosis,11,FALSE)=0,"",VLOOKUP($A4,diagnosis,11,FALSE)
)

83. Quaternary Diagnosis quaternary diagnosis category recorded at first referral

As above with variable 81 using the following statement, but where column 12 refers to quaternary diagnosis:

=IF(VLOOKUP($A4,diagnosis,12,FALSE)=0,"",VLOOKUP($A4,diagnosis,12,FALSE)
)

Summary

...and so on. This appendix was intended to provide an overall indication of the complexities involved in dealing with data which describes complex social process. A number of further stages were involved in the final construction of the datasets

used in this research, each of which were based on the same logic as that detailed in this appendix.

REFERENCES

Abramson, M. F. (1972) The Criminalisation of Mentally Disordered Behaviour: Possible Side Effects of a New Mental Health Law. *Hospital and Community Psychiatry*, 23, 101-105.

Allodi, F. A., Kedward, H. B., & Robertson, M. (1977) Insane But Guilty: Psychiatric Patients in Jail. *Canada's Mental Health*, 25, 3-7.

Audit Commission (1986) *Making a Reality of Community Care.* London: HMSO.

Barnes, D., & Keithley, J. (1988) Responding To The Health Needs Of Arrestees. (pp. 1-40) Durham: University of Durham.

Barnes, D., & Keithley, J. (1999) Health Profile Of Northumbria Probation Service Clients - January 1999 Snapshot (pp. 1-13) Durham: University of Durham.

Bebbington, P., Wilkins, S., Jones, P., Forester, A., Murray, R., Toone, B., & Lewis, S. (1993) Life events and psychosis: initial results from the Camberwell Collaborative Psychosis Study. *British Journal of Psychiatry*, 162, 72-79.

Becker, H. S. (1963) *Outsiders: Studies in the Sociology of Deviance.* New York: Free Press of Glencoe.

Biles, D., & Mulligan, G. (1973) Mad or Bad? - the Enduring Dilemma. *British Journal of Criminology*, 13, 275-279.

Birmingham, L., Mason, D., & Grubin, D. (1996) Prevalence of mental disorder in remand prisoners: consecutive case study. *British Medical Journal*, 313, 1521-1524.

Brinded, P. M. J., Grant, F. E., & Smith, J. E. (1995) The Spectre of Criminalisation: remand admissions to the Forensic Psychiatric Institute; British Columbia, 1975-1990. *Medicine, Science and Law*, 35, 59-64.

Brooke, D., Taylor, C., Gunn, J., & Maden, A. (1996) Point prevalence of mental disorder in unconvicted male prisoners in England and Wales. *British Medical Journal*, 313, 1524-7.

Brown, D. (1989) *Detention at the Police Station under the Police and Criminal Evidence Act 1984*. London: HMSO.

Brown, G. W., & Birley, J. L. T. (1968) Crises and life changes and the onset of Schizophrenia. *Journal of Health and Social Behaviour*, 9, 203-214.

Brown, G. W., Harris, T., & Peto, J. (1973) Life events and psychiatric disorder. *Psychological Medicine*, 3, 159-176.

Bryman, A. (1984) The debate about quantitative and qualitative research. *British Journal of Sociology.*, 35, 75-92.

Burney, E., & Pearson, G. (1995) Mentally Disordered Offenders: Finding a Focus for Diversion. *The Howard Journal*, 34, 291-313.

Busfield, J. (1986) *Managing Madness*. London: Hutchinson.

Busfield, J. (1993) Managing madness: changing ideas and practice. In J. Bornat, C. Pereira, D. Pilgrim & F. Williams (Eds.), *Community Care: A Reader* (pp. 227-234) London: The Macmillan Press Ltd.

Busfield, J. (1996) *Men, Women and Madness: Understanding Gender and Mental Disorder*. London: Macmillan.

Byrne (Forthcoming) *Interpreting Quantitative Data*. London: Sage.

Byrne, D. (1998) *Complexity Theory and the Social Sciences*. London: Routledge.

Byrne, D. (1999) personal communication.

Campbell C. (1997) *SPSS for Windows*. Lawrence Erlbaum Associates.

Campbell, T., & Heginbotham, C. (1991) *Mental Illness: Prejudice, Discrimination and the Law*. Aldershot: Dartmouth.

Capra, F. (1946) It's a Wonderful Life: RKO.

Chesler, P. (1972) *Women and Madness*. New York: Doubleday.

Cleveland Diversion Team for Mentally Disordered Offenders (1995) Operational Policy. Middlesbrough: Cleveland Diversion Team.

Cleveland Services for mentally Disordered Offenders Working Group (Services for Adults) (1993-1994) minutes of meetings held.

Cleveland Steering Group Services for Mentally Disordered Offenders (1993-1994) minutes of meetings held.

Code for Crown Prosecutors (1992)

Cohen, J., & Stewart, I. (1994.) *The Collapse of Chaos: Discovering Simplicity in a Complex World.* London: Penguin Books.

Coid, J. W. (1988) Mentally abnormal prisoners on remand: accepted or rejected by the NHS? *British Medical Journal*, 296, 1779-82.

Conrad, P. (1981) On the Medicalization of Deviance and Social Control. In D. Ingleby (Ed.), *Critical Psychiatry - The Politics of Mental Health* (pp. 102-119): Penguin Books.

Cooper, D. G. (1967) *Psychiatry and Anti-Psychiatry.* London: Tavistock.

Coppock, V., & Hopton, J. (2000) *Critical perspectives on mental health.* London and New York: Routledge.

Cormack, R. M. (1971) A review of classification. *Journal of the Royal Statistical Association*, 134, 321-367.

Couvalis, M. (1997) *The Philosophy of Science: Science and Objectivity*. London: Sage.

Coverdill, J. E., Finlay, W., & Martin, J. K. (1994) Labor management in the Southern textile industry: comparing quantitative and qualitative comparative analysis. *Sociological Research Methods*, 23, 54-85.

Cramer, D. (1998) *Fundamental Statistics for Social Research.* London: Routledge.

Criminal Justice Act (1991) .

Criminal Justice Consultative Council (1993)

Dale, A., Arber, S., & Proctor, S. (1988) *Doing Secondary Analysis.* London: Unwin Hyman.

Daniel, A. E., Robins, A. J., Reid, J. C., & Wilfley, D. E. (1988) Lifetime and Six-Month Prevalence of Psychiatric Disorders among Sentenced Female Offenders. *Bulletin of the American Academy of Psychiatry and the Law*, 16, 333-342.

Department of Health and Social Security (1972) White Paper on National Health Service Reorganisations. London: HMSO.

Department of Health and Social Security (1975) *Care in the Community.* London: HMSO.

Department of Health (1989a) *Caring for People: community care in the next decade and beyond.* London: HMSO.

Department of health (1989b) *Working for Patients.* London: HMSO.

Department of Health (1990) *The Care Programme Approach for People with a Mental Illness.* London: HC(90) 24/LASSL(90)11, DOH.

Department of Health (1992) Health of the Nation. London: HMSO.

Department of Health (1995) *Building Bridges: a guide to arrangements for inter-agency working for the care and protection of severely mentally ill people.* London: DOH.

Department of Health (1999) National Service Framework for Mental Health: Modern Standards and Service Models, Executive Summary. London: HMSO.

Department of Health (2000) *Effective Care Co-ordination in Mental Health Services: Modernising the Care Programme Approach, A Policy Booklet.* London: DoH.

Department of Health (2000) Reforming The Mental Health Act - Part II - High Risk Patients: Executive Summary.

Department of Health and Home Office (1991a) Review of Health and Social Services for Mentally Disordered Offenders and Others Requiring Similar Services - Report of The Community Advisory Group. London: HMSO.

Department of Health and Home Office (1991b) Review of Health and Social Services for Mentally Disordered Offenders and Others Requiring Similar Services - Report of The Prison Advisory Group. London: HMSO.

Department of Health and Home Office (1991c) Review of Health and Social Services for Mentally Disordered Offenders and Others Requiring Similar Services - Interim Report. London: HMSO.

Department of Health and Home Office (1992) Review of Health and Social Services for Mentally Disordered Offenders and Others Requiring Similar Services - Final Summary Report ("The Reed Report") London: HMSO.

Department of Health and Social Security (1957) Royal Commission on the Law Relating to Mental Illness and Mental Deficiency, 1954-1957.: DHSS.

Department of Health and Social Security (1974) *Report of the Working Party on NHS Psychiatric Hospitals.* London: DHSS.

Department of Health and Social Security (1975) Better Services for the Mentally Ill. London: HMSO.

Department of Health and Social Security (1975) Report of the Committee on Mentally Abnormal Offenders ("The Butler Report") London: HMSO.

