FACTORS RELATED TO OUTCOMES OF DRUG ABUSERS' PARTICIPATION IN A PRISON THERAPEUTIC COMMUNITY

by

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Abstract

FACTORS RELATED TO OUTCOMES OF DRUG ABUSERS' PARTICIPATION IN A PRISON THERAPEUTIC COMMUNITY

by

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This study assesses the factors that contribute to the efficiency of a program of resocialization of substance abusers via their participation in a prison therapeutic community (TC). The impact of social support mechanisms, or client resources, on treatment outcomes is explored. The preliminary findings indicate the effectiveness of the prison TC program with a reduction in inmate drug abuse and crime, and an increase in employment. Positive outcomes are strongly associated with retention in treatment. The influence on client resources upon recovery is substantiated. Higher treatment outcomes are related to positive friendships and a moderate criminal record. This study supports previous conclusions reported in prison-based TC research and it also initiates two possible areas of advancement. Investigating social interactions before, during, and after the drug treatment program to enlighten researchers of the influential factors supporting successful treatment outcomes and to help them "visualize" the actual treatment process. Lastly, the incorporation of the ethnic/minority status of clients into future TC studies is recommended.

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In conclusion, I would like to recognize the help of my family and friends that I received over the years. Their uplifting love, faith, and support were the "wind beneath my wings." Finally I want to extend my appreciation to the men at Donovan Prison who volunteered for the Amity TC program. Besides contributing to our data bank of research, they offer hope when the future often looks bleak. Their attempt at change should inspire all of us.

This paper I dedicate to my former students in the SUNY New Paltz Prison Program. They touched my life in innumerable ways. Hopefully, their educational experience helped them to live a better tomorrow.

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Chapter I

DRUG ABUSE OFFENDERS AND SOCIETY

INTRODUCTION

This study assesses the factors contributing to the effectiveness of a program of resocialization of substance abusers via their participation in a therapeutic community (TC) experience while in prison and later, during a post-release period. The study explores treatment outcomes in terms of social adaptation, substance abuse and recidivism rates. It evaluates client resources, which include previous personal relationships, work skills, and drug and criminal activity, as intervening factors in this process. Findings from this study may contribute to guidelines for future candidate placement in prison treatment and suggest changes in the structure of prison TCs. The study also can contribute to theory by clarification of the relative importance of social support mechanisms, background variables, and the learning of "right living" in the doubly restrictive setting of a prison therapeutic community.

The study should provide greater understanding of the social dynamics of prison TCs. Since drugs and crime already cost society many billions of dollars annually, reducing drug use and its associated crime even modestly is important. Costs include victims of drug-related crimes, health problems, loss of productivity resulting from criminal careers, and maintenance of enforcement machinery. The federal government, however, allots less than one fifth of its annual $17 billion drug abuse budget for all forms of treatment. Although legislatures and the public are generally convinced that prisons are a good way of handling drug abusers, such views rely on stereotypes and on general impressions rather than data.

SIGNIFICANCE OF THE PROBLEM

The United States is on the verge of a major expansion of TCs in prisons, an expansion which is probably the most important development in penology and our society's treatment of drug abusers in the last few decades. However, the decision to proceed with a massive expansion of prison TCs has been made with minimal availability of substantial research on whether or not the civilