RESEARCH ON THERAPEUTIC COMMUNITIES IN PRISONS
a review of the literature

Produced for the Prison Service by
Barbara Rawlings
1998

Barbara Rawlings B.Sc., B.Phil., Ph.D.
Honorary Research Fellow
Department of Sociology
Coupland 2 Building
University of Manchester
Oxford Road
M13 9PL
## CONTENTS

<table>
<thead>
<tr>
<th>Acknowledgements</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary of findings</td>
<td>2</td>
</tr>
<tr>
<td>Introduction: Therapeutic communities in prisons - an overview</td>
<td>4</td>
</tr>
<tr>
<td>Existing literature reviews</td>
<td>6</td>
</tr>
<tr>
<td>The literature search and selection strategies</td>
<td>6</td>
</tr>
<tr>
<td>The layout of the report</td>
<td>6</td>
</tr>
<tr>
<td>Methodological note</td>
<td>7</td>
</tr>
<tr>
<td>Section 1: Therapeutic Community Provision for Offenders in the UK</td>
<td>8</td>
</tr>
<tr>
<td>Therapeutic Community Provision for Offenders outside the UK</td>
<td>10</td>
</tr>
<tr>
<td>Research on the prevalence of psychiatric disorder in prisons</td>
<td>12</td>
</tr>
<tr>
<td>Section 2: Methodological problems in research</td>
<td>13</td>
</tr>
<tr>
<td>Section 3: Follow-up research</td>
<td>16</td>
</tr>
<tr>
<td>Democratic therapeutic communities in prisons</td>
<td>16</td>
</tr>
<tr>
<td>Hierarchical therapeutic communities in prisons</td>
<td>23</td>
</tr>
<tr>
<td>Democratic therapeutic communities outside prisons</td>
<td>27</td>
</tr>
<tr>
<td>Hierarchical therapeutic community outside prison</td>
<td>29</td>
</tr>
<tr>
<td>Section 4: Behavioural change during treatment</td>
<td>33</td>
</tr>
<tr>
<td>Democratic therapeutic communities in prisons</td>
<td>33</td>
</tr>
<tr>
<td>Hierarchical therapeutic communities in prisons</td>
<td>35</td>
</tr>
<tr>
<td>Democratic therapeutic communities outside prisons</td>
<td>36</td>
</tr>
<tr>
<td>Hierarchical therapeutic communities outside prisons</td>
<td>37</td>
</tr>
<tr>
<td>Section 5: Other research issues</td>
<td>38</td>
</tr>
<tr>
<td>Studies of early leaving</td>
<td>38</td>
</tr>
<tr>
<td>Prediction studies</td>
<td>39</td>
</tr>
<tr>
<td>Therapeutic process</td>
<td>40</td>
</tr>
<tr>
<td>Ward Atmosphere Studies</td>
<td>40</td>
</tr>
<tr>
<td>Co-morbidity of mental disorders</td>
<td>41</td>
</tr>
<tr>
<td>Cost-Offset Studies</td>
<td>42</td>
</tr>
<tr>
<td>Section 6: Research reviews</td>
<td>44</td>
</tr>
<tr>
<td>Meta-analysis</td>
<td>44</td>
</tr>
<tr>
<td>Section 7: Discussion</td>
<td>46</td>
</tr>
<tr>
<td>Appendix: The Search Strategies</td>
<td>49</td>
</tr>
<tr>
<td>Book bibliographies handsearched</td>
<td>49</td>
</tr>
</tbody>
</table>
Acknowledgements

I would like to extend my thanks to several people for their help in furthering this piece of work. My research advisory committee, who helped with information on the whereabouts of therapeutic communities, with names of contacts and with general information about therapeutic communities in prisons, comprised Andrew Downie, Senior Probation Officer, Grendon, Marya Hemmings of the GTC at Gartree Prison, David Kennard, of the Retreat, in York, Dr. Judy MacKenzie, Therapeutic Community Consultant, Joe Mullins, Governor, Wormwood Scrubs, and John Shine, Director of Research and Development at Grendon. I would also like to thank Margaret Newton, Psychologist at Grendon, Roland Woodward, Principal Psychologist at HMP Gartree, Tim Newell, Governor of Grendon, Dr. Zoe Ashmore, Psychologist at HMYOI Aylesbury, and Rob Bignall, Therapy Manager at the Chiltern Unit, HMYOI Aylesbury. My thanks also go to all the staff I have talked to at different times, face-to-face and over the telephone, in different therapeutic communities in prisons and in the community, and to the inmates who have given me their views of therapeutic community life or welcomed me into their meetings. And very importantly, I want to thank Karen George, whose knowledge and ability in the area of database searching got this whole project moving.
Summary of findings

This review of therapeutic community literature examines the research from prisons and elsewhere on the outcome of therapeutic community treatment for offenders.

Therapeutic communities (TCs) are divided into two types, democratic, which are the type found mostly in prisons in the UK and Europe, and hierarchical, which are the type found mainly in USA prisons. In general, democratic TCs address problems of psychiatric disturbance, whilst hierarchical TCs are designed to treat drug abuse.

The research reviewed mainly falls into two categories: follow-up research, which examines changes once treatment is completed, and in-treatment research, which examines changes between admission and leaving.

A great deal of USA research on hierarchical TCs has demonstrated their effectiveness in reducing recidivism and relapse. These TCs are fairly widespread in US prisons, and have become a relatively-well accepted form of drug abuse treatment. They generally provide good aftercare and focus strongly on reintegrating the inmate into the community. Part of their success is due to large numbers of people in the programmes, which enables them to provide ready-made peer groups for ex-addicts and positive reinforcement. They have a high drop-out rate however, particularly in the first few weeks of treatment.

Research on democratic therapeutic communities demonstrates their effectiveness both in lowering reconviction rates and in improving behaviour and psychiatric symptoms. TCs however are not so widespread in the UK and Europe, and small TCs in prisons tend to be short-lived or under regular threat of closure, and under-researched. Exceptions to this are Grendon Prison, the Special Unit at Barlinnie Prison (which closed in 1995) and a number of Social Therapeutic Institutions in Germany. These have all been productive of research into effectiveness and therapeutic process.

This review also looked at research outside prisons, in particular at the Henderson studies on the effectiveness of TCs in the treatment of psychopathy. TCs have been found to improve psychopathic symptoms. This finding apparently conflicts with findings from elsewhere which suggest that TCs have no effect on psychopathy. The Henderson work disputes this, noting that (a) there are different kinds of psychopaths, and some psychopathic types are more benefited than others and (b) it is critical to maintain high-quality treatment and a high level of programme integrity for improvements to occur.

The following points are of interest:

1. Many of the studies showed a positive relationship between outcome and length of treatment. Optimum treatment length varies from 9 months to over 18 months. It is
generally agreed that very short lengths of stay, which may happen when an inmate changes his mind or is expelled for breaching a rule, are not beneficial, and may make matters worse.

2. In-prison therapeutic communities in the UK tend to have no specialised after-care facilities, and inmates not transferred back into mainstream prison are released into the community. Hierarchical TCs in the USA on the other hand are often linked with similar organisations in the community, so that inmates leave prison and go straight into another TC. This is extremely helpful for reintegrating the inmate into the wider community, and has been shown to have a beneficial effect on reoffending. Social Therapeutic Institutions in Germany are highly geared towards the eventual readmission of inmates into society, and incarceration is regarded as an essentially rehabilitative process.

3. There is general agreement that TCs cope well with violent and disruptive inmates, and evidence to show that behaviour improves dramatically when difficult prisoners enter TCs.

4. Several reconviction studies demonstrate greater improvements for TC inmates than for mainstream prison inmates despite the tendency of TCs to take in some of the more difficult prisoners.

5. There are no democratic style therapeutic communities in prisons for women, despite evidence that women inmates could benefit from this form of treatment. In the USA there are some facilities for treating women drug abusers in prison-based TCs.

6. Small TC units in prisons tend to be relatively short-lived, possibly because of the consistent difficulties of maintaining therapeutic program integrity inside a discipline environment. Either small in-prison TCs become too isolated from the host institution, or are not separate enough. Prison TCs which have their own buildings, such as Grendon, or some of the Social Therapeutic Institutions are better able to harmonise the requirements of therapy and security.

7. More research is needed, both into outcome of treatment and into therapeutic process. Treatment outcome research is important not only to justify the approach as a whole, but also to establish the effectiveness of the separate TCs. Process research is needed in order to know more precisely how therapeutic community treatment effects the changes which are observed, so that this information can be fed back to the communities to inform and improve practice.
INTRODUCTION

Therapeutic communities in prisons - an overview

Within the prison sector, and therapeutic community thinking in general, there are two types of therapeutic community (TC), which are distinguishable by their respective cultures, and which derive from different antecedents (Jones 1984; Kennard, 1983). These are democratic therapeutic communities and hierarchical therapeutic communities.

The democratic therapeutic community is generally taken to have begun with the work of Dr. Maxwell Jones during and after the Second World War, and to have been developed at the Henderson Hospital during the 1960s. The approach can be seen as an attempt to transform the traditional authoritarian psychiatric hospital environment. It distinctively works around four principles, outlined by Rapoport (1960): democratization (the sharing of decision-making between all members of the community, both staff and patients) permissiveness (tolerance of other members' behaviour, so that patients can make "mistakes" which can then be examined therapeutically, and used as insights into problems and as means of learning new behaviours) communalism (the development of a community which works together, shares feelings and problems and in which members take responsibility for each other's behaviour and learning) and reality confrontation (continuous feedback from other members about how they perceive and are affected by each other's behaviour). Characteristically, democratic therapeutic communities have frequent and regular large group meetings, attended by all members of the community, where housekeeping matters are arranged or reported and which provide a public forum for confrontation and complaint about members' behaviour. These communities usually also run small therapeutic groups which provide a more intimate atmosphere, and at which sensitive matters may be dealt with. In addition other therapeutic opportunities may be provided, such as art or drama therapy. The whole experience of being a patient in a therapeutic community is seen to be therapeutic, since opportunities for therapeutic work exist all the time, and the responsibility for helping each other is devolved to everybody. Community members are encouraged to talk about their problems and progress as much as possible. Since patients are often working with difficult and painful material, it is held that too much structure or too many extra activities may be used to defend against the pain which must be experienced if progress is to be made, and that people need time to "work through" the things they are learning. Consequently, spare time is deliberately built into democratic TC timetables, as a therapeutic device. Nevertheless, many democratic TCs offer a range of additional therapeutic opportunities, such as cognitive or behavioural programmes and creative therapies and there is often a tension between the introduction of structured activities and the need for spare time.

In prisons, the democratic TC model has been taken on, but has been modified to accommodate custodial requirements of discipline and control. In particular, the
concept of democracy has been limited, so that inmates are allowed to make major community decisions without compromising the rules of the host institution, or the reality of their incarcerated state (Scharf 1980). Wexler (1997) takes the view that small therapeutic communities in prisons need to remember that they are existing in an environment which has been established for security purposes, rather than for treatment, and as such they are guests. Reviewing the four principles of therapeutic community treatment at Grendon, Cullen (1997) reports that the principle of "democratization" has been altered to "empowering" (every community member has a direct say in every aspect of how the wing is run), "permissiveness" has become "support" (which is the acceptance of who someone is and what he has done and experienced), "communalism" has become "responsibility" (both individual and collective) and "reality confrontation" has become "confrontation", which is a more directive approach to cutting through an inmate's tendency to deny and minimalise his offences and his actions. For descriptions of democratic TCs in prisons, see Briggs 1972; Genders and Player 1995; Parker 1970.

The hierarchical or concept-based therapeutic community model derives from Synanon, a self-help community set up by Charles Dederich in San Francisco in 1959. It was based on the hierarchical structure similar to that found in large industrial organisations, and on a version of the Alcoholics Anonymous 12-stage program adapted to treat drug addicts. Current TCs on this model usually have a three stage programme - an induction phase which may last about three months, a treatment phase, which may last nine months to a year, and a re-entry phase, during which residents find work or education and accommodation out in the community. Residents work their way up a hierarchical structure, which offers positions of increasing responsibility and opportunity to carry out and manage different aspects of the work of running the TC, such as cooking, cleaning, house maintenance, office duties and fund-raising. Sanctions include losing their position and being made to wash up or clean for a specified length of time. Large meetings are held regularly, often entirely run by residents, who are seen as moving more and more towards the position of responsibility and trust accorded to staff members as they rise up the hierarchy. Therapy groups tend to be highly confrontational, as ex-addicts are seen as particularly good as manipulating others and at defending themselves. A feature of hierarchical TCs is that according to the original ideal they should be staffed entirely by ex-addicts, who have successfully graduated from the programme, and who are better than non-addicts at identifying devious strategies. In practice, staff of hierarchical communities are often a mix of professionals and ex-addicts.

These hierarchical communities are fairly widely used in prisons, especially in the USA. (For historical reviews of TCs in US prisons, see Pan et al. 1993; Wexler and Love 1994). However, Wexler (1997) has identified problems with transporting the hierarchical TC concept into prisons, in particular the difficulties of employing ex-addicts, who often have criminal records and no professional qualifications, and the problem of finding real work for the recovering addicts to do, since the cooking, cleaning, laundry etc in prisons is now generally done by paid contractors. Although some prisons have attempted to change some of their policies and practices to
accommodate the needs of hierarchical TCs, the TCs have also had to make changes for their move into prisons. For descriptions of hierarchical TC programs in prisons see Eisenberg and Fabelo 1996; Hooper and Wald 1990; Hooper et al. 1993; Inciardi 1996; Knight et al. 1997; Mullen 1996; Pan 1993; Singer 1996; Schwartz et al.1996; Wexler and Williams 1986.

The differences between concept-based and democratic TCs is reflected in the type of literature found on them. In a systematic study of the number and influence of TC publications, Nieminen and Osohanni (1997) found that of 223 TC articles published between 1987 and 1992, 38% were related to concept-based programmes for substance abusers, and 36% for democratic style facilities in psychiatric hospitals. They report that systematic data collection, statistical analysis and the use of control groups was more common in the studies of concept-based TCs, whilst qualitative, descriptive methods were more common in the studies of democratic TCs.

Existing literature reviews

A number of literature reviews already exist, which have a bearing on this one (see Section 6). These have been helpful, especially where they have provided a historical overview of the development of TCs. However, the existing reviews tend to focus either on particular types of TC (eg: Wexler and Love 1994), on particular types of patient (Warren and Dolan 1996a) or particular countries (Lösel and Egg 1997) Where the interest is in TCs, information on prison TCs is thinly reported. The present report, by focusing primarily on prison TCs, attempts to remedy this imbalance.

A number of meta-analyses of in-prison TC research have been conducted, which provide statistical analyses of research findings, and these are reported in Section 6.

The literature search and selection strategies

This report reviews the literature on therapeutic communities collected via three research strategies (see appendix): bibliographic database searches, hand searches of bibliographies of relevant books and articles, and literature recommended by practitioners and researchers in the field. From the start it was intended that the report would not focus exclusively on therapeutic communities in prisons, since it was thought that there would be relatively little work on this, and that a more balanced picture would emerge if therapeutic communities in community and hospital settings were also included. Within these parameters, a wide variety of texts were considered for inclusion: although the core of the report was to be a summary of evaluation and outcome literature, other literature was included if it provided information on the existence and extent of therapeutic community facilities, particularly outside the UK and USA. The main focus however remains evaluation and outcome, and literature
which centrally addresses these topics has been more extensively reported here than literature which offers descriptions of regimes and therapeutic processes.

**The layout of the report**

Section 1 provides a brief description of the current extent of therapeutic community facilities and approaches in the UK and elsewhere, and reviews some of the literature on the prevalence of mental disorder in prisons. Section 2 outlines some of the methodological problems of evaluation research identified and discussed in the literature, such as ascertaining outcome of treatment and identifying control samples. Sections 3 and 4 report the literature on two kinds of outcomes: Section 3 covers behaviour after treatment has finished, and in particular research on reconviction and rehospitalisation, and Section 4 covers in-treatment behaviour, in particular modifications in behaviour during treatment and comparisons of symptomatology between admission and discharge. For clarity, these sections have been sub-divided so that they each cover four different kinds of treatment: democratic style TCs in prisons; democratic style TCs outside prisons; concept-based TCs in prisons and concept-based TCs outside prisons. Whilst these categories are sometimes blurred in the actual live TC projects which the research reports, they were adopted here because they correspond with the kinds of distinctions most often drawn in the literature and by practitioners. Section 5 summarises a series of other relevant studies which are different enough from those in Sections 3 and 4 to warrant their own space. These include some of the more recent developments in the research, such as cost-offset studies, studies of the extent of co-morbidity of symptoms and studies which attempt to derive or apply theories of change to TCs. Section 6 outlines other literature reviews, and summarises the findings of meta-analyses.

**Methodological note**

This report has been compiled and written as a piece of qualitative research. The intention was to identify, collect, read and report all the material which could be found relating to therapeutic communities in prisons, and in particular to report the effects which therapeutic community treatment has been variously found to have on inmates. The report does not set out to evaluate TC approaches, although there are at least two major types of TC (democratic and hierarchical) as well as many variations of these, often identified as modified TCs. Where evaluative debate has been fierce in the literature, this has been reported. Nor does the report set out to evaluate research methods and findings. Although care has been taken to report these methods and findings in enough detail to show how the conclusions of the different studies were reached. The report thus provides a piece of comprehensive, descriptive research, which it is hoped will add to the existing knowledge of both practitioners and researchers, so that they can continue to make informed choices about the direction of their work.
SECTION 1

Therapeutic Community Provision for Offenders in the UK

The range of psychiatric provision for mentally disordered offenders is reviewed in Bowden and Bluglass (1990) and Prins (1993). Current therapeutic community provision in UK prisons is divided into two main types: those TCs following the democratic model originated for psychiatric patients by Maxwell Jones at the Henderson Hospital in England, and those following the hierarchical model originated for substance abusers by Charles Dederich at Synanon in California.

The bulk of published research work from prison therapeutic communities in the UK has focussed on two institutions: Grendon Prison in Buckinghamshire and the Special Unit at Barlinnie Prison in Glasgow.

Grendon

Opened in 1962, this is the major therapeutic community for offenders in Britain with four wings, each operating as a separate therapeutic community. Inmates are received from prisons nationally, and spend an introductory period in an assessment unit, before being allocated to one of the wings, where they might stay for up to eighteen months or more. Within the therapeutic milieu, Grendon also runs a number of specialised treatment programmes, directed at particular offences. There has been considerable research into behavioural change and reconviction at Grendon which is described in sections 3 and 4. Descriptive studies include Parker (1970), who interviewed staff and inmates to produce an insiders' picture of the life of the prison, and Genders and Player (1995) who carried out a detailed study using observation and interviews, and describe the various stages of admission, treatment, discharge and life after Grendon. Inevitably, changes occur in organisation and therapeutic emphasis: Cullen (1997) provides a recent description of the regime.

The Special Unit at Barlinnie

Established in 1973 in response to growing concern about increasing violence in Scottish prisons, the BSU was designed to house only seven or eight persistently violent prisoners (SPS 1988). When it closed in 1995, had treated only 36 prisoners in total, whose length of stay ranged from 4-126 months. The BSU was set up to operate as a therapeutic milieu, staffed by a combination of Discipline and Nurse Officers, and it evolved into a therapeutic community during its first few years (SPS 1994:14). The BSU was closed because of concerns that the inmates were no longer engaged in constructive activities and that the regime was not in the control of the staff. A number of problems with the BSU were identified as "regime slippage" (SPS 1994:17-19; Wozniak 1995) The authors of the Working Party Report recommended that the Barlinnie Special Unit should be closed, and that the small units at Shotts Prison and at Peterhead Prison, should take on some of the features which the SBU had developed during its early days, and which had worked well at that time. These features were: weekly community meetings, with compulsory attendance, special meetings, which could be called by any member of the
community, and which it would be compulsory to attend, four groups to help inmates adjust to the unit and to provide individual support, daily meals together for inmates, and a weekly meal for staff and inmates together. Thus the working party suggested cohesiveness could be promoted. They also recommended that time should be built into the regime during which personal visitors should not be allowed in. Cooke (1997) provides a retrospective paper on the history and achievements of the Barlinnie Special Unit, and on the lessons to be learned for other therapeutic communities.

Research on behaviour change in the SPU is examined in section 4. Descriptive works include Boyle (1977), who ends his autobiography with a description of his experiences as an SBU inmate in the 1970s, Cooke (1989) Stephen (1988) and Whatmore (1990). In 1985, an article by Light in the Prison Service journal sparked a debate amongst prison service personnel about whether the regime was equitable or over-privileged (Conlin and Boag 1986; Gibson and Cooke 1987).

Other locations
There are a number of other therapeutic communities in the UK based on the democratic model described above. The GTC at Gartree Prison, treats life-sentenced prisoners and has been open since 1993 (Hemmings and Rawlinson 1997; Hodkin and Woodward 1997; Hodkin and Woodward 1996; Pearce 1994; Woodward 1997). The Max Glatt Centre at Wormwood Scrubs (previously known as the Annexe) has been operating as a therapeutic community for 22 years, originally for inmates with addictions (Clarke and Glatt 1985; Glatt 1985; Sewell and Clarke 1982) and currently including inmates with personality disorders and histories of violent offending (Jones 1997a). Jones (1997b) discusses the problems of managing a small therapeutic community, such as the Max Glatt Centre, in a mainstream prison. At present, therapeutic community provision in prison is entirely directed at male prisoners: according to Maden et al. (1994) an attempt was made to establish a TC for women inmates at HMP Holloway, but the experiment was abandoned some years ago.

In addition to therapeutic communities in adult prisons, there are currently two TC units in Young Offenders’ Institutions. The Albatross Unit at Feltham has been in existence since 1989 (Fowler 1977) and the Chiltern Unit at Aylesbury since 1977. The longer running TC at Glen Parva YOI ran for 17 years before closing in 1996 (MacKenzie 1989 and 1997; Wright 1994:15-20).

Three concept-based therapeutic communities for drug abusers have recently been established in Prison Service Establishments, using outside expertise. The unit at Channings Wood category C training prison with 84 beds has been set up by the APA (Association for the Prevention of Addiction), the unit at Portland Young Offenders Institution with 72 beds is running as a partnership between Yedall Manor and Bridges of America (Yedall Bridges) and the unit at Holme House category B training prison with 65 beds is being run by Phoenix House UK. The structure, rules and regime of these units is described in Clarke (1977). Each unit is subject to independent research and evaluation by PDM Consultants, who have been contracted
by the Prison Service to collect regular process and outcome information, and conduct follow-up research. There are also similar units at Swaleside prison and Wayland prison. Follow-up research on substance abuse treatment approaches, which include residential therapeutic community programmes, is currently being conducted at the National Addiction Centre at the Maudsley Hospital in London. Data will be gathered over five years on an initial cohort of 1,110 people entering treatment (NTORS 1996, 1997).

Special hospital provision for mentally disordered offenders in England and Wales is reviewed in Prins (1993) and the facilities are described in Hamilton (1990). According to Blackburn (1993) however, although secure hospitals often claim to offer "milieu therapy", this is usually a euphemism for an orderly regime rather than evidence of a therapeutic community approach.

There are two Small Units in the Scottish Prison Service, which do not consider themselves to be therapeutic communities, but which nevertheless have adopted some TC practices. The Small Unit at Shotts Prison, in Lanarkshire, has been open since 1990, and the Peterhead Unit since 1995. Both units organise their timetables around a series of large and small meetings, which staff and inmates attend, and require inmates to engage actively in the regime and in the routines of unit life, or else return to the mainstream prison. The units take a maximum of ten inmates each, those at Shotts tending to be more outwardly aggressive, with histories of violence, and those at Peterhead tending to be more withdrawn with histories of experiencing or causing serious disruptions in mainstream prisons. Unlike the prison therapeutic communities at Grendon and elsewhere, the Small Units do not address offending behaviour, but are designed to help prisoners to cope with life in prison and outside.

**Therapeutic Community Provision for Offenders outside the UK**

The literature examined on therapeutic communities outside the UK suggests that prison therapeutic communities in Europe and Nordic countries are more likely to be based on the democratic TC model, and those in the USA, which deal largely with substance abusers, are more likely to be based on a hierarchical model. This is backed up by Nieminen and Isohanni (1997), who also note that there is far more literature on TCs from the UK and USA than from elsewhere.

**USA**

Therapeutic communities in America were originally influenced both by the Synanon model during the early 1960's, and the democratic model (eg: at Chino, California, which began in 1959, see Briggs 1972 and at the Durango Detention Centre in Phoenix, Arizona, see Garcia-Bunuel 1991) but in recent years TCs in prisons have become almost exclusively based on the hierarchical concept. Often therapeutic communities would stay open for a few years, and then close down because of overcrowding, staff burn-out, budget deficits or changes in prison leadership (Pan et al. 1993) In 1974 an influential review paper suggested that virtually no treatment
methods made any difference to offending behaviour (Martinson 1974), which negatively affected the official and public attitude towards all treatment initiatives, including therapeutic communities in prisons. Since that time, there has been a resurgence of interest in therapeutic communities in prisons (Peters 1993) especially in hierarchical TCs for substance abusers, since substance abuse has become so widespread and the cost of substance abuse, in terms of crimes committed, has spiralled. In particular the Stay'n Out TC in New York State was established, one for men and one for women, and has helped to define the model structure for prison-based therapeutic communities (Pan 1993; Wexler and Williams1986). In 1986, the commitment of the United States to the hierarchical therapeutic community model for drug abusers was seen in the allocation of funds for prison-based treatment by the Anti-Drug Abuse Act. The Bureau of Justice launched Project Reform, selecting the therapeutic community as the key treatment modality because of its positive track record. By the end of the 1980s the project had supported the establishment of prison-based TCs in eight states. In 1991, the project became Project Recovery, supported by the Department of Health and Human Services Office of Treatment Improvement. As well, the National Institute on Drug Abuse began to support projects which demonstrated and evaluated therapeutic communities in prison settings. The history of the projects, and the spread of rehabilitative drug treatment in America during the 1980's is described in Wexler and Lipton (1993). Prison-based therapeutic communities in the USA include the KEY in Delaware (Hooper and Wald 1990; Hooper et al. 1993), IMPACT in Chicago (Schwartz, et al.1996) the IPTC (In-Prison Therapeutic Community), in Texas (Eisenberg and Fabelo 1996; Knight et al. 1997), Stay'n Out in New York (Pan 1993; Wexler and Williams1986, Wexler et al. 1996), the Passages programme for women offenders in Wisconsin (Wellsich et al. 1993) and the Doin' Time Gettin' Straight program in Marion, Florida (Singer 1996). Wexler (1994 and 1997) has reviewed the current standing of concept-based therapeutic communities for in-prison drug abuse treatment, arguing that the research results demonstrate both their capacity to fit in with the strict security and discipline measures required by prisons and their success when compared to other treatment methods.

Community-based therapeutic communities, again based on hierarchical lines and aimed at drug users include the CREST in Delaware (Hooper et al. 1993; Martin et al. 1995; Nielsen et al. 1996; Inciardi et al. 1997, DAYTOP (Drug Addicts on Probation) (O'Brien and Biase 1984; Smith and Bassin 1992; Sugarman 1974) and Phoenix House in New York (Simpson 1979; De Leon 1979 and 1984)

**Europe and Scandinavia**

A number of specialised psychiatric centres in European prisons are described in the literature, which have some or most of the features of democratic therapeutic communities. Snortum (1976) describes three specialised prison in Sweden, one of which is a therapeutic community. Kramp (1990) describes the Herstedvester Institution in Denmark, which is a prison, with its own Governor. The Herstedvester treats inmates with personality disorders or who have committed serious sexual offences, providing intensive psychiatric treatment and psychological treatment,
social treatment and support, education and workshop training. Bernheim and de Montmollin (1990) describe the Pâquerette Sociotherapeutic Centre at Champ-Dollon prison in Geneva, which was transformed into a therapeutic community based on ideas from Grendon, Wormwood Scrubs and the Barlinnie Special Unit in 1986. Therapeutic community treatment for offenders is provided in a hospital setting at the van der Hoeven Clinic, in the Netherlands (Feldbrugge 1990; Wiertsema and Derks 1994) The was clinic founded in 1955 and has facilities for 73 patients who have been convicted of serious crimes of violence and are committed on a court order. Isohanni et al. (1994) describe a small Finnish therapeutic community prison for 35-40 prisoners which opened in 1991.

Lösel and Egg report that there are 15 social-therapeutic institutions in Germany. These are prison-based therapeutic communities, some of which are separately housed and some of which are based inside mainstream prisons. Altogether they house 831 inmates out of a total prison population of approximately 57,500 incarcerated offenders. The authors say that whilst social-therapeutic communities are based on democratic therapeutic community principles, they differ from one another in various respects because each is autonomously run. They go on to describe the regime at Erlangen in Bavaria as an example of social-therapeutic organisation. MacKenzie (1996) describes the regimes at Anstalt Bergedorf and Altengamme, Anstalt Bad Gandersheim and Tagel prison, noting several differences between German and British prison therapeutic communities, in particular the much greater provision for rehabilitation and aftercare in Germany.

In Slovenia, the prison system is largely based on a socio-therapeutic model, which aims to return prisoners usefully to the community rather than locking them away (Kriznik 1996). Programmes aim to isolate prisoners as little as possible from their natural environment whilst offering them help in resolving the problems which may have led up to their incarceration. Also in Slovenia is the Department of Forensic and Social Psychiatry at Ljubljiana University, a therapeutic community which operates mainly for convicted offenders most of whom have committed violent crimes, and who have been diagnosed as psychotic or personality disordered. The Department has been running as a therapeutic community since 1967, and houses about 15 patients (Kobal and Zagar 1994).

Canada
The Social Therapy Unit at the Oak Ridge Branch of Penetanguishene Mental Health Centre - a maximum security mental hospital for men in Ontario - was organised as a modified therapeutic community for offenders with psychopathic disorders. It was established in 1965 and continued until 1978. The programme is described at length in several papers (Barker and Buck, 1977; Barker and Mason 1968; Barker et al. 1969; Barker and McClauhlin, 1977; Maier, 1976; Quinsey, 1981; Rice et al. 1992; Wiesman 1995).

Research on the prevalence of psychiatric disorder in prisons
There have been a number of studies which demonstrate the prevalence of psychiatric disorders amongst prisoners (Coid 1984; Bland et al. 1990, Chiles et al. 1990; Herrman et al. 1991). Newton (1980) examined the effects of imprisonment on inmates, and Reali and Shapland (1986) in their Trieste study, found that prisoners' personal problems were exacerbated by the rigours and difficulties of prison life, especially in patients already suffering from mental disorder. Gunn et al. (1978) assessed psychiatric need amongst male prisoners in the south east region of England in 1972 and found that 37% had psychiatric disorders. Of these, 3% were judged to require transfer to psychiatric hospital for treatment, 5% required therapeutic community treatment and a further 10% needed psychiatric assessment or treatment in prison. In another study, carried out in 1988 (Gunn et al. 1991) again found that 37% of sentenced prisoners had a psychiatric disorder. Of these they judged that 3% should be transferred to hospital, 15% should receive further assessment and treatment in prison and 5% required therapeutic community treatment of the kind available in Grendon and other smaller units. In a further paper Maden et al. (1994) extended the analysis to include a survey of women prisoners; the results suggested that 8% of women serving a prison sentence could benefit from time in a therapeutic community.

A study of Finnish prisoners (Joukamaa 1994) found that of a sample 1099 inmates, one half were in need of psychiatric care, that a third of all prisoners had an impaired working capacity as a result of their mental disturbance, and that one tenth were unable to work at all. Of prisoners with psychiatric disorders, they estimated that 3% could benefit from treatment in a therapeutic community setting during imprisonment.
SECTION 2

Methodological problems in research

Outcome studies in therapeutic community research have focused on two types of measure: behaviour in treatment, such as reported changes in observable behaviour or changes in psychological test scores, and behaviour after treatment, such as changes in reconviction or rehospitalisation rates. Both types of measure present problems. The main concerns of researchers engaged in evaluation of therapeutic communities centre on four problems of methodology, whether the research was conducted qualitatively or quantitatively. These are: (i) isolating the effect of the therapeutic community from other factors (ii) the problem of defining "successful outcome", (iii) the problems of finding matching controls and (iv) the problems of contacting ex-prisoners for follow-up purposes.

Isolating the effect of the therapeutic community experience from other factors

There is always the problem in outcome research of knowing which factor is responsible for change. Because human beings are complex organisms, with many different ways of perceiving and reacting to events and experiences, it is often difficult to establish whether change is due to the factor being measured or to something else. Methodological ways of addressing this problem include the use of statistically reliable sampling procedures, with large enough samples to establish significance of change amongst cohorts (eg: Newton 1971) and the incorporation of qualitative research to extend and check quantitative findings (eg: Gunn et al. 1978).

Observed changes in behaviour in TCs may be partly due to changes in ways of perceiving and reacting to behaviour. Cullen (1997) notes that whilst Grendon has one of the lowest rates of "prison reporting" as measured by Governor's Reports of any prison in its category in the country, this could be taken as an unfair comparison since the Grendon approach is to refer offensive and disruptive behaviour back to the inmate's community, not to the Governor. This introduces an uncertainty into figures which might otherwise look clearly defined: is the difference a reporting difference, or the result of a more beneficial regime, or is it a bit of both? Similarly, psychological tests which demonstrate improvements in scores between admission and leaving may be due to improvements wrought by the treatment, or may be due to something else, eg: the natural passing of a crisis that precipitated admission, or the relief of a sojourn away from external environmental pressures. Whilst researchers are aware of the complications attending studies of change, the practical need to evaluate outcomes often means that considerations like this are dealt with pragmatically. It should be emphasised however that such problems affect research into effects of all types of programme or initiative: they are not confined to research into therapeutic communities.

Defining "successful outcome"

The Working Party Report on the Barlinnie Special Unit (SPS1994) notes the importance of having clearly stated aims at the outset of a new project if outcomes
are to be appropriately measured. They say that the purpose of the SBU was never clearly defined at a Headquarters level, which made the measurement of its success problematic. If it was intended to reduce incidents of violence by specific individual prisoners, and provide an alternative location for the management of difficult prisoners, then it was clearly a success (and here the authors cite Cooke 1989 and Cooke 1991). If it was intended to effect a lasting change in the attitudes of prisoners towards imprisonment, and enable them to make a successful reintegration into mainstream prison life, the extent of its success is less clear, since ten of the 36 prisoners were returned to mainstream prison for rule-infractions on the SBU, not because they were considered ready to return. Reconviction data however looked encouraging: whilst the Unit had not been set up overtly to reduce recidivism, only 4 of the total number of former BSU prisoners released had been re-convicted (out of a possible 12, see Cooke 1989).

Regarding follow-up research, Gunn et al. (1978) point out that the notion that prison has a deterrent effect on offending is premised on the assumption that the decision to offend is based on individual preferences. They argue however that individual choice is only one factor among others, and that criminal behaviour is powerfully influenced by environmental and situational factors. They say that the importance of environmental criminogenic factors, such as unemployment, poverty, family disruption and the norms of immediate groups is underestimated by people who believe the individual can be taught, helped or persuaded through treatment to lead a law-abiding life. Whilst a spell in a therapeutic community might help an individual to sort out some personal problems, this does not mean that individual will cease to offend, because these powerful environmental factors come back into play after release. Consequently, to evaluate a treatment programme solely on the basis of outcome measures such as reoffending and reconviction is misguided. Moreover, they point out that reconviction figures do not necessarily reflect reoffending rates, and they provide a series of small case studies which show that some ex-Grendon men in their study reoffended repeatedly without getting caught, whilst others remained law-abiding for some time, but were caught the first time they broke the law. Their argument here is that to simply count the number of reconvictions, misses out on the very things therapeutic communities focus on, such as enhanced quality of life and ability to deal appropriately with problems.

**Constructing control groups**

In general, control samples have been renamed comparison samples because of the difficulty of obtaining exact matches and the difficulty of being sure one set receives treatment and the other does not. When comparisons are drawn from criminal records, there is an immediate mis-match over levels of motivation to change, because inmates in the comparison sample have shown no interest in treatment, whereas TC inmates have. Where comparisons are drawn from lists of inmates referred but not admitted, these are not matched samples, but two groups distinguished by differences which led to entering or not entering therapy.
Inciardi et al. (1997), in their outcome study of the KEY and CREST multi-stage TCs for drug involved offenders in Delaware, USA, point out that one of the main problems they had with establishing a comparison group was that it was impossible to find one which could properly be considered a "no treatment" group. Of the 184 people in their comparison group, 56% reported having received some treatment after prison release, whilst some members of one of the treatment groups they were being compared to dropped out of treatment very early on. It was likely then that some members of the no-treatment group actually received more treatment than the treatment group. Thus the comparison was less than perfect, although it was possible to state that the comparison group did not receive TC treatment.

**Contacting ex-prisoners**

Reconviction studies rely on official records of reconviction rates. Finding out about people who have not been reconvicted is often more complicated. Once a prisoner has been released back into the community, and is no longer under the jurisdiction of custodial or after-care authorities, it can be very difficult for researchers to keep track of them. Studies of ex-prisoners often report a reasonable rate of questionnaire return or interview response for a year or so after release, but this dwindles. Importantly, there is no simple way of contacting people who do not want to be found, and no way of knowing why they do not want to be found: it may be a sign that they have taken up a new law-abiding life or a sign of just the opposite. From the point of view of study reliability, even where the attrition rate is low, the individuals who cannot be contacted may comprise a class which never gets represented in the results.
SECTION 3

Follow-up research

This section will look at follow-up studies, which are defined here as studies of how people behave after they have left the therapeutic community. For prison studies, these often focus on reconviction or reoffending rates, and measures to establish whether these improve after treatment. For therapeutic communities outside prisons, studies may focus on reconviction, readmission or relapse rates, or on psychological tests conducted some time after treatment has ended. Follow-up studies are described for four settings: democratic therapeutic communities in prisons, hierarchical therapeutic communities in prisons, democratic therapeutic communities outside prisons and hierarchical therapeutic communities outside prisons. For continuity, each separate review in this section is written more or less chronologically, except where it seems more appropriate to group research by setting.

Democratic therapeutic communities in prisons - follow-up studies

Interest in the establishment of democratic-style therapeutic communities in prisons in the USA was generated by Dr. Maxwell Jones, who had founded the first psychiatric TC at the Henderson Hospital in England. In 1959, Jones spent a year as a visiting professor at Stanford University, and as a consultant for the California Department of Corrections. Fink et al. (1969) describe an early democratic prison TC in the USA, and report that improvements were made in personality variables such as ego strength, tension, frustration and depression, and social variables such as relationships and trusting others. However, a comparison with a control group from a mainstream prison showed no differences for reconviction and recidivism rates. Briggs (Whiteley et al. 1972) describes a four-year project at Chino in California during which a TC was established and run in the prison, focussing particularly on the relationships between the prison culture and the TC culture. For the first two years of the project, the TC was an integrated part of the prison; for the second two years, it was separately housed and run. A one-year follow-up study of ex-TC inmates and a control group found that 71% of the control group and 79% of the treated group had a favourable outcome (which was defined as anything up to a jail sentence of under 90 days). They found no difference in outcomes of those who stayed in jail longer, but a marked improvement in favourable outcome rates for those who were treated during the second two years of the project, when it was autonomous, compared with those treated during the first two years when it was integrated into the prison (84% versus 74%). In all cases, treated inmates performed better than the control group.

The 3320th. Retraining Group at Amarillo Air Force Base, Texas was established in 1952, to treat prisoners from US airbases throughout the world following conviction and sentence to confinement by courts martial (Kennedy 1970). The aims of the programme were to identify which prisoners could be rehabilitated to air force life, and which would be discharged, and to conduct research. The Retraining Group was
designed to use a "multidisciplinary correctional treatment team approach" to prisoner rehabilitation within the framework of a therapeutic community milieu, in which all contacts between all staff members and retrainees were seen as potential opportunities to enhance the treatment goal of returning retrainees to active service. Importantly, the security measures found in prisons generally were absent, and repressive and punitive attitudes forbidden. On the grounds that only a minority of prisoners actually need high levels of security, the program sought to internalise control in the retrainees, by fostering trust, rather than applying control externally. Retrainees were selected for the program if they demonstrated certain characteristics (eg: desire for change, satisfactory background, adequate intellectual, emotional and physical capacities, good service record) and rejected if they had unfavourable factors (such as serious crimes against person or property, habitual drug use, a history of psychoneurotic disorders or a poor service record). Post-release follow-up results for 1964-1969 found a return-to-duty rate of 65-72%. Most of the approximately 30% not returned to duty left the Air Force with a less-than-honourable discharge. Follow-up data at six months showed an average short-term success rate of 89.4%. The total success rate showed a linear progression, year by year, from 54.2 in 1964 to 71.1% in 1968. The five year period from 1962 to 1966 was examined for the long-term success rates of retrainees (judged by whether the men received honourable discharges or not at the end of their enlistment). During this period, the long-term success rate was found to be 80.4%. The author concludes that these figures indicate the success of the Air Force Prisoner Retraining Program, and suggests that the techniques employed could be directly transferred to any other penal setting.

Newton (1971) studied the reconviction rates of prisoners admitted to Grendon between 1964 and 1966, and compared these with the reconviction rates of prisoners from Wormwood Scrubs (noting the difficulties of finding matched controls for Grendon prisoners). For both groups, approximately 40% were reconvicted within one year. Those who stayed longer in therapy at Grendon tended to do better: 50% of those who had stayed in therapy for over a year had been reconvicted after two years compared with 58% of those who had stayed less than one year.

Newton (1973) carried out a comparison study of men released from Grendon between 1967 and 1968, matching the Grendon men on six variables with men from HMP Oxford. She found that reconviction rates at one year and two years after release were very similar for the Grendon and Oxford groups: Grendon men were reconvicted about as often as their Oxford counterparts, whether they stayed for under or over a year. An analysis of the psychological test scores of men at Grendon on admission and release, showed that their intrapunitive scores and total hostility scores were lower and that this difference was greatest for men who were not reconvicted. Newton concluded that changes occur in certain men during their stay at Grendon, in the direction of their becoming more "normal", and these changes have a bearing on subsequent reconviction.

Gray (1973) reported that Grendon comprised about 220 inmates housed in three adults wings and three boys wings. For research purposes, two of the boys wings had
been given contrasting regimes: one was a therapeutic community, and the other
paternalist and providing individual psychotherapy. Otherwise wings were run as
therapeutic communities, and inmates were randomly assigned to them. Grendon
inmates were described as being a highly disturbed group, with high levels of
recidivism, and about 40% having a history of inward or outward violence. The staff-
inmate ratio was described as high, with about 40 uniformed staff, 7 psychiatrists, 4
psychologists, a psychiatric social worker and 4 welfare officers. A two-year follow-
up study in 1971 examined the careers of men discharged during 1967/8. Results
showed a statistically significant correlation between success and length of time spent
at Grendon (a 31.6% success rate for a stay of less than 12 months compared with a
60.5% success rate for a stay of over 12 months). The findings that 12-18 months
was required for successful treatment was supported by clinical experience of
individual cases. The research also found that inmates admitted on their own were
more likely to succeed than those admitted with others. Gray also reports an early
and "impressionistic" finding, from the research into contrasting regimes, that the
reconviction rate for ex-prisoners from the paternalistic group were twice that of the
therapeutic community group. For releases from borstal for the years 1966-70,
Grendon had the lowest reconviction rate of any closed borstal.

In 1966, the McGill University Clinic in Forensic Psychiatry was contracted to set up
a therapeutic community programme for persistent offenders at Clinton Prison, New
York State. The TC was established in the prison hospital, beginning with fifty men
and expanding to 100 men in the following year. It was run by McGill until 1972,
when the contract expired and it was taken over by prison staff. The establishment
and operation of the TC is described in detail by Cormier (1975). The aim of the
programme was the treatment of persistent offenders regardless of their offences, and
any reasonably motivated inmates who fitted this criteria and were due for parole
within eighteen months were eligible. The average stay was one year. Whilst the TC
was housed in a maximum security setting, the arrangements inside the TC itself were
"minimum security". The regime included shared cooking, cleaning and eating, work
(to promote the establishment of good work habits) daily community meetings, and
individual therapy. Individual therapy was designed to foster group therapy, which in
turn was aimed at promoting community therapy. Although evaluations of outcome
were carried out, Cormier repeatedly stresses that reconviction is a poor criteria for
the evaluation of a treatment programme for persistent offenders. This is partly
because positive change in an inmate does not necessarily mean he will not reoffend,
and partly because the offending rates for persistent offenders tend to slow down for
people in their thirties and forties, regardless of treatment. Reconviction figures were
obtained for the first fifty men in the programme, and compared with the figures for a
comparable sample of men who stayed in regular prisons (see also Angliker 1973;
Cormier and Angeliker 1972). These showed that in January 1972, when the men had
been living for an average of 43 months outside prison, 50% of the experimental
group and 52% of the control group had no reconvictions or violations. When
reconvictions were analysed, it was found that the inmates reconvicted for new
offences among the experimental group were nearly all from a group who had
transferred back to prison after only a brief spell in therapy. Of those who had stayed
the full course of therapy, and who had been released directly into the community, only two had committed new offences; the others had been convicted for technical parole violations only. However, twelve reconvictions from the control group were for new offences. These findings, along with other information collected from the experimental group, led Cormier to conclude that the experimental group had settled back into life outside the prison better, and were better adjusted than the control group.

Elliott House, a Probation Hostel in Birmingham, opened in 1970 and evolved into a therapeutic community for 51 persistent male offenders between the ages of 21 and 30 (Haydon, 1976) Residents lived at Elliott House at evenings and weekends, and worked during the day. The therapeutic regime included community meetings at which individuals' behaviour was discussed and reviewed, and decisions made by the whole community about housekeeping matters and rules. Summarising the results of the first five years of treatment, Davidson (1976) provides the following performance figures: 81.43 completed a successful period of residence (ie: were not returned to prison during that time), 41.43% completed a successful 12 months period of residence, and 58% completed residence and one year in open probation successfully. Overall, 37.35% were returned to prison either from Elliott House or after a period of residence at Elliott House.

Lambert and Madden (1976) studied 338 women admitted between 1970-71 to the Vanier Center for Women in Ontario which had a therapeutic milieu program, based on open communication and honest attempts at problem solving. They used two outcome measures: recidivism and a "quality of life" index. They found that recidivism was related to length of stay during the first year after release: the longer the stay, the lower the recidivism rate. For the second year after release, recidivism for the longer term group rose sharply. Persistent offenders were more likely to recidivate than first time offenders, although recidivism rates for persistent offenders fell (from 46% to 15%) for those in stable employment. Quality of life was poor for the majority of ex-offenders, whether reconvicted or not, and the majority of women were leading marginal existences.