Department of Health Circular (1990) Re: CPA. .

Donzelot, J. (1979) *The Policing of Families.* New York: Pantheon.

Durkheim, E. (1933) *The Division of Labour in Society*. New York: Free Press.

Dyer, W. (1995) Cleveland's Mentally Disordered Offenders. Durham: University of Durham.

Dyer, W. (1996c) A Review of Accommodation Needs.

Dyer, W. A. (1996a) A review of the rate of referrals made by Cleveland Constabulary following a proactive pilot scheme. Middlesbrough: Cleveland Diversion Team.

Dyer, W. A. (1996b) An evaluation of the Custody Diversion Team by Cleveland's Custody Sergeants. Middlesbrough: Cleveland Custody Diversion Team.

Dyer, W. A. (1997) Report 6: A Summary of Referrals (18/4/95 - 31/10/96) Middlesbrough: Cleveland Diversion Team.

Edwards, S. M. (1984) *Women on Trail*. Manchester: Manchester University Press.

Eve, R. A., Horsfall, S., & Lee, M. E. (1997) *Chaos, Complexity and Sociology*. London: Sage Publications.

Everitt, B. (1974) *Cluster Analysis*. London: Heinemann Educational Books Ltd.

Everitt, B. (1993) *Cluster Analysis*. London: Arnold.

Fagan, J. (1990) Intoxication and Aggression. In M. Tonry & J. Wilson (Eds.), *Drugs and Crime*. Chicago: University of Chicago Press.

Fahy, T. A. (1989) The Police as Referral Agency for Psychiatric Emergencies - A Review. *Medicine, Science and Law*, 29, 315-322.

Fahy, T. A., Birmingham, D., & Dunn, J. (1987) Police admissions to psychiatric hospitals: A challenge to community psychiatry. *Medicine, Science and Law*, 27, 263-268.

Farrington, D. P. (1994) Human Development and Criminal Careers. In M. Maguire, R. Morgan & R. Reiner (Eds.), *The Oxford Handbook of Criminology* (pp. 511-84) Oxford: Oxford University Press.

Farrington, D. P., & West, D. J. (1990) The Cambridge Study in Delinquent Development: A Long-Term Follow-Up of 411 London Males. In H. J. Kerner & G. Kaiser (Eds.), *Criminality: Personality, Behaviour and Life History* (pp. 115-38) Berlin: Springer-Verlag.

Field, S. (1990) *Trends in Crime and their Interpretation*. London: HMSO.

Fielding, N. G., & Lee, R. M. (1998) *Computer Analysis and Qualitative Research*. London: Sage Publications.

Forgey, E. W. (1965) Cluster analysis of multivariate data: efficiency versus interpretability of classification. *Biometrics.*, 21, 768-769.

Fowles, A. J. (1993) The mentally abnormal offender in the era of community care. In W. Watson & A. Grounds (Eds.), *The Mentally Disordered Offender in an Era Of Community Care*. Cambridge: Cambridge University Press.

Fraser, K. (1994) A Survey of Cleveland's Mentally Disordered Offenders - a definition.: Personal Communication.

Freeman, R. J., & Roesch, R. (1989) Mental disorder and the criminal justice system: a review. *International Journal of Law and Psychiatry*, 12, 105-115.

Frieze, I., & Browne, A. (1989) Violence in Marriage. In L. Ohlin & M. Tonry (Eds.), *Family Violence*. Chicago: University of Chicago Press.

Garson, G. D. (1998) *Neural Networks: An Introductory Guide for Social Scientists*: Sage Publications.

Gilbert, N., & Troitzsch, K. G. (1999) *Simulation for the Social Scientist*: Open University Press.

Gleick, J. (1988) *Chaos: the amazing science of the unpredictable.* London: Minerva.

Goffman, E. (1961) *Asylums: Essays on the Social Situation of Mental Patients and other Inmates*. New York: Doubleday and Co.

Gordon, D., & Hedderman, C. (1993) Panel assessment schemes and other response to mentally disordered offenders: a survey of probation areas (Research Bulletin Number 34) London: Home Office.

Gould, S.J (1991) *Wonderful Life: the Burgess Shale and the Nature of History*. Penguin.

Greenhalgh, N. M., Wylie, K., Rix, K. J. B., & Tamlyn, D. (1996) Pilot Mental Health Assessment and Diversion Scheme for an English Metropolitan Petty Sessional Division. *Medicine, Science and Law*, 36, 52-58.