As part of their study on behavioural change at Grendon Prison, Gunn et al. (1978) followed up 107 adult prisoners treated in 1971-2. The men were compared with a matched group of prisoners not receiving psychiatric treatment, who were seen in prison and given the same battery of tests, interviews and questionnaires as the Grendon men. Results showed that 43 (70%) of the Grendon men and 38 (62%) of the controls were reconvicted during the two-year follow-up period. To qualify the reconviction study results, and provide qualitative information, letters and questionnaires were sent out to released men at six, twelve and eighteen months. Each time about 40% of the total sample replied, revealing that whereas 32 men had been reconvicted, 42 reported re-offending. Of the Grendon cohort, the main difference between reconvicted men and those still at liberty after 20 months, was that those not reconvicted were noticeably more favourable towards psychiatry. Gunn
suggests this shows the possibility of an interaction between initial high motivation and treatment at Grendon.

In their book, Gunn et al. argued against the use of reconviction rates as a measure of success for a therapeutic community for offenders, on the grounds that treatment in a TC cannot be expected to overcome all the social and environmental factors which affect a recidivist's prospects of re-conviction. This argument is taken up in a later paper (Robertson and Gunn 1987) which reports a further follow-up study on the same cohort of Grendon and matched prisoners. They found that 92% of men from Grendon and 85% of the matched sample had been reconvicted. Offences of serious violence were committed by 20% of the Grendon group and 17% of the matched group. Drug offences were significantly more common among the Grendon group (but an original failing of the matching procedure had been that the researchers had been unable to find many matches with drug offences). As with the earlier study, the authors present case studies which expand on the statistical evidence, and demonstrate both how the social and environmental difficulties experienced by ex-inmates leads to re-offending, and the lack of fit between offending behaviour and reconviction records. They argue that Grendon is a paradigm for good prison management, and that much more attention should be given to after-care in the community if the work done at Grendon is to be capitalised upon.

An American therapeutic community program, which operated for 40 months and treated 117 mentally ill offenders is described by Cooke and Cooke (1982). The program was a co-operative venture between the criminal justice and mental health systems, and was established in a hospital rather than a prison. Primary treatment was through the therapeutic community, and other treatment included psychotropic medication, individual and group psychotherapy, counselling and training. Cooke and Cooke evaluated the program through case studies of residents and staff, and concluded that the project was successful. The close co-operation between correctional and mental health agencies was seen as unusual but effective in treating mentally ill offenders, especially when combined with appropriate release planning.

It is debatable whether the Special Unit at Barlinnie Prison was set up to contain violent prisoners or to reform them (SPS 1994). The type of prisoner admitted to the Special Unit formed a highly unusual and disordered group for whom the level of psychopathy would tend to predict a higher than normal rate of re-offending (Cooke 1989). Cooke, using a parole prediction equation (from Nuttall et al. 1977), found that of the twelve prisoners released at the time of his study, 8.31 would have been expected to be re-convicted within two years. The study however showed the actual number of prisoners reconvicted to have been 4. Whilst the cohort was small, Cooke suggests that there is a possibility that the Special Unit may in some cases have long-standing success.

Ogloff et al. (1990) studied 80 male prisoners - ex-residents and current inmates - serving sentences of two years or more, admitted to a Canadian prison therapeutic community in a forensic psychiatric hospital. Using Hare's psychopathy, they divided
subjects into psychopathic (P), mixed (M) and non-psychopathic (NP) groups. The P group stayed an average of 104 days, and had the lowest scores for improvement and motivation/effort; the M group stayed an average of 207 days, and the NP group stayed an average of 242 days and scored highest for improvement and motivation/effort. Then, dividing the subjects according to their length of stay, the authors found significant differences between those who left before 5 months and those who left later. They conclude that the psychopathy ratings are predictive of outcome, and that therapeutic communities are less successful in treating psychopaths than non-psychopaths. In a critical review of this article, Evans (1994) argues that too little information, both about the TC programme and about the research methodology is given for the results to be meaningfully understood by the reader. Whilst he regards the paper as genuinely interesting, he suggests what is needed is better research and simpler, more informative, methods of reporting.

In a descriptive paper on the Alternative Probation Project in Farnham, which was founded in 1976 by Jeananne Medd, a probation officer, Earnshaw (1991) notes that from the beginning the Day Centre operated as a modified therapeutic community, in that members and staff lived, worked, cooked and cleaned together, and all transactions between them were available for feedback. The emphasis was always on helping offenders to take responsibility for themselves and others, and to make choices. Summarising outcome data from APP final reports, Earnshaw notes that during the first 2 years of the programme, almost 50% of offenders reoffended (n=31), and in 1988-89, 46% were either breached, suspended or reoffended (n=35), in 1989-90 35% were either breached, suspended or reoffended (n=28). The improvements in outcome figures are attributed to the introduction of a more structured "offending behaviour based" programme, although Earnshaw argues that the years are not strictly comparable: treatment outcomes may have been more improved if the offender population had remained the same; as it was, the APP began to take in far higher risk offenders, which may have acted to depress the results.

The Social Therapy Unit at the Oak Ridge Branch of Penetanguishene Mental Health Centre - a maximum security mental hospital for men in Ontario - began its experimental life as a therapeutic community in 1965 and continued until 1978. The programme was designed for mentally disordered offenders, and thought to be especially suitable for psychopaths. The regime was peer operated and involved intensive therapy, the aim being to create an environment in which patients could develop empathy and responsibility for their peers. Because of the difficulties of getting through the powerful defensive systems of the patients involved, very intrusive therapeutic methods were employed, designed to bring out the violence which the programme was intended to address. The programme is described at length in several papers (Barker and Buck, 1977; Barker and Mason 1968; Barker et al. 1969; Barker and McCloudlin, 1977; Maier, 1976; Quinsey, 1981; Wiesman 1995). In a retrospective evaluation of the programme (Rice et al. 1992) studied 176 patients who had spent at least 2 years in the therapeutic community programme between 1968 and 1978. Treated offenders were compared with untreated offenders who were matched on variables most consistently related to recidivism (age, criminal history,
and index offence). The subjects of the study were a particularly serious group of offenders, and almost all had a history of violent criminality. Hare's revised psychopathy check-list was used to examine the interrelationships among treatment, psychopathy, and recidivism. The outcome measures were criminal and violent recidivism and the average follow-up period exceeded ten years. Outcome data were obtained from a variety of official sources. Subjects were classified as failures if they had incurred any new charge for a criminal offence, had their parole revoked, or were returned to the maximum security institution. Violent failure comprised any new charge against persons, or any sanction for violent behaviour. Overall the results showed no effect of the therapeutic community in reducing recidivism. Psychopaths who participated in the program showed higher rates of recidivism than those who did not, whereas non-psychopaths who participated in the program, both psychotic and non-psychotic, showed lower rates of recidivism than the matched counterparts. The authors conclude that the kind of therapeutic community studied is the wrong program for serious psychopathic offenders. They add however that the treated psychopaths were an especially serious group of offenders, and say that it is unclear whether such a program would have the same results with a group of less violent, less criminal psychopaths. They emphasise that the results showed a positive effect of the therapeutic community (compared to prison) in reducing recidivism for non-psychopaths. The methods and results of this research are summarised in Harris et al. (1994). Researchers and practitioners have discussed the Penetanguishene programme, questioning whether it properly deserved the title of therapeutic community (Warren 1994; Whiteley 1995). In particular, critics note that the programme comprised a very coercive regime and adopted radical techniques which are not part of a democratic therapeutic community approach, such as nude marathon encounter groups and the use of hallucinogenic drugs.

Taking a sample of 214 randomly selected men who had been in therapy at Grendon Prison between 1984 and 1988, Cullen (1993) found that 33.2% were reconvicted within two years of release, compared with 42%-47% of all adult males released in England and Wales. He then allocated subjects to two groups: "successes" (those who had not been reconvicted within two years of being released into the community after treatment at Grendon), and "failures" (those who had been reconvicted), and examined the differences between them. He found that 20% of men who had completed 18 months or more in therapy reoffended (n=69), compared with 40% of those who had stayed less time. Of those who had been released directly from Grendon (n=43) seven (16%) of those who had stayed over eighteen months had been reconvicted, compared with thirty one (45%) of those who had stayed less time in therapy. Finally, a smaller sample (n=41), which had left Grendon more recently were rated by Wing Psychologists as successes or failures according to their clinical judgements. Of those rated as successful, and who had completed over 18 months in therapy, only 7% (one out of fourteen) reoffended. Of the 18 who were identified as successes, only 2 reoffended regardless of time in therapy, and of the 22 rated as failures, one in three reoffended, regardless of time in therapy. Cullen argues that whilst the numbers here are too small to validate significance, they strongly suggest
that the length and quality of therapy appear to differentiate those who do not reoffend from those who do.

In an update on this research, Newton and Thornton (1994) examined the records of 150 men who had been in therapy at Grendon between 1984 and 1989. They found that although overall reconviction rates were only slightly lower than the rates for adult male prisoners serving similar sentences, rates for those who had stayed more than 18 months (n=103) were 19% compared with 50% for those who stayed less than 18 months (n=47). 26% of men paroled on supervision (n=43) were convicted compared with 40% (n=63) for those released without supervision, and here again the rates were lower for those who had stayed longer.

Marshall (1997) compared the reconviction rates of Grendon inmates admitted between 1984 and 1989 (n=700) with two control groups: a Waiting List Group (n=142) of men selected for Grendon but who did not go there, and a General Prison Group (n=1,400) of men with similar characteristics and offences to the Grendon men, but who went to a conventional prison. A comparison between the Waiting List and General Prison Groups, showed that substantially more men from the Waiting List Group (65%) were reconvicted compared with 50% of the General Prison Group. Marshall concludes from this that (i) Grendon has been selecting prisoners at higher risk of reconviction and (ii) that previous studies which have compared Grendon prisoners with the general population have not been comparing like with like. A comparison between the Waiting List Group and the Admitted Group showed that those who had been admitted to Grendon were less likely to be reconvicted than those in the Waiting List Group, and that they were less likely to be imprisoned and to be reconvicted of violence. Reconviction rates for the Admitted Group were found to be lower for those who had stayed longer: Marshall estimated that a stay of 18 months in Grendon might produce a reduction in reconviction rate and re-imprisonment rate of about one-fifth or one quarter, whilst shorter stays at Grendon are associated with a lesser reduction or no reduction at all. Specifically, evidence was found from these comparative studies to suggest that Grendon has a positive effect on older prisoners with a history of violent crime, and prisoners with a history of sexual offences.

The Gartree Therapeutic Community (GTC) for life-sentenced prisoners treats inmates during the early period of their sentence. Consequently, ex-GTC inmates are transferred back into the prison system, rather than released, as they may be at Grendon. Outcome information for the GTC is currently based on comparisons between the number of adjudications which prisoners receive before and after therapy. At a point when the GTC had been open for 20 months, Hodkin and Woodward (1996) reported that adjudications had shown a decline from 0.18 per month before admission to 0.06 per month after leaving.

Hierarchical therapeutic communities in prisons - follow-up studies
A history of therapeutic communities in American prisons is provided by Wexler and Love (1994), who note that initial enthusiasm from prison authorities was due to the development of unit management systems. Institutions were restructured into separately managed functional units, so that it was possible to manage a large prison as if it were several smaller institutions, a system which was suited to the development of TCs. One of the first and best known prison TCs was a program called Aesklepion, established in 1969 at a maximum security prison in Marion, Illinois. The program used confrontational techniques to break down prisoners reliance on the "convict code" (inmate resistance to communicating with staff) and transactional analysis to tackle manipulative interpersonal strategies by prisoners. Lack of communication between the TC and the rest of the prison led to mistrust and the eventual closure of the program. No objective outcome data is available.

Like their community-based equivalents, concept-based TCs in American prisons operate in such a way that successful program graduates are often recruited as TC staff. Graduates from the Marion prison TC were used as staff in State and Federal programs in a number of other prisons during the late 1960's and 1970's. Some programmes continued fairly successfully, but others became corrupt: staff would lose control, the unit would become isolated and inmates allowed to manage many aspects without supervision. In the late 1970's, interest in TCs in prisons waned, part of a general trend away from providing treatment to inmates. Martinson's critical literature review "What Works?" (1974) supported and fuelled this move away from treatment of offenders, with the conclusion that "nothing worked". Wexler and Love note that the prison TC programs in this early period did not provide outcome evaluations or collect data which would be useful to assess their integrity or effectiveness, and cite only one study (Nash 1973) which demonstrated the efficacy of TCs as a suitable treatment approach for prison inmates. Nash evaluated 173 inmates in seven prison-based drug abuse treatment programs, using changes in arrest rates as a major independent measure. Four of these programs were TCs based on the original Synanon model, two were counselling programs and one a drug-free residential program. Whilst Nash did not find any significant differences in arrest rates between the programs, De Jarlais and Wexler (1979) who analysed the data more extensively in a later study, found that two of the four TCs did significantly better than the comparison groups.

The Stay'n Out prison TC was implemented in July 1977, at a time when many other prison TCs were closing. It was closely modelled on Phoenix House, a New York concept-based community drug-abuse program, which was itself modelled on the original concept program, Synanon, in California. Two prison facilities were opened, one for men, and one for women, with a total capacity of 120 prisoners, and with a staff composed mainly of ex-addicts who had graduated from other programs. A number of evaluative studies were carried out on the program: Wexler and Chin (1981) found that program integrity was maintained, that inmates could be retained, and that positive personality changes were facilitated. Postive outcomes on recidivism were found by Wexler et al. (1985a and 1985b). In an evaluation which compared Stay'n Out participants, with three other groups: one from the TC waiting
list, one from a milieu prison program and one from a prison counselling program, Wexler et al. (1988 and 1990) studied male and female inmates who completed the program between 1977 and 1984. They found that the percentage arrested after treatment for the Stay'n Out program was lowest (26.9%), higher for the other programmes and highest for the waiting list group (40.9%). Analysis of the data supported earlier findings from Phoenix House (De Leon 1979, 1982; Simpson, 1979, 1980) about the relationship between time in therapy and positive outcome: Wexler et al. found that those who stayed between 9 and 12 months stayed arrest free longest, whilst those who stayed less or more than this time were re-arrested earlier. The authors suggested that inmates who stayed in the program between 9 and 12 months did best, particularly if they were then released into the community rather than becoming demoralised by being returned to prison.

Wexler (1995) contrasts the Stay'n Out prison TC approach with the Amity approach at Donovan prison, saying that they represent the two variants of prison therapeutic communities. Stay'n Out program is based on the hierarchical model developed by Charles Dederich and first used at Synanon in 1958 (Yablonsky 1965). Because Dederich was himself a recovering alcoholic, there are many similarities between the twelve-step program of Alcoholics Anonymous, and concept-based substance abuse therapeutic communities (Kennard 1983) such as movement through different stages and the more senior "recovering addicts" helping the more junior. Early and enduring examples of the concept-based approach in the community include Daytop in New York (Sugarman 1974) and Phoenix House, also in New York. Such programs are highly structured, with a strong hierarchy, clear reporting channels and regular movement up and down the hierarchy. In contrast, the Amity program (Wexler and Graham 1992; Mullen 1996) maintains the minimum hierarchy necessary for the program to operate, using the analogy of the circle to demonstrate equality and inclusion. Amity groups often explore deeply painful issues, such as molestation, rape and physical abuse, and staff openly share related experiences. Amity staff live in a staff house, unusual for prison TCs, and provide on-going support for program staff who are ex-addicts at varying points in their own recovery. Unlike other TCs which rely on verbal transmission of values and culture, Amity has developed a formal curriculum which includes workbooks, teacher guides and videotapes on central topics.

The Cornerstone Program is a concept-based therapeutic community for drug abusers in Oregon State Hospital in Salem, which opened in 1979 for minimum security recidivist prisoners with 6-12 months left of their sentence. It has a 32-bed residential unit and a 6 month aftercare program. Field (1984) examined three-year outcomes for all inmates who graduated from Cornerstone between 1976 and 1979, and compared them with three groups: Cornerstone drop-outs (less than one month stay), and two groups of parolees. He looked at two outcome measures: percentage not returned to prison and percentage not reconvicted. He found that the Cornerstone graduates did better on both measures: after three years 71% were not in prison and just over 50% had not been reconvicted. This compared with 63% and 36% of a parolee group, and 26% and 15% of the drop-out group. In a second study Field (1989) found the
positive outcome for the TC treatment at Cornerstone was continuing. He also found that length of stay was a factor in successful outcome, comparing a group of Cornerstone graduates, who had stayed on average 11 months in the program, with groups who had stayed less time. Three years after follow-up, 37% of the graduate group had not been re-arrested, compared with 21% of a group who had stayed six months or more and 8% of a group who had stayed two months or less. Over 50% of the graduates had not been reconvicted (compared with 28% and 11%) and nearly 75% were not in prison (compared with 37% and 15%).