Griffiths Sir R (1988) *Community Care: agenda for action.* London: HMSO.

Maden A, Swinton M, Gunn J (1992) A Survey of Prearrest Drug-Use in Sentenced Prisoners. *British Journal of Addiction*, 87:1, 27-33.

Gunn, J., Maden, A., & Swinton, M. (1991a) Treatment needs of prisoners with psychiatric disorders. *British Medical Journal*, 303, 338-341.

Gunn, J., Maden, T., & Swinton, M. (1991b) How many prisoners should be in hospital? *Home Office Research and Statistics Department*, Research Bulletin No. 31, 9-15.

Gunn, J., Robertson, G., Dell, S., & Way, C. (1978) *Psychiatric Aspects of Imprisonment.* London: Academic Press.

Hakim, C. (1982) *Secondary Analysis in Social Research.* London: Allen and Unwin.

Hartigan, J. A. (1975) *Clustering Algorithms*. London: John Wily and Sons.

Haynes, P., & Henfrey, D. (1995) Making a Reality of Reed. *Probation Journal*, 83-87.

Health and Community Care Act (1990) .

Hedderman, C. (1993) Panel Assessment Schemes for Mentally Disordered Offenders (Research and Planning Unit Paper 76) London: Home Office.

Heidensohn, F. (1981) Women and the Penal System. In A. Morris & L. Gelsthorpe (Eds.), *Women and Crime*. London: Macmillan.

Heidensohn, F. (1994) Gender and Crime. In M. Maguire, R. Morgan & R. Reiner (Eds.), *The Oxford Handbook of Criminology*. Oxford: Clarendon Press.

Holloway, J., & Shaw, I. (1992) Providing a forensic psychiatry service to a magistrates' court. *Journal of Forensic Psychiatry*, 3, 153-159.

Home Office (1990a) Home Office Circular No.66/90, Provision for Mentally Disordered Offenders. London: Home Office.

Home Office (1990b) HMP Brixton: Report by HM Chief Inspector of Prisons. London: Home Office.

Home Office (1995) Home Office Circular No.12/95, Mentally Disordered Offenders: Inter-Agency Working. London: Home Office.

Home Office (2000) Notifiable offences recorded by the police: by type of offence, 1981, 1991 and 1998-9: Social Trends Dataset: at URL http://www.statistics.gov.uk/statbase/.

Home Office and Department of Health and Social Security (DHSS) (1975) *Report of the Committee on Mentally Abnormal Offenders (The Butler Committee)* Cmmnd, 6244, London: HMSO.

Home Office/Department of Health and Social Security (1987) Report of the Interdepartmental Working Group of Home Office and DHSS Officials on Mentally Disturbed Offenders in the Prison System in England and Wales. London: Home Office/DHSS.

Huber, G. L., & C, M. G. (1991) Computer assistance for testing hypotheses about qualitative data: the software package AQUAD 3.0. *Qualitative Sociology*, 14, 325-348.

ICD-10 (1992) *The ICD-10 Classification of Mental and Behavioural Disorders: clinical descriptions and diagnostic guidelines*. Geneva: World Health Organization.

Jacobs, M. (1977) *The Social Context of Prisons*. Penguin.

James, A. (1996) Life on the Edge - Diversion and the Mentally Disordered Offender. Volume 1: Policy Report. London: The Mental Health Foundation.

James, A. (1996) Life on the Edge - Diversion and the Mentally Disordered Offender. Volume 2: Practice Report. London: The Mental Health Foundation.

James, D. V., & Hamilton, L. W. (1991) The Clerkenwell Scheme: assessing efficacy and cost of a psychiatric liaison service to a magistrates' court. *British Medical Journal*, 303, 282-285.

James, D. V., & Hamilton, L. W. (1992) Setting Up Psychiatric Liaison Schemes to Magistrates' Courts: problems and practicalities. *Medicine, Science and Law*, 32, 167-176.

James, J. J. (1977) Macroscoiology and Imprisonment. In D. Greenberg (Ed.), *Corrections and Punishment* (pp. 89-107) Beverly Hills, CA: Sage.

Jary, D. J. a. J. (1991) *Dictionary of Sociology*: Harper Collins Publishers.

Joseph, P. (1991) Mentally Disordered Offenders: diversion from the criminal justice system. *Journal of Forensic Psychiatry*, 1, 133-138.

Joseph, P. L. A. (1992) Psychiatric Assessment at the Magistrates Court. London: Home Office and Department of Health.

Joseph, P. L. A., & Potter, M. (1993) Diversion from custody, I and II. *British Journal of Psychiatry*, 162, 325-334.

Kitterie, N. (1971) *The Right to Be Different*. Baltimore: Johns Hopkins Press.

Laing, R. D. (1959) *The Divided Self: A Study of Sanity and Madness*. London: Tavistock.

Laing, R. D. (1961) *The Self and Others: Further Studies in Sanity and Madness*. London: Tavistock.

Land, N. (1994) A Survey of Cleveland's Mentally Disordered Offenders - a definition.: Personal Communication.

Lemert, E. M. (1967) *Human Deviance, Social Problems and Social Control.* Englewood Cliffs, NJ: Prentice-Hall.

Levi, M. (1994) Violent Crime. In M. Maguire, R. Morgan & R. Reiner (Eds.), *The Oxford Handbook of Criminology.* Oxford: Clarendon Press.

Liebrand, W. B. G., Nowak, A., & Hegselmann, R. (1998) *Computer Modeling of Social Processes*: Sage Publications.

Lim, M. H. (1983) A psychiatric emergency clinic: a study of attendances over six months. *British Journal of Psychiatry*, 143, 460-466.

Link, B. G., & Cullen, F. T. (1986) Contact with the Mentally Ill and Perceptions of How Dangerous They Are. *Journal of Health and Social Behaviour*, 27, 289-303.

Lorr, M. (1983) *Cluster Analysis for Social Scientists: techniques for analyzing and simplifying complex blocks of data.* London: Jossey-Bass Publishers.

Lowman, J., Menzies, R. J., & Palys, T. S. (1987) Introduction: transcarceration and the modern state of penality. In J. Lowman, R. J. Menzies & T. S. Palys (Eds.), *Transcarceration: Essays in the Sociology of Social Control*: Gower.

Lowman, J., Menzies, R. J., & Palys, T. S. (1987) Transcarceration: Essays in the Sociology of Social Control. In A. E. Bottoms (Ed.), *Cambridge Studies in Criminology.* Aldershot: Gower.

Maden, A., Swinton, M., & Gunn, J. (1994) A Criminological and Psychiatric Survey of Women Serving a Prison Sentence. *British Journal of Criminology*, 34, 172-191.

Marquart, J. W., Merianos, D. E., Cuvelier, S. J., & Carroll, L. (1996) Thinking About the Relationship Between Health Dynamics in the Free Community and the Prison. *Crime and Delinquency*, 42, 331-360.

Marriot, F. H. C. (1971) Practical Problems in a Method of Cluster Analysis. *Biometrics.*, 27, 501-514.

Marsh, K. (1982) *The Survey Method.* London: Allen and Unwin.

Mason, T., & Mercer, D. (1999) *A Sociology of the Mentally Disordered Offender*. London and New York: Longman.

Matza, D. (1969) *Becoming Deviant*. Englewood-Cliffs NJ: Prentice-Hall.

Meltzer, H., Gill, B., Petticrew, M., & Hinds, K. (1995) OPCS Surveys of Psychiatric Morbidity in Great Britain, Report 1: the prevalence of psychiatric morbidity among adults living in private households. London: Office of Population Censuses and Surveys.

Mental Health Act (1959)

Mental Health Act (1983)

Microsoft Corporation (1997) Access 97

Microsoft Corporation (1997) Excel 97

Ministry of Health (1962) A Hospital Plan for England and Wales. London: HMSO.

Mojena, R. (1977) Hierarchical Grouping Methods and Stopping Rules: An Evaluation. *Computer Journal*, 20, 359-363.

Monahan, J. (1973) The Psychiatrisation of Criminal Behaviour: A Reply. *Hospital and Community Psychiatry*, 24, 105-107.

Morrison, D. A. (1994) Cleveland Inter-Agency Steering Group for Mentally Disordered Offenders: Strategy on Services for Mentally Disordered Offenders. Middlesbrough: Cleveland Inter-Agency Steering Group for Mentally Disordered Offenders.

Morrison, D. A. (1994) Cleveland Probation Service working for The Inter-Agency Steering Group - Draft Strategy on Services for Mentally Disordered Offenders. Middlesbrough: Cleveland Probation Service.