The Wharton Tract Narcotics Treatment Program, a concept-based therapeutic community for young offenders, opened in New Jersey in 1970, for 45 residents in a former state forestry camp. Platt et al. (1980) carried out a two-year follow-up study of 160 graduates of the program, comparing them with 140 similar offenders who did not enter the program. They looked at two outcome measures: rearrest and reimprisonment. They found that Wharton graduates performed significantly better on both measures: with 18% reincarcerated compared with 30% of the comparisons, and 51% arrest free compared with 34% of the comparisons.

In 1988, a prison-based TC for male inmates, located at the Multi-Purpose Criminal Justice Facility in Wilminton, Delaware was established (Hooper and Wald, 1990). By 1993, the KEY expanded to 107 beds. The program offers a modified TC regime, using behavioural, cognitive and emotional therapy, and it is organised around a hierarchical multi-stage structure. In 1991, a further program was established in Delaware, this time out in the community, and known as the CREST Outreach Centre. This offers a five-phase, 6-month program in a therapeutic community. The two programs and some of the specific activities used, are described in detail in Hooper et al. (1993). A number of studies have been carried out on KEY and CREST, which look at the different outcomes for four different groups of clients. These are (i) clients who go through the KEY program only; (ii) clients who go through the CREST program only; (iii) clients who move from KEY to CREST, and go through both programmes; and (iv) a comparison group, who do not go through either program (Hooper et al. 1993; Martin et al. 1995; Nielsen et al. 1996; Inciardi et al. 1997) All these studies have found that the highest relapse rates occur in the comparison group; the next highest in the KEY-only group, the next in the CREST-only group, and the lowest rate of relapse and recidivism, in the KEY-CREST group. Inciardi et al. (1997), looked at outcomes for KEY and WCI Village (a prison based TC for women) and for CREST, using interviews and urinalysis to establish rates of relapse and recidivism. They found that at eighteen months 16% of the comparison group were arrest-free and drug-free (n=184), compared with 22% of the KEY/WCI Village group (n=38); 31% of the CREST only group (n=183) and 47% of the KEY/WCI - CREST group (n=43). They conclude, as do the other authors, that the results underline the value of community after-care for prison-based TC treatment, and that community-based TCs which continue the treatment, and continue to provide the same kind of support as was given in prison, will increase the effectiveness of prison-based TC programs, and lessen the difficulties of re-entry into work and community life.
Schwartz, et al. (1996) assessed the effectiveness of IMPACT (Integrated Multiphasic Program of Assessment and Comprehensive Treatment) which is a prison-based therapeutic community for drug users in Cook County Jail, Chicago. The authors followed 453 inmates who were released from the prison into the community either because they were not convicted of their arrest charges or because they were released on a supervision order. They found that those who had been in the TC program had significantly reduced re-arrest rates, and longer delays before being rearrested. As with other studies, they found that outcomes improved as length of stay in the program increased, the optimum length of stay being 150 days. In addition, community treatment after leaving prison significantly reduced recidivism, even for those who had stayed in the program for this optimum period.

Eisenberg and Fabelo (1996) describe the design and delivery of a large-scale correctional therapeutic community substance abuse program, which began in 1992 with a 500-bed In-Prison Therapeutic Community program (IPTC) for males in Kyle, Texas, and a 96-bed IPTC for females in Gatesville, Texas. The intention was to increase this bed capacity to 2000 within four years. These were instituted at the same time as an even larger program, Substance Abuse Felony Punishment (SAFP) for probation and parole violators. The therapeutic community programs were operated by contract treatment providers, and incorporated many of the features of the Stay’n Out therapeutic community programs (see eg. Wexler and Love 1994). Following completion of a 9-month stay in the IPTC, and release from prison, offenders participated in a community residential therapeutic community facility for 1 to 3 months, followed by 3 to 12 months of outpatient counselling. For evaluation purposes, offenders admitted to treatment between 1992 and 1993, and had been released for one year were selected for the experimental sample (n=672). Offenders who were eligible to participate in the program, but not selected, were included in a comparison sample (n=395). This comparison sample was similar to the experimental sample in everything except education: the comparison sample had a significantly higher percent of high school graduates than did the experimental sample. Statistical information based on interviews, demographic, criminal history and offence data, and post-release employment and reconviction data was used to chart the progress of offenders, and semi-structured interviews with professionals and clients used to evaluate how the programs were running. For the outcome analysis, offenders who completed the program (n=279) had significantly lower recidivism rates than those not completing (n=393). 7% of completers were incarcerated after treatment, and 13% arrested, compared with 19% of non-completers incarcerated and 31% arrested. The recidivism rates for those not completing treatment and for the comparison group were very similar. Offenders completing treatment also had significantly higher employment rates (81%) than the non-completers (57%) and the comparison group (53%).

Despite these favourable figures, the Texas program was found to have problems. The semi-structured interviews revealed that it had been brought in by policy makers favourable to drug abuse treatment programs, and that in order for the policies to be
accepted, only the most favourable evidence had been put forward. No research had been carried out into the number of prisoners who were ready to benefit from IPTC treatment. Nevertheless, a huge program had been initiated, with the intention being that the number of beds available would grow from 5000 to 14,000. The speed with which this program was initiated created great pressures on provider organisations, and some of the "treatment vendors" contracted had no previous experience of running therapeutic communities. Consequently, program integrity was very patchy. There were also over-estimates of the cost savings to the community of providing IPTC treatment for drug users, and delays in introducing post-release treatment, because state and federal funds were not secured. This discontinuity between the in-prison program and the post-release program meant that continued client recovery was inefficiently provided (DeLeon 1993). Because of these problems, the legislature decided not to expand the program. The originally planned 14,000 beds was reduced to 5,300 (4,500 for SAFP and 800 for IPTC). The program is still, however, one of the largest in the country. The authors argue that the research clearly showed that the IPTC program could lead to a reduction in recidivism for those inmates completing the program, and that this reduction would make the program cost-effective. However, the high drop-out rates, the infrastructure issues, the need to refine selection procedures for inmates, the need to train staff and the need to expand the post-release program to absorb growth in the IPTC were all important factors in the decision to slow down the growth rate of the initiative.

Another evaluation of the IPTC at Kyle was carried out by Knight et al. (1997). They compared a group of 293 Kyle IPTC graduates with a group of 121 prison parolees, using pre-admission data, in-treatment data and follow-up data collected 6 months and 12 months after release. Follow-up data comprised interviews, analysis of hair samples to ascertain drug use, parole officers' reports, urinalysis and official criminal records. Their paper reports on the 6 month outcomes, finding that for the Kyle IPTC graduates drug use and criminal behaviour declined substantially, and that their rates compared favourably with the rates for the comparison group. Further analysis showed that the best outcomes were shown by a group of Kyle graduates who had also attended a Transitional Treatment Centre (TTC) aftercare program.

Democratic therapeutic communities outside prisons - follow-up studies

The Henderson Hospital in Surrey was established in the 1950's as a therapeutic community by Dr. Maxwell Jones, who is credited with originating the democratic therapeutic community idea. Over the years it has continued to function as a therapeutic community, although the focus has changed so that it now has a particular emphasis on psychopathic patients. Patients are volunteers: though they may be ex-offenders, they are not admitted under any court order or committed under the Mental Health Act (Dolan 1997). No psychotropic medicine is used, patients are called residents, and therapy takes place by way of large and small groups, specialised groups and the therapeutic milieu.
In an early study of 122 male patients discharged from the Henderson Hospital between 1964 and 1965, Whiteley collected social history data and official information on criminal and psychiatric records for each patient, and conducted follow-up interviews at one year, and again at between two and three years after discharge (Whiteley 1970; Whiteley et al. 1972:59-72). Results showed an improvement rate of 40.1 per cent in terms of no further conviction nor psychiatric admissions in a two year period. Of the 87 with a previous history of convictions, 38 (43.6%) were not convicted in two years. Those who were re-convicted tended to be recidivists, who had been sent to the Henderson on a Probation Order of Residence rather than entering treatment on their own volition. Of 66 with a history of psychiatric admissions prior to treatment at the Henderson, 38 (57.5%) had no further psychiatric admission in two years. The study suggested that good outcomes are linked to previous ability to achieve success in school, work, and interpersonal relationships, together with a capacity for emotional feeling and involvement. Whiteley concluded that the therapeutic community could be of benefit to the "creative psychopath" (one who is not grossly immature and has some potential for personal growth), of less benefit, or harmful to the more immature and acting out "inadequate psychopath", and of doubtful benefit to the totally egocentric, impulsive, thought-disordered and primitive "aggressive psychopath".

Copas et al. (1984) conducted a follow-up study of 235 individuals (male and female) who had been referred to the Henderson Hospital between September 1969 and February 1971. Information pertaining to criminal convictions and psychiatric hospital admission prior to the referral was ascertained for each person from the Criminal Records Office and the Department of Health and Social Security. Subjects were followed up over periods of 3 and 5 years after discharge from the Henderson Hospital following their period of treatment, or over the same period following the date of the assessment interview after which they had not been admitted for treatment. Subjects, like the majority of patients referred to the Henderson, largely fell within the diagnostic category of psychopathic disorder, personality disorder or similar. For the purposes of the study, these were allocated a psychological type, neurotic, extrapunitive neurotic, intrapunitive psychopath or psychopath, following earlier research by O'Brien (1976) from which this typology had been derived. Data was also collected on subjects' social, criminal and psychiatric history, and on length of stay for those admitted. The not-admitted group, though not deemed a viable control group, were nonetheless analysed separately to provide comparative information.

Those subjects for whom no subsequent information on further convictions nor hospital admissions was found (and who had not died or emigrated) were considered successes. The sample was divided into two groups: successes and failures, and these were compared according to different variables. The overall success rates for patients in the sample who were admitted to the Henderson therapeutic community were 41% at the 3 year follow-up, compared with 23% in the not-admitted group, and 36% in the 5 year follow-up compared with 19% in the not admitted group. Analysis of the results suggested that treatment is effective for this difficult patient group but that
time is required for benefit to accrue. A steady improvement occurs with increasing
time spent in treatment, with up to a 71% success rate for those staying nine months
or more. Those without criminal convictions, or with very few, were more likely to
stay longer and be represented in the successful group. Of the four psychological
types, all benefited to some measure from treatment, but the extrapunitive neurotic
group (who characteristically have high levels of anxiety and extrapunitivevness) benefited least. However, this is a group which is particularly difficult to treat, and
the results suggest that treatment in the Henderson therapeutic community is effective
relative to the low level of expectation for these subjects.

In a study of residents admitted to the Henderson from 1985 to 1988, Dolan et al. (1992a) looked at changes in neurotic symptomatology of personality disordered
patients treated at the Henderson (n=62). The SCL-90R, a self-report questionnaire
which measures symptomatic psychological distress, was completed for all patients
before assessment for admission, and again six months after discharge. Results
showed marked improvements in symptomatology. According to the authors,
personality disordered patients are often viewed pessimistically by treatment
agencies, because they seem to "suck in" services but not improve. This is partly
because they tend to present in crisis, and leave treatment as soon as the crisis has
passed, and also because personality disorder co-exists with other symptoms (see eg.
Gunn and Robertson 1976; Copas et al.. 1984). The Henderson study however
provides evidence that personality disordered patients with neurotic symptoms can
improve through therapeutic community treatment. 55% of subjects had improved
reliably, in 32% this change was also clinically significant, whilst 6.5% of subjects
had deteriorated reliably. There was some evidence to suggest that these
improvements were related to length of stay, but this was not a strong connection.

In a study of 424 patients referred to the Henderson between 1990 and 1993, a group
who were admitted for treatment and stayed more than 12 weeks (n=86) were
compared with a group who stayed less than twelve weeks (n=91)and a group who
had had their funding for treatment refused (n=44). At one year follow-up,
significantly fewer of the long stayers had been admitted as in-patients following
treatment compared to short stayers (24.4% versus 37.4%) Overall, 19.8% of long
stayers had either reoffended or been readmitted for psychiatric treatment, compared
with 54.5% of the untreated group. (Dolan et al. 1996)

In a study to evaluate the impact of in-patient TC treatment at the Henderson on core
personality disorder Dolan et al. (1997) sent a self-report questionnaire pack to
hospital referrals between 1990 and 1994 on referral (n=598). A second pack was
sent one year after referral to those not admitted, and one year after discharge to those
who were. 70 admitted referrals and 67 non-admitted referrals returned both base-line
and follow-up questionnaires, and these formed the final study sample. The
researchers used the Personality Diagnostic Questionnaire (PDQ-R) to assess
personality disorder and the Borderline Syndrome Index (BSI) to assess borderline
psychopathology. The results demonstrated that whilst there was no significant
difference between the two groups on referral, the admitted group showed a
significantly greater reduction in symptoms on follow-up, than the non-admitted group. In addition, the change in the BSI score was found to be significantly positively correlated with length of stay in treatment: those patients who improved significantly stayed for a mean of 35.7 weeks, compared with 21.1 weeks for those who did not.

**Hierarchical therapeutic community outside prison - follow-up studies**

Hierarchical - or concept-based - therapeutic communities began in San Fransisco in the 1950's and whilst they have been set up in countries all over the world, they have remained strongest in the USA. Consequently much of the research on this type of TC is American.

In Britain, three concept-based TCs were established in the late 1960's, styled on the Synanon and Phoenix House models in America. These were Alpha House in Portsmouth, Phoenix House in London, and Ley Community in Oxford. During the early 1970's, research was carried out on these (Ogbourne 1975; Melotte 1975; Ogbourne and Melotte 1977; Wilson and Mandelbrote 1978a &1978b) but no research has been found in more recent years, although the communities continue to operate. Whilst there may be published research which was not retrieved through the search processes of this project, discussions with TC personnel suggest that no systematic studies have been carried out, although information on numbers and characteristics of residents are recorded as part of the administrative routines. Currently a 5 year follow-up study of British substance abuse programmes is being conducted by the National Addiction Centre, which should provide information on TCs (NTORS 1996). The early studies on outcome in UK hierarchical TCs are as follows.

Ogbourne and Melotte (1977) followed up the first 100 admissions to "London House" a hierarchical TC. The characteristics of this group are reported in detail in Ogbourne 1995, and the methodology of the study and follow up techniques employed are reported in Melotte and Ogbourne 1975. The subjects were admitted to the house between 1970 and 1972, and the study was carried out in 1974. Of the first 100, personal interviews were obtained from 87. The others were either dead, unwilling to be interviewed or could not be contacted. Using information from the interviews and corroborative evidence from friends, official records or other professional workers, the authors developed a typology of drug use patterns as follows: Abstainers: no drugs used - alcohol use only (17%); Sporadic Users: drugs used only once a week (12%); Regular Oral Users: used drugs orally more than once a week (23%); Regular Injectors: used daily drug injection (44%). Overall they found the results of the London House study very similar to those of other concept houses (Smart 1976). A majority of all admissions left prematurely against advice, and less than 10% of all admissions completed the programme. A majority of those who did complete the programme were subsequently recruited to the programme staff or went to work in similar houses. Those who completed the programme were very
likely to remain drug free and out of trouble with the police, although some who did not complete the programme also remained abstinent. Overall about a third were found, during the period of follow-up, to have remained abstinent or to have used drugs less intensively than prior to admission.