Moss, S. (1999) MAS methodology: a proposal.: Electronic Mail: SimSoc List.

Muijen, M. (1996) Scare in the community: Britain in moral panic. In T. Heller, J. Reynolds, R. Gomm, R. Muston & S. Pattison (Eds.), *Mental Health Matters: A Reader.* (pp. 143-155): Macmillan in association with The Open University.

NACRO Mental Health Advisory Committee (1993) Diverting Mentally Disturbed Offenders from Prosecution. London: NACRO.

National Schizophrenia Fellowship (1999a) Mental illness and the criminal justice system. London: NSF.

National Schizophrenia Fellowship (1999b) National Diversion and Liaison Scheme Register. London: NSF.

Northern Regional Health Authority (1993) A Strategy For Mentally Disordered Offenders And Others Requiring Similar Services - A Summary. Newcastle upon Tyne: Northern Regional Health Authority.

NHS Management Executive (1994) *Supervision Registers.*

Orchard House Software Developments (1995) Cleveland Diversion Team Database.

Outhwaite, W. (1987) *New Philosophies of Social Science.* London: Macmillan.

Pawson, R., & Tilley, N. (1997) *Realistic Evaluation.* London: Sage Publications.

Pawson, R. (2000) Middle-range realism. *Archive of European Sociology*, XL1, 2, 283-325.

Peay, J. (1994) Mentally Disordered Offenders. In M. Maguire, R. Morgan & R. Reiner (Eds.), *The Oxford Handbook of Criminology* (pp. 1119-1160) Oxford: Clarendon Press.

Pederson, P. (1993) A Survey of the Incidence of People with Mental Health Problems in Those Detained Overnight at Teesside Law Court "Bridewell Cells". Middlesbrough: The Hutton Unit.

Penrose, L. S. (1939) Mental Disease and Crime: Outline of a Comparative Study of European Statistics. *British Journal of Medical Psychology.*, 18, 1-15.

Penrose, L. S. (1943) A Note On The Statistical Relationship Between Mental Deficiency And Crime In The United States. *American Journal of Mental Deficiency*, 47, 462-6.

Pilgrim, D., & Rogers, A. (1999) *A Sociology of Mental Health and Illness.*: Open University Press.

Platt, J. (1986) Functionalism and the survey: the relation of theory and method. *Sociological Review.*, 35, 501-536.

Police and Criminal Evidence Act (1984)

Powers in the Criminal Justice and Court Services Act (2000)

Prins, H. (1995) *Offenders, Deviants or Patients?* London and New York: Routledge.

Prior, L. (1991) Mind, body and behaviour: theorisations of madness and the organisation of therapy. *Sociology*, 25, 403-22.

Prosecution of Offences Act (1985)

Purchase, N. D., McCallum, A. K., & Kennedy, H. G. (1996) Evaluation of a psychiatric court liaison scheme in north London. *British Medical Journal*, 313, 531-532.

Rabinow, P. (1991) *The Foucault Reader*: Penguin Books.

Ragin, C. (1987) *The Comparative Method:Moving Beyond Qualitative and Quantitative Strategies*: University of California Press.

Ragin, C. C. (1994) *Constructing Social Research*: Pine Forge Press.

Rappeport, J. R., & Lassen, G. (1966) The dangerousness of female patients: a comparison of the arrest rate of discharged psychiatric patients and the general population. *American Journal of Psychiatry*, 123, 413-9.

Research and Intelligence Unit (1994) Census 1991: Households and Families in Cleveland: Cleveland County Council.

Reed, M. and Harvey, D.L. (1992) The new science and the old: complexity and realism in the social sciences. *Journal for the Theory of Social Behaviour*, 22, 356-79.

Revolving Doors Agency (1993) *Mental Health and Housing*. London: RDA.

Rieff, P. (1966) *The Triumph of the Therapeutic*. New York: Harper and Row.

Ritchie, J., Dick, D., & Lingham, L. (1994) Report of the Inquiry into the Care and Treatment of Christopher Clunis. London: HMSO.

Rogers, A., & Faulkner, A. (1987) A Place of Safety? London: MIND.

Ruelle, D., & Takens, F. (1971) On the Nature of Turbulence. Harper and Row.

Russell, D. (1995) *Women, Madness and Medicine*. Cambridge: Polity Press.

Sarder, Z., & Abrams, I. (1998) *Chaos For Beginners*. Cambridge: Icon Books.