A study of reconviction after treatment in a concept-based therapeutic community, the Ley Community at Littlemore Hospital in Oxford (Wilson and Mandelbrot 1978a) looked at people admitted to the Community between 1971 and 1973 (n=62). Using information from the Criminal Records Office, the sample was divided according to whether or not conviction for a criminal offence was recorded within two years of leaving the treatment programme. This reconviction data was correlated with demographic characteristics, history of criminality and history of drug use. The sample was divided into three groups according to duration of residence: a short stay group of those who had stayed less than one month (n=22), a medium-stay group of those who had stayed between one and six months (n=20), and a long stay group of those who had stayed over six months (n=20). The maximum duration of residence was two years. Rates of conviction before admission and following departure were obtained and compared. Conviction rates following departure were also compared with length of stay. The long-stay group had a pre-admission conviction rate of 60% which was significantly reduced to 10% during the follow-up period; the conviction rate of the medium stay group was reduced from 70% to 45%, (which did not reach significance on the chi-squared test) and the conviction rate of the short stay group remained constant at 57%. These results were compared with results from other treatment programmes, and showed that the post-treatment conviction rates were substantially lower than those reported from other types of treatment. The authors concluded that concept-based therapeutic community treatment is effective in reducing criminal activity in drug abusers who remain in residence for longer than six months.

Using the same sample of ex-residents, Wilson (1978) examined frequency of drug injection before admission and after leaving, for a follow-up period of between 2 and 4 years. He found a significant association between longer periods of residence and lower frequencies of subsequent drug injection. Residents who stayed in treatment for more than 6 months showed significant reductions in frequency of injection compared to their own pre-admission levels.

Wilson (1977), analysing the same sample, found that treatment outcome for those who were introverted on admission was particularly poor for those who left the programme within the first three months, but that introverts who remained in the programme for a longer period of time had an improved outcome. This was extended in a further study of the same sample, (Wilson and Mandellbrot 1978b), which found three factors to be significantly associated with a lower post-treatment conviction rate: two or less previous convictions, a greater degree of extroversion on admission and a longer period of residence in the community. The authors suggested that the reason for this link between introversion, reconviction and early leaving, may be that some introverted people find it difficult to tolerate the social pressure exerted by a
therapeutic community upon its members and therefore leave prematurely. Those who can tolerate the regime, and stay, may become less introverted. Kennard (1978), in a further study, provided evidence of a progressive move towards extroversion occurring during the first year of residence.

The Gateway Houses in Illinois are programs for the treatment and rehabilitation of drug users. Holland (1978) studied three groups of former residents: early drop-outs (n=89), late drop-outs (n=70) and program graduates (n=34), comparing arrest rates for each group before admission and for a year following discharge. Data were obtained from police records. Results showed that prior to admission, rates were comparable, but after discharge the early drop-outs showed no change in arrest rates, the late drop-outs showed an 81% reduction in arrest rates and the program graduates showed a 97% reduction.

Skolnick and Zuckerman (1979) compared drug users treated in a therapeutic community in Delaware, USA, with drug users spending an equal amount of time in prison. Using a personality inventory (MMPI) they found that levels of general psychopathology decreased more for the TC group than for the prison group, but that TC treatment was more effective for lessening neurotic and psychotic tendencies than for affecting psychopathic traits: using Psychopathic Deviate and Hypomania scales, measures of impulse disorder remained high. The TC group showed a greater decrease in sensation seeking, and greater increases in self-actualisation and extroversion. Overall results showed marked changes for the TC group, and little change for the prison group.

Concept-based therapeutic communities outside prisons in the USA include Phoenix House and Daytop Village in New York. Phoenix House in particular has been the subject of evaluative research, through the work of George de Leon. In a 1984 study of effectiveness, he examined the data on two cohorts of ex-residents, one from 1970-1 and one from 1974. This involved a total of 525 subjects, 400 of whom were graduates, and 125 of whom had dropped out of the program. Follow-up information was obtained through interviews and records, and assessed according to measures of criminality, drug use, drug treatment and employment, at 2 and 5 years after residents had left the program. For the first cohort, best success (no crime and no drug use) was 75% for program graduates and 31% for drop-outs. For the second cohort, best success was 68% for graduates and 34% for drop-outs. Analysis of the relationship between time which drop outs spent in the program and outcome suggested that success and improvement rates improved with length of stay in treatment. The studies also examined changes in psychological profiles, and found that whilst signs of personality disorder and poor self-esteem improved significantly at the 2 year follow-up, these did not reach normative or healthy levels. Again, improvements were greatest for those who stayed longest. This and other related studies (De Leon et al 1979, 1982: Simpson 1979, 1980) have lent weight to the positive relationship between time spent in the program (TIP) and successful outcome.
The CREST outreach program in Delaware (Inciardi and Lockwood 1994) is a community-based TC for drug users, and is strongly related to the KEY in-prison TC program described elsewhere in this document. Although some residents enter CREST from the community, a large number of residents arrive from the KEY program, so that the CREST program forms an integrated part of their treatment, and a continuation of the concept-based therapeutic community approach to which they have become accustomed in prison. Thus CREST acts as a form of half-way house, providing support and aftercare, and a means of re-integrating ex-prisoners into the community. Nielsen et al. describes how the CREST treatment program integrates the therapeutic community with work release for drug involved offenders, and assesses the effectiveness of the treatment by comparing subsequent substance abuse and criminal activity of people who had been through the program with comparison groups. The total number sampled on leaving were 689, of which a total of 307 remained in the study at 18 months. Follow-ups were conducted at 6 and 18 months. The authors found that CREST clients had significantly lower relapse and recidivism rates than the comparison group, and that similar effects could be seen across sexes, racial/ethnic groups and age categories. Length of time in treatment, and graduation from the program, were positively associated with improved treatment outcome.
SECTION 4

Behavioural change during treatment

Behaviour change during treatment is defined here as changes noted in patients and inmates up to the time of leaving the therapeutic community. For prison TCs this is often measured by comparing rates of recorded disciplinary reports with rates recorded before admission. For both prison and non-prison TCs, psychological test scores are often used to compare profiles at different stages of treatment, and to provide information on internal changes. The research on behaviour change is again divided into the four settings: democratic TCs in prisons, hierarchical TCs in prisons, democratic TCs outside prisons and hierarchical TCs outside prisons. Again, each separate review is presented chronologically.

Democratic therapeutic communities in prisons - studies of behaviour change

Gunn et al. (1979) studied all the adult prisoners sent to Grendon Prison for therapeutic community treatment between June 1971 and May 1972 (n=107). The men were seen at three and nine months after admission, and again just before release, and asked to complete psychiatric tests and a psychiatric examination. Results showed both therapeutic changes (a highly significant reduction in neurotic symptoms, such as anxiety, tension and depression, and greater self-esteem) and social changes (less anxiety about interacting, improved self-confidence and a decrease in antagonism towards others). Whilst most of these changes took place in the first three months of the inmates' stay, the authors point out that longer stays are necessary to consolidate changes and maintain the therapeutic sub-culture which provides for the efficacy of Grendon treatment.

A series of other studies at Grendon have demonstrated improvements in behaviour, symptoms and attitudes during treatment. Sleap (1979) showed significant achievements in attaining observable goals after 6 months in therapy (for a sample of 209 men) and after 12 months in therapy (for a sample of 94 men). Newton (1973) and Miller (1982) using the Hostility and Direction of Hostility Questionnaire (HDHQ) with samples of 377 and 83 men, found significant reductions in guilt, extra-punitiveness and overall hostility.

In an extended qualitative study of Grendon Prison, Genders and Player (1995) used a varied methodology including semi-structured interviews, self-completion questionnaires, observation and analysis of documents, to generate a description of the prison, the therapeutic regime, the inmates and the staff. They describe how inmates get into Grendon, what the therapy comprises, conflicts between the operations of the therapeutic community and prison security requirements and how and why inmates leave Grendon. They conducted four series of interviews: with men within the first two months of reception at Grendon (n=71); with men during treatment (n=102); with men about to leave (n=69) and with men after transfer to
other prisons (n=40). Part of this interview data was then used to assess changes made during time at Grendon. To do this, they split the 102 inmates in treatment into 3 time cohorts: (less than 6 months in therapy; 6-12 months; more than 12 months) and looked at 3 areas of change: modifications in inmates' adherence to prison culture, developments in their perceptions of their problems and changes in their assessments of the benefits they had derived from therapy. They found that as time in therapy went on, inmates were less likely to adhere to prison culture, and more likely to understand their own and other people's problems. As with earlier research (Gunn et al. 1978), they found that the degree of change in inmates' perceptions was greater for those who had been in therapy longest. On the basis of changes observed during therapy, they constructed a five-stage therapeutic career model which represented five progressive stages of therapeutic development. When they used the model to analyse their data, they found that 19% of inmates who completed less than 12 months of therapy had completed all five stages, compared with 33% of 12-18 month inmates and 88% of those who stayed longer.

Genders and Player went on to study the records of ex-Grendon inmates who had been transferred back into the prison system, and found that at least a third of the men had demonstrated a marked reduction in their rates of offending, and that the institutional performance of over half the men had been unproblematic at the time of the study.

Cullen (1994) found that Grendon Prison had the lowest rate of prison offending, as measured by Governor's Reports, of any prison in its category in the country. The figures were derived from annual statistics for the Prison Service, and had been consistent over three decades. A sample of all men discharged from Grendon in 1993 had an average of 2.11 report in each of the six months prior to Grendon, and .32 reports in each of their first six months in therapy.

Newton (1997) compared questionnaire scores on admission and on leaving of a sample of 94 men, who had completed the Eysenck Personality Questionnaire (EPQ), the HDHQ and Rotter's Locus of Control (Internal- External) Scale. She found that in a substantial minority of cases, treatment resulted in lower levels of psychoticism and neuroticism, and higher levels of extraversion, reduced levels of intrapunitive and extrapunitive hostility and increased belief in internal locus of control. Except in the case of psychoticism, there was a tendency for the changes to be greatest, or to affect more individuals, after relatively long periods of treatment (one to two years).

The therapeutic community at Glen Parva Young Offenders Institute (Wards 3 and 4) closed in 1996. Despite increasing severity of offences and high levels of inmate disturbance prior to referral, only four outstanding assaults were recorded during its fifteen years of operation (MacKenzie 1997) There were no suicides, and inmates themselves provided 24-hour care for suicidal inmates from the rest of the prison. According to MacKenzie (1989) this behaviour was brought about by the essentially benign nature of the regime, bonds between inmates and staff, inmate responsibility for running as much of the regime as possible, permission to work on problems and
the existence of a clear boundary between the therapeutic community landing and the rest of the prison hospital.

Cooke (1989) describes the regime and admission criteria for the Special Unit at Barlinnie Prison, and examines the extent to which the Unit was succeeding in its primary goal of reducing the frequency of violent behaviour. Using prison records, psychiatric and psychological reports, criminal records and independent observations, he compared prisoners' violent behaviour before admission and subsequent to admission. The Unit had been established in 1973, and at the time of the study, 1986, twenty-five prisoners had experienced the Unit, including the five currently in residence. Using predictive formulae based on a number of factors including previous histories of prison violence, the researchers found that whilst the expected number of assaults on individuals was 105, only 2 had occurred in the Unit; that whilst the expected number of serious incidents on the Unit was 49, only 8 had occurred (mostly barricading of cells); that whilst the expected rate of serious incidents after transfer from the Unit was 26, only 17 had occurred, of which 9 were perpetrated by one prisoner. Prior to admission to the Unit, the prisoners had been responsible for a total of 195 episodes of disruptive behaviour. Cooke examines a number of possible reasons for this reduction in the rate of disruptive episodes including changes in parole policy, statistical regression, maturation (ageing of individuals), mistakes in recording incidents, and behavioural test problems. They found that the changes in behaviour could not be attributed to any artefact of the measurement process or extraneous factors, and that they were therefore a direct result of confinement in the Special Unit.

In a later paper, Cooke (1991) explores the influence of regime factors on violence in prisons. Reviewing the literature, he found that violent behaviour was reduced by improved staff-inmate communication, by high levels of staff experience and training, by maintaining high levels of staff morale, by maximising contact between inmates and visitors, by reducing overcrowding, by reducing the monotony and frustrations of prison life, by providing lower levels of overt security and control and by reducing the uncertainties produced by changes in rules and policies. He argued that regimes, like the one at the Special Unit at Barlinnie Prison, which allow more inmate participation, increased contact with the outside world and which are operated by more highly trained prison officers, are likely to have a positive impact on the rising tide of violence in British jails.

In his study of a prison reform project in Iran, Tehranhi (1997) measured the change in certain personality factors occurring in inmates who remained in the project for the full six-month period of treatment. The prison-based project used integrative therapy, which combined milieu therapy, psychotherapy, counselling and cognitive therapy, all of which were encompassed within a context of the Islamic religion. Two groups were tested, a project group and a matched group who received counselling only. The researcher argued that for inmates to be rehabilitated, they needed to find some meaningful purpose in life. This was tested using the suicidal depression subtest (D2) of Cattell's Clinical Assessment Questionnaire (CAQ), which was administered to all
subjects at the beginning of the project, and again after six months. In addition, the project subjects were administered a brief questionnaire, asking how the project had affected them. Results showed that inmates participating in the project had changed more than the control group, showing, after treatment, less disgust with life, less suspiciousness and paranoia, and lower levels of insecurity.

Hierarchical therapeutic communities in prisons - studies of behaviour change

The search strategies employed for this study did not produce any research reports on behaviour change of inmates for therapeutic communities in prisons. This may be a product of the search strategies employed, although it is more likely a reflection of the high interest shown in recidivism and relapse as critical treatment outcomes, both by researchers and policy makers. Because hierarchical prison TCs are aimed directly at drug abusers, and because drug abuse is seen as a major cause of crime, particularly in the USA where the bulk of the research is done, the prevention of relapse and recidivism is seen as primary. Moreover, one of the major behaviour changes which occurs in inmates during residence in a prison therapeutic community is the cessation of drug use. If drug use is continued during residence, the inmate responsible will often be automatically returned to the main prison. Since drug-taking and residence cannot occur simultaneously, studies of decreased drug use during treatment are seen as unnecessary, even though the change in behaviour is evident.

Democratic therapeutic communities outside prisons - studies of behaviour change

In a study of changes in patients during treatment at the Henderson Hospital therapeutic community during 1977-81, Norris (1983) used the repertory grid method to study 70 men and 33 women. The main instrument was a form of repertory grid, comprising a matrix which individuals were asked to complete on arrival and at roughly three month intervals until they left. Analysis of their responses provided information on beneficial or adverse changes. Information was collected on how patients currently saw themselves, and how they would like to be (with the four possibilities here being: conformist (breaks fewer rules, stands on own feet more); rebel (breaks more rules, stands on own feet more); institutionalised (breaks fewer rules, depends on others more); and problem (breaks more rules, depends on others more). Changes towards "conformist" were generally seen as more beneficial for the organisation and the individual; changes towards "problem" were seen as least beneficial. Changes in self-esteem were also measured. The results suggested that those who benefited the most from the Henderson treatment tended to be older, male, middle-class and more inclined to attend community meetings. The study was done as part of a wider study, and the results were compared with results from two other settings: a detention centre and group of residential homes for young people run by a voluntary trust. The comparison revealed that people in the Henderson generally benefited more from treatment (the figures were: Henderson 59%, detention 40% and
trust 41%). In addition, those at the Henderson tended to maintain or improve their self esteem (Norris notes that high self-esteem is associated with long-term benefit) whereas the detention and trust groups tended to lose self-esteem. Norris concludes that since the Henderson caters for patients often regarded as unamenable to treatment (such as psychopaths, sociopaths and anti-social personalities) the findings are encouraging.

Vaglum et al. (1990) studied 97 day patients at a therapeutic community at Ullevål University Hospital in Oslo admitted between 1982 and 1985. They divided the patients into three groups: those with severe personality disorders (SEVPD), those with other personality disorders (OPD) and those with no personality disorder (NOPD) and looked at changes in symptoms and overall pathology form admittance to discharge. Using the Health Sickness Rating Scale (Luborsky and Bachrach 1974) they found treatment response greatest amongst the OPD group and lowest amongst the SEVPD group. Using the general symptom index (GSI) at admittance and departure, they found greatest improvement in symptoms in the NOPD, significantly less improvement in the OPD group, and whilst the improvement in the SEVPD group was modest, it was nonetheless clearly discernible. They concluded that the personality disorder variable had a significant impact on treatment response. However, they emphasised that the numbers studied were small and the time between first and subsequent evaluation brief. At the time of writing, they were also engaged on a 2 to 5 year follow-up study, which they expected to provide less tentative results.

Hierarchical therapeutic communities outside prisons - studies of behaviour change

Ravndal and Vaglum (1991) studied 36 Norwegian substance abusers who completed the first year in-patient phase at Phoenix House, a hierarchical therapeutic community in Oslo. Like the Phoenix Houses in London and the USA, the in-patient phase takes on average one year, and the outpatient phase, during which patients work as junior staff members and then attend school or take up employment, lasts six months. Subjects were studied using information about their social, criminal, drug-taking, education and employment backgrounds. Information on behaviour change was obtained from self-report inventories completed at intake and at the completion of the one-year phase one. These were the Millon Clinical Multiaxial Inventory (MCMI), the Basic Character Inventory (BCI) and the Symptom Checklist-90 (SCL-90). Psychiatric type and changes in anti-social aggressiveness during the first year of treatment were thus assessed.

The study identified two subgroups of clients: the increase group (n=25) who had relatively low scores on anti-social aggressiveness at intake, but whose scores increased during the in-patient phase, and the no-increase group (n=11) who scored high on intake and whose scores remained high during treatment. The increase group had a high drop-out rate (45%) during the out-patient phase of the programme, compared with a drop-out rate of 20% from the no-increase group. A high level of
antisocial aggressiveness at intake was related to drop-out in the no-increase group, and a high degree of increase in antisocial aggressiveness was related to drop-out in the increase group. The authors suggest that the no-increase group is characterised by clients with strong and relatively unchanged antisocial personality traits, who were able to adapt superficially to the program, but not identify with it strongly enough to prevent drop-out. With the increase group it was difficult to say whether the increase indicated a real change of personality, or a denial of feelings at intake: clients may have grown more in touch with their feelings, or may simply have become more open and willing to report their feelings honestly. The authors note that there are several limitations to the study: small numbers, a reliance on self-reporting and instrument problems of reliability and validity. Moreover, they do not attribute any changes to the treatment per se. However, the study shows the importance of monitoring the level of anti-social aggressiveness during treatment, and of reconsidering the management of anti-social aggressiveness in the hierarchical therapeutic community model.
SECTION 5

Other research issues

Apart from follow-up and behaviour change studies, a number of other issues which are linked to therapeutic outcome have received attention. These include studies of the rates and reasons for early leaving, analyses of therapeutic process and factors, predictive studies, the co-occurrence of mental disorders in patients and inmates, studies of ward atmosphere and cost-offset studies. Since the search strategies for this report were not specifically geared towards collecting these studies, the overviews in this section are not comprehensive. The reports cited are those which were found in the course of conducting the main searches. They have been included here because they indicate other important research areas.

Studies of early leaving

Most therapeutic communities, even in prison settings, operate with a notion of the voluntary co-operation of residents. Some coercion may be applied to persuade residents to enter a TC or not to leave a TC early (eg: convicted drug users may be offered the opportunity to stay out of prison if they will agree to reside in a community TC on a probation order of residence) but nevertheless the principle of choice still operates at some level. Moreover, ejection from the therapeutic community is about the only serious sanction which can be threatened or applied, and persistent rule-breaking, or the breaking of cardinal rules, may result in an individual leaving early. Because of the relationship which is frequently found between length of stay and positive outcome (cf. Cullen 1993; Bleiberg et al. 1994; Jones 1997; Newton 1996) and a mirror relationship between short stay and negative outcome, there has been research interest in the issue of early leaving.

In an early quantitative study of a concept-based therapeutic community in a maximum security prison in the USA, Mrad and Krashnoff (1976-77) found that the main difference between early leavers and those who stayed on, was length of remaining sentence. They suggest that this may be due to those with long sentences left to run feeling less convinced in the usefulness of TC treatment.

Copas et al. (1984) found that successful outcomes at the Henderson were inversely related to rule-breaking while in treatment. Failures break on average about 50% more rules than successes, and those who ultimately failed tended to be those whose rule-breaking increased during treatment. Whereas a discharge by a community vote early on was associated with failure, a discharge by community vote at a late stage in treatment was not so linked to poor outcome, possibly because an individual who has made some progress cannot manage to terminate treatment in a planned way, and so sets up the situation in which the community vote to discharge him or her. Those who left normally at a late stage nevertheless did better subsequently than those who were voted out.
Using data from the SLC-R90 questionnaire collected from 62 subjects who had left the Henderson Hospital, Dolan et al. (1992b) found that length of stay in treatment was not related to the severity of initially symptoms, but could be predicted by psychological changes in the first three months. Those who stayed longer than 9 months tended to have experienced some change in symptoms in the first three month period, either getting worse or getting better. Those who dropped out of treatment tended not to have changed at all on these psychological measures in the first 3 months. There was a non-significant tendency for those who stayed longer to improve more on psychological symptoms.

In their study of Grendon prison, Genders and Player (1995) analysed the psychological test scores of inmates according to their length of stay. They found that those who stayed longest were the more intelligent, demonstrated higher levels of guilt and tended to blame themselves rather than others for their situation. In addition they tended to be more introverted, have lower scores of actual and paranoid hostility, low psychoticism ratings and inward directed hostility, rather than "acting out" towards other people. Men who stayed for 18 months or more tended to possess fewer previous convictions and have fewer disciplinary offences listed against them from other prisons, especially for offences of violence against prisoners; those convicted of murder were much more likely to stay than those convicted of rape. In their discussion of this finding, they point out that there are two possible explanations for this: either therapy follows a series of phases whereby specific changes tend to be achieved within certain broad time periods (a finding backed up by their observations on the wings) or the findings are a product of the general therapeutic community principle of voluntary admission, voluntary continuation of treatment, and expulsion for unacceptable behaviour. They suggest that this general principle could create a "distillation" process, whereby the "best bets" remain longer in therapy and thus increasingly weight the positive responses of the longer-serving groups.

Jones (1997) points out that when therapeutic communities deal with personality disordered and psychopathic patients, they are daily confronted with particularly difficult and unlikeable people. Whilst it is possible to see this unlikeableness as part of the individual's problem and as the reason for treatment, the work of dealing with difficult behaviour is tremendously stressful. In a TC, where persistent rule-breaking and interpersonal hostility may be seen as detrimental to the community as a whole, such people can be ejected early. Jones examines the organisational and interpersonal processes which cause people to be ejected from a community, and argues for better training and better institutional support, particularly in small prison units.

**Prediction studies**

Copas and Whiteley (1976) re-examined data from an earlier study of male psychopaths treated at the Henderson (Whiteley 1970), to build a predictive equation for treatment outcome. They took the original social background factors which had
been shown to be significantly associated with success or failure, and chose six of these for the equation: having married; having been previously admitted to a psychiatric hospital; recidivism; at least one O-level pass; longest period in any job, and having attended an approved school. These factors were then weighted according to the likelihood of their being associated with success, so that the findings from the previous study could be used to make predictions about the successful outcome of treatment with future cohorts. To validate the equation, a second study was then carried out of another series of ex-patients, for which social data, reconviction and rehospitalisation data was obtained and analysed. The equation was found to be useful in distinguishing those who did best in terms of outcome (the 'good' group), and those who did worst (the 'bad' group).

Other prediction studies have evaluated the outcome of treatment by predicting the expected level of offending and comparing actual level of offending (Cooke 1989), and underlined the importance of motivation and readiness for treatment, by predicting who is likely to stay in a TC programme and who is likely to drop out (De Leon et al. 1994).

**Therapeutic process**

Much of the research that has been done over the past twenty years has focused on establishing the effectiveness of therapeutic community treatment, particularly in the case of hierarchical therapeutic communities in the USA. Whilst such evaluative research continues to provide valuable feedback to communities and to funding bodies, attention has been turning to explicating the treatment itself in order to explicate the process of change in therapeutic communities. (Redl 1980; Allison and Hubbard 1985; DeLeon 1994). Some recent attempts to understand and analyse the process are summarised in Nielsen and Scarpitti (1997), who examine work by De Leon (1990, 1994), Hooper, Lockwood and Inciardi (1993:304) and Frankel (1989). They note that all these authors rely on a version of social learning theory in which the therapeutic community is seen to provide the setting and mechanisms for clients to replace negative feelings, thoughts and behaviours with new positive, roles, attitudes, skills, and definitions of self. For Nielsen and Scarpitti however, the problem with identifying how and why TCs operate to effect change, is that writers describe the components in use, and what they are intended to do, rather than look at the dynamic interactions among the various components, the community itself and the individual clients. Nielsen and Scarpitti go on to describe a process analysis at the CREST Outreach Centre in Delaware, using fifteen months of intensive fieldwork which involved participant observation, informal discussions with clients and staff members, formal interviews and analysis of formal documents relating to the program. From this data they were able to show how the core elements of the program (which they list as: increased self-esteem, dealing with core issues, behavioural change, hope and belief, identity change and motivation) interact with one another, and importantly how these are worked on within a contextual framework which comprises a sense of community and a set of behavioural rules and expectations. They emphasise however
that their model was developed from the process analysis of one therapeutic community, and that similar analyses in other TCs are needed to lend it support.

Howells (1989) carried out a study of the therapeutic factors at work in the therapeutic community at Glen Parva Young Offenders Institute, basing her analysis on therapeutic factors in psychotherapy (identified by Yalom 1985). A Q-sort methodology was used (Stephenson 1953) to rank therapeutic factors identified by inmates, so that factors were sorted onto a continuum from "extremely helpful" to "least helpful". The research found that the importance of the different factors was related to length of stay in the community - what helped at one stage may be found less helpful at another.

**Ward Atmosphere Studies**

Analyses of therapeutic environments have been conducted in therapeutic communities using the Ward Atmosphere Scale (Moos 1974, 1997) which provides the means to systematically isolate and measure features of the treatment milieu and relate these to treatment outcome. For example, Vaglum et al. (1990) used the approach with three groups of patients - severely personality disordered, personality disordered and not personality disordered - in a therapeutic community at Ullevål University Hospital in Oslo. They found that patients with severe personality disorders evaluated the milieu as significantly less supportive and less orderly than did patients without personality disorders, and that this group also differed significantly in having a higher rate of irregular discharges from the TC.

Lees and Manning (1985) and Manning (1989:148-182) describe the use of a later version of this approach, the Multi-phasic Environmental Assessment Procedure (MEAP) also devised by Moos (1980). The procedure was used to describe, monitor and compare six Richmond Fellowship therapeutic community houses in Australia, and to establish which factors could be be related to the successful improvements of residents. Using path analysis to establish which were the stronger links between sets of factors, the researchers built a causal model which suggested that from the point of view of residents, social background was the strongest predictor of successful outcome, whereas from the point of view of staff, social background, treatment experiences and the unique influence of the particular house in question were equally strong predictors. They concluded that the therapeutic community treatment approach has a substantial effect on outcome.

**Co-morbidity of mental disorders**

Studies have found large amounts of personality disorder co-morbidity in psychiatric patients (cf. Dolan et al. 1995) and convicted offenders (Dolan and Coid 1993; Jones 1997; Hare et al. 1993). Côté and Hodgins (1990) studied 495 male inmates in Quebec penitentiaries in April 1998, using a French translation of the DIS version
111-A to establish diagnoses of mental disorder. The following disorders were considered: schizophrenic disorders, bipolar disorder, major depression, antisocial personality disorder (APD) alcohol and drug abuse. They found that the rates of major mental disorder far exceeded the rate for men in the general population, that major disorders rarely occurred in a pure form - combinations of two or three were more frequent - and that APD, drug and alcohol abuse, were more often associated with each other than with major mental disorders, and were the most frequently found combination.

These findings are supported by an analysis of interviews with 20,291 individuals (the National Institute of Mental Health Epidemiological Catchment Area Program) in which Regier et al. (1990) assessed the co-morbidity of alcohol, drug abuse and mental disorders. They found that co-morbidity rates for severe mental disorders, such as schizophrenia, bipolar disorder and anti-social personality disorder are particularly high. They noted that among the institutional settings, comorbidity of addictive and severe mental disorders was highest in the prison population, finding strikingly high base rates of severe mental disorders in the prison population, coupled with addictive disorder comorbidity in about 90% of prisoners with schizophrenia, bipolar disorder and anti-social personality disorder. They argue that these findings provide persuasive evidence that mental disorders must be addressed as a central part of substance abuse prevention efforts.

Several papers have focussed on the co-morbidity of substance abuse and mental disorder (cf. De Leon 1974, 1989). A study by Taylor et al. (1997) looked at a concept-based New York hospital TC for substance abusers. Using the DSM-111-R instrument, they ascertained that of 183 successive admissions, 121 (66%) had schizophrenia, 61 (33%) had an affective disorder and 1 (1%) had some other category of Axis 1 disorder. They note that for such patients (known as MICAs - mentally ill chemical abusers) to be treated in concept-based therapeutic communities, some modifications would need to be made, especially since these patients may have limited abilities to tolerate confrontation. Sacks et al. (1997) surveyed the literature on co-occurring mental disorders and substance abuse disorders, and concluded that the prevalence of these co-occurring disorders is a major problem for both the individual and the community. They go on to describe a modified therapeutic community programme for MICAs, based around a 10 stage recovery model, in which the key concepts are motivation for change and readiness for treatment.

Cost-Offset Studies

Outcome studies of treatment have also been conducted which compare the cost of treatment with the amount which is saved as a consequence of no longer needing to treat or support a client. Such studies look at treatment as specifically providing "value for money" rather than behavioural or affective changes. According to Dolan (1997) personality-disordered patients have a particularly high level of service usage, tending to suck in services in a reactive and unplanned way. Studies which assess the
cost of Henderson treatment, and then offset this against savings in subsequent service usage offer a means of assessing the usefulness of the therapy. Menzies et al. (1993) carried out a retrospective study of penal and psychiatric service usage for 29 Henderson residents and found that the group used a total of £423,000 worth of services in the one year before they were admitted. Since these patients were not likely to spontaneously remit, they would be likely to carry on using services at that level if left untreated. 24 of the 29 patients were followed up after leaving (Dolan et al. 1996a) It was found that the actual cost of their psychiatric and penal services had dropped from £13,966 per person during the year before admission to £1308 per person for the first year after discharge. This represented a cost-offset of £12,658 per patient per year. Since the average cost of in-patient treatment was £25,641 treatment costs could be recouped within two years, and savings made thereafter.

In a study described earlier (Dolan et al. 1996b) of 424 patients referred to the Henderson between 1990 and 1993, a group who were admitted for treatment and stayed more than 12 weeks were compared with a group of patients who had had their funding for treatment refused. Overall, 19.8% of treated patients had either reoffended or been readmitted for psychiatric treatment, compared with 54.5% of the untreated group.