Scheff, T. J. (1967) *Mental Illness and Social Processes*. New York-London: Harper Row.

Schneider, J., Carpenter, J., & Brandon, T. (1999) Operation and organisation of services for people with severe mental illness in the UK - A Survey of the Care Programme Approach. *British Journal of Psychiatry*, 175, 422-425.

Schutz, A. (1972) *The Phenomenology of the Social World*. London: Heinemann.

Scull, A. (1977) *Decarceration: Community Treatment and the Deviant - A Radical View*. Englewood Cliffs, NJ: Prentice Hall.

Sneath, P. H. A., & Sokal, R. R. (1973) *Numerical Taxonomy*. San Francisco: W.H. Freeman.

Social Services Inspectorate (1997) Services for Mentally Disordered Offenders in the Community. London: Department of Health.

Solivettii, L. M. (1999) De-institutionalisation, Psychiatric Treatment and Mentally Disordered Offenders in Italy: Some Critical Considerations. *The Howard Journal*, 38, 173-197.

SPSS Inc. (1998) SPSS V.8.0.

Steadman, H. J., Monahan, J., Duffee, B., Hartstone, E., & Robbins, P. C. (1984) The Impact Of State Mental Hospital Deinstitutionalisation On United States Prison Populations, 1968-1978. *The Journal of Criminal Law and Criminology.*, 75, 474-490.

Steadman, H. J., & Morrissey, J. P. (1987) The impact of deinstitutionalisation on the criminal justice system: implications for understanding changing modes of social control. In J. Lowman, R. J. Menzies & T. S. Palys (Eds.), *Transcarceration: Essays in the Sociology of Social Control* (pp. 227-248) Aldershot: Gower.

Stephen, M. (1988) Problems of police/social work interaction: some American lessons. *Howard Journal of Criminal Justice*, 27, 81-91.

Sundgren, B. (1985) *Data Bases and Data Models*. Sweden: Chartwell-Bratt Ltd.

Szasz, T. (1970) *Manufacture of Madness*. New York: Dell.

Szasz, T. S. (1961) *The Myth of Mental Illness: Foundations of a Theory of Personal Conduct.* New York: Harper and Row.

Taylor, D. (1987) Current usage of benxodiazepines in Britain. In H. Freeman & Y. Rue (Eds.), *Benzodiazepines in Current Clinical Practice*. London: Royal Society of Medicine Services.

Taylor, P. J. (1986) Psychiatric Disorder in London's Life-Sentenced Offenders. *British Journal of Criminology*, 26, 63-78.

Taylor, P. J., & Gunn, J. (1984) Violence and psychosis. 1. Risk of violence among psychotic men. *British Medical Journal.*, 288, 1945-9.

Thorndike, R. (1953) Who belongs in a family? *Psychometrica*, 18, 267-276.

Toyne, M. (1992) Mentally Disordered Offenders - A Summary of Data Obtained by the Court Team, June/July/August 1992. Middlesbrough: Cleveland Probation Service.

Troitzsch, K. G. (1998) Multilevel Process Modeling in the Social Sciences. In W. B. G. Liebrand, A. Nowak & R. Hegselmann (Eds.), *Computer Modeling of Social Processes* (pp. 20-36): Sage Publications.

Tuck, M. (1989) *Drinking and Disorder: A Study of Non-Metropolitan Violence*. London: HMSO.

Walker, J. (1992) Police Contact with the Mentally Disordered. London: Home Office.

Ward, J. H. J. (1963) Hierarchical Grouping to Optimize an Objective Function. *Journal of the American Statistical Association*, 58, 236-244.

Watson, W. (1993) Future directions for research. In W. Watson & A. Grounds (Eds.), *The Mentally Disordered Offender in an Era of Community Care* (pp. 191-200) Cambridge: Cambridge University Press.

Weller, M. P. I., & Weller, B. G. A. (1988) Crime and Mental Illness. *Medicine, Science and Law*, 28, 38-46.

World Health Organisation (1978) *International Classification of Diseases*. Geneva: World Health Organisation.

Williams, M. (2000) Interpretivism and Generalisation. *Sociology*, 34, 209-224.

Williams, M. (2000) *Science and Social Science: An Introduction*. London: Routledge.

World Health Organisation (1999) Strengthening Community Mental Health Services and Primary Care.

Zubin, J. (1938) A technique for measuring like-mindedness. *Journal of Abnormal Social Psychology.*, 33, 508-516.