In their study of the Texas Correctional Substance Abuse Treatment Initiative, Eisenberg and Fabelo (1996) noted that a primary rationale behind the IPTC program was that the investment in treatment would produce a positive return to the state through costs avoided by reduced recidivism. The cost-effectiveness formula used by the state simply subtracted the cost of treatment from the potential savings of lower prison operating costs associated with reduced recidivism. For the IPTC program, the state's investment in treatment occurs over a two-year period, and the return occurs over the subsequent three year period, when most recidivism occurs. At the time of their study, Eisenberg and Fabelo did not have 3-year follow-up results, and so they estimated the reduction in recidivism which would be necessary. They found that the current recidivism rate of 55% would need to be reduced to 44% for the state to break even on its treatment. This would mean reducing the numbers of recidivists in their IPTC (n=672) from an anticipated 55% (n=370) to 44% (n=296). An assessment based on actual recidivism figures has yet to be made.
SECTION 6

Research reviews

Warren and Dolan (1996a; 1996b) reviewed the research on therapeutic communities in prisons in the UK and outside the UK, in high security hospitals, and non-secure health settings. They concluded that the studies demonstrated that personality disorder can be successfully treated using democratic TC methods in both secure and non-secure settings, and argue that the TC model is far better supported by research studies than other treatment strategies for this patient group.

Concept-based therapeutic community programmes, in prisons are reviewed in several papers by Wexler (1995, 1996, 1997; Wexler and Love 1994) which point to the success of this form of treatment with drug abusers. Skett and Ashcroft (1996) cover some therapeutic communities in a review of substance abuse treatment, and note that treatment results seem to be variable. Gerstein and Harwood (1990), examining 12-step programmes for drug and alcohol abusers (a version of concept-based TCs derived from the Alcoholics Anonymous approach), report that these type of treatment programmes are the most heavily funded and widely available in the USA.

Lees (1998) provides a historical overview of therapeutic community research, and a detailed examination of current research practice. The review describes therapeutic community research which uses experimental methods and randomised control trials, noting that these are often considered inappropriate because of the relatively small samples studied in therapeutic communities, and because of the difficulties associated with random allocation. Comparative cross-institutional research design, which compares naturalistic descriptions of TC settings and regimes has proved helpful in identifying types of community and principles of therapeutic work, and recent adaptations of this approach, such as the Ward Atmosphere Scale (Moos 1974; 1997) have included quantitative as well as qualitative features. Single case studies, while useful to the institution itself, are seen as of limited generalisable value. The review also covers the psychological research approaches which assess the effectiveness of treatment through psychological testing, and cost effectiveness studies. Lees argues that what is needed is research which better identifies factors within the therapeutic community regime itself, and which relates these to a more complex range of measures for identifying change in therapeutic community residents, both during and after treatment. Such research is necessary to support and inform evidence-based practice.

Meta-analysis
Meta-analyses of the results of collected research have been conducted of fields relevant to that of therapeutic communities in prisons (Andrews et al. 1990; Lipsey 1995; Pikoff 1989). The findings have been varied. Garrett (1985) in a review of the effects of residential treatment on delinquents found that by and large treatment has a positive effect, whereas Whitehead and Lab (1989) evaluating results of juvenile treatments from 1975 to 1984 concluded, as did Martinson in his influential paper of 1974, that "nothing works". Overviews of meta-analyses on offender treatment have been published by Lösel (1995a; 1995b) and Palmer (1992). Lösel and Egg (1997) point out that most of the available research refers to specific programs for juvenile offenders, often in non-custodial settings, and that the treatment of persistent adult offenders in prisons is under-represented in meta-analyses. In 1987 Lösel et al. published a qualitative and quantitative review of research into the treatment of adult offenders in some European countries and the USA, with particular focus on Social Therapeutic Institutions in the former Federal Republic of Germany, and carried out an associated statistical meta-analysis (Lösel et al. 1987; Lösel and Köferl 1989). They found re-offending rates for offender groups in social therapeutic institutions were lower by an average of 11 percentage points than groups serving standard prison sentences, and that in nearly all the studies, those who failed to complete treatment produced by far the worst results. In a recent article (translated for this study) Lösel (1997b) reviews some more recent meta-evaluations of offender treatment, looking in particular at issues of general effectiveness of treatment and at differences between various types of programmes. He found that even the large-scale North American meta-analyses do not paint a consistent picture, which suggests that it is unwise to rely on the findings of one meta-analysis. His overall finding from the review, regarding treatment of offenders, is that the general slogan "nothing works" does not apply. However, for treatment to have a positive effect, there is a need to match the offender to the programme, to maintain high quality of treatment and staffing and to ensure that programme integrity is maintained. (See also Lösel 1997c). In a general discussion of findings from meta-analyses on offender treatment, Lösel (1993) points to a lack of research information on the comparative effectiveness of treatment carried out in penal institutions as opposed to more open settings, and on the effect of organisation, staff and treatment process on outcome.

Antonowicz and Ross (1994) conducted a quantitative analysis of 44 rigorously controlled offender treatment studies published between 1970 and 1991, in order to determine which factors are essential to programme success. As part of their results they noted that an important and widely held assumption about correctional rehabilitation programs, is that therapeutic treatment programmes cannot function effectively in a prison setting. They dispute this assumption, noting that the literature shows that some programmes can be effective in prisons, at least if they somehow escape from or diminish the usual prison ambience and create an "alternative community" within the institution, either in separate buildings away from the general offender population, or in an educational or therapeutic community which isolates the offenders from the antisocial prison subculture.
SECTION 7

Discussion

Therapeutic communities have existed in prisons since the early 1960's. Today, most of the TCs in American prisons are based on a hierarchical model, and aimed at treating drug abusers, whilst most of the TCs in European prisons and in the UK are based on the democratic model and are designed to treat psychiatrically disturbed offenders. Many of these may also be drug abusers, but in democratic TCs drug abuse is seen as secondary to psychiatric need, whereas in hierarchical TCs, psychiatric need is seen as secondary to the issue of drug abuse.

For democratic TCs in particular there are some major differences between those run in prisons and those run outside. Structures and regimes have evolved to fit more closely with the prison requirements of security and control, and staff are often prison officers who have been given training in therapeutic skills rather than professional therapists or psychiatric staff. Programme integrity and therapeutic quality is maintained through experienced senior staff, outside consultants and regular training.

The evidence suggests that therapeutic communities can be helpful in reducing offending and in reducing symptomatology. Whilst the evidence from the hierarchical TCs for substance abusers in the USA looks particularly impressive, these figures cannot be directly compared to the evidence from democratic TCs for several reasons. Firstly, hierarchical TCs are organised essentially to deal with a particular symptom - drug-abuse. Since the crimes committed by drug abusers are held to be directly associated with their drug use, the TCs tackle drug abuse issues (eg: immaturity, susceptibility to peer group pressure etc) rather than the psychological disturbances connected with offending behaviour. Moreover, they provide program graduates with alternative reference groups, often ex-addict program graduates, who continue to positively reinforce the therapy long after treatment has ended.

The emphasis on evaluative research on hierarchical TCs has provided a great deal of evidence of their effectiveness, based on large numbers of clients. In turn, this has led to their becoming accepted as a mainstream drug abuse treatment approach in the USA; whilst democratic TCs have provided evidence of their effectiveness, especially with psychopathic disorders which are generally considered "untreatable", this does not seem to have resulted in any proliferation of therapeutic communities. TCs in prisons in particular seem to have been established very sparingly, and often last only a few years. Literature on this "short-lived" aspect of democratic TCs suggest that they may be perceived as "soft" by the rest of the prison, and that whilst they may be tolerated as experiments, they are rarely regarded as an acceptable part of prison culture, despite evidence that they are effective in reducing both offending and
psychological disturbances. It may be that hierarchical TCs are perceived as "hard" and therefore are more acceptable to prison culture.

Small therapeutic community units inside prisons often have difficulties maintaining programme integrity because of requirements to submit to prison rules, or because of expectations that staff are not dedicated to the TC but can cover elsewhere in the prison. TCs may also find themselves with "lodgers" - psychiatrically disturbed inmates who are not TC members, but are lodged there during an acute phase. Prison therapeutic communities which can maintain some distance from the host prison, or even be established outside, seem to fare better (eg: Grendon, and some of the German Social Therapeutic Institutions.) Inside prisons, separate buildings, staff and administration allow therapeutic communities to operate with therapeutic integrity, and TCs may be located in hospital buildings, or separate facilities, to keep inmates away from the rest of the prison population. However, too much separation can lead to problems: either the therapeutic regime will lose quality or the host organisation will object.

Hierarchical therapeutic communities seem particularly efficient at re-integrating inmates back into the community. Some in-prison TCs operate community-based TCs which function almost as half-way houses for ex-prisoners, and which continue the familiar therapeutic regime. Again however, re-integration for ex-addicts often involves a break with past environments and adoption of a new, positive way of life and groups of friends. Aftercare for inmates from democratic TCs is more likely to be carried out as regular discharge from prison under the auspices of the Probation Service, and ex-prisoners often find themselves back in their old environments and amongst their old reference groups without the "cushion" of a therapeutic community environment to help them readjust. In the German Social Therapeutic Institutions, where re-integration is considered primary, treatment is seen to be particularly effective.

Studies on democratic therapeutic communities demonstrate their effectiveness in the treatment of psychopathy. Studies suggest that there are different types of psychopath, some of whom are more amenable to treatment than others. It has been suggested by several writers that effectiveness could be improved by careful selection for treatment, and also that modifications to therapeutic community environments may be effective in treating some of the more entrenched psychopathic personalities. Overall, effectiveness of TC treatment for psychopaths looks particularly promising. This is an important finding for in-prison TCs, since offending is often linked with psychopathy.

There seems to be general agreement that inmates behave better in TCs than in mainstream prisons, even though the particular inmates who elect to join TCs often have lengthy records of prison disruption and violence. Because of this, units for violent prisoners have adopted some of the main characteristics of therapeutic communities. Studies of psychiatric disturbance show that disturbance tends to decrease during TC treatment, and that positive traits such as self-esteem tend to rise.
The research suggests that therapeutic communities are not suitable for everyone, and that even those for whom it seems suitable may not be ready or willing to engage in therapy. Research which attempts to identify people for whom TC treatment seems most appropriate offers a practical means of establishing potential successes, but therapeutic community practice generally centres on either admitting everybody who wants to try the program, or admitting those whom the community feels it can help. Decisions about acceptance or rejection are often made according to the current make-up of the community, not on standard criteria of entry, and someone who might be suitable on one occasion, may be deemed not to fit on another. Nevertheless, the economic need to demonstrate levels of effectiveness, and the finding that TCs can negatively affect those who stay a very short while may make it more likely that therapeutic communities will develop ever more focussed admission criteria.

One of the main findings of the research, repeatedly demonstrated in many of the studies, is that there is a positive relationship between time spent in therapy and outcome. This may be through some kind of self-selection procedure, in which only those most committed to change are prepared to stay the course, or it may be an effect of the experience. (It would be difficult to isolate and measure these two factors.) Self-selection through early leaving seems to be a particular feature of hierarchical therapeutic communities, which have especially high drop-out rates in the early weeks of the programme, but all therapeutic communities have drop-outs because of the requirement that members should be willing to continue, and the community should be willing to let them continue. Early leaving may be a particular problem with some types of inmate or patient, such as the more unlikeable psychopaths, who get voted out, or introverts, who may be unable to tolerate the milieu. Research suggests that TCs can be modified to accommodate such residents more readily, and that staff can be trained to work more effectively with difficult residents.

There are very few therapeutic communities for women in prisons: the literature provides examples of some in-prison hierarchical programmes for women substance abusers, but no information was found that suggested other programmes existed. In the UK, the only therapeutic community opportunities for women are outside prisons, despite estimates that 8% of women in prisons could benefit from TC treatment.

The overall conclusion of most of the studies and the literature surveys, is that therapeutic communities have a positive effect on reconviction and reoffending, and a positive effect on behaviour in prison. A great deal of research has already been done which shows this. Nevertheless, there needs to be more research into the process and outcome of prison therapeutic communities, particularly in the UK, if TCs are to become a more accepted and welcome part of the prison establishment. This however poses a problem. TCs need to be evaluated in order to ascertain their effectiveness; their effectiveness however rests quite largely on the freedom they have to establish and maintain a workable, consistent programme, to train and retain staff, and to operate with enough independence to create a safe and supportive environment. Without the research, they may not be granted the freedom to operate effectively;
without the freedom to operate effectively, they may be unable to produce the quality of results which they are aiming at.
APPENDIX

The Search Strategies

**Book bibliographies handsearched:**


**Bibliographic databases searched:**

Dissertation Abstracts
Embase
IBSS
Science Citation Index
CareData
Social Science Index
British Humanities Index
Biological Abstracts (BIOSIS)
Sociolfile
Computer Retrieval of Information on Scientific Projects
National Criminal Justice Reference Service
National Criminal Justice Periodical Index
Directory of Published Proceedings
Medline
Psychological Abstracts (Psychlit/PsychInfo)
Applied Social Science Index and Abstracts (ASSIA)
System for Information on Grey Literature in Europe
BIBLIOGRAPHY


Barker E.T., and Mason, M.H., (1968) The Insane Criminal as Therapist, Canadian Journal of Corrections, 10, 553-561


Cullen, E. (1997) *Can a prison be a therapeutic community: the Grendon template*, in E. Cullen, L. Jones, R. Woodward (eds) Therapeutic Communities for Offenders, Wiley: Chichester, pp.73-99


Eisenberg, Michael and Fabelo, Tony, (1966) *Evaluation of the Texas Correctional Substance Abuse Treatment Initiative: the impact of policy research,* Crime and Delinquency, 42, 2, pp.296-308

Earnshaw, Judith, (1991) *Evolution and accountability: ten years of groups in a day centre for offenders,* Groupwork, 4, 3, pp. 231-239

Evans, Chris, (1994) *TC methods within the penal system: Is research on possible selection variables as simple as it sounds? Or should it be simpler?* Therapeutic Communities, 15, 4, pp.319-324


Harris, Grant T., Rice, Marnie E., and Cormier, Catherine, A., (1994) *Psychopaths: is a therapeutic community therapeutic?* in Therapeutic Communities, 15, 4, pp. 283-324


Kobal, M., and Zagar, Dusan, (1994) *An open forensic psychiatry ward organised as a therapeutic community*. In Therapeutic Communities, 15, 4, pp. 265-272


Lambert, L.R., and Madden, P.G., (1976) *The adult female offender: the road from institution to community life*. Canadian Journal of Criminology and Corrections, 18, 4, pp. 319-331


Lösel, F., and Egg, R., (1997) *Social-therapeutic institutions in Germany.* In E.Cullen, L.Jones, R.Woodward (eds) Therapeutic Communities for Offenders, Wiley: Chichester, pp. 181-203


Lösel, F., (1997c) *Effective correctional programming: what empirical research tells us and what it doesn't.* (Unpublished article, Internet, 1997)


Maier, G.J. (1976) *Therapy in Prisons,* in J.R.Lion and D.J. Madden, Rage, Hate, Assault and Other Forms of Violence, Spectrum: New York, 113-133


Melotte, Christopher, (1975) A rehabilitation hospital for drug users: one year's admissions, British Journal of Criminology, 15, 4, pp.376-385


Norris, Margaret, (1983) Changes in patients during treatment at the Henderson Hospital therapeutic community during 1977-81, British Journal of Medical Psychology, 56, 135-143

NTORS (1996) The National Treatment Outcome Research Study: summary of the project, the clients and preliminary findings, NTORS/ Department of Health, Maudsley Hospital: London.


Sacks, S., Sacks, J., De Leon, G., Bernhardt, A.I., Staines, G.L., (1997) *Modified therapeutic community for mentally ill chemical "abusers": background; influences; program description; preliminary findings.* Substance Use and Misuse, 32, 9, 1217-1259


Smith, A.B., and Bassin, A., (1992) *Kings County Court Probation: a laboratory for offender rehabilitation.* Journal of Addictions and Offender Counselling, 13, 1, pp. 11-22


Sugarman, B. (1975) *Drop-out patterns in a therapeutic community: Behaviour that does not correlate with social background and some implications for motivation.* Corrective and Social Psychiatry and Journal of Behaviour Technology Methods and Therapy, 21, 3, 2-6


Wilson, Stephen, and Mandelbrote, Bertram, (1978b) *Drug rehabilitation and criminality*, British Journal of Criminology, 18, 4, pp. 381-386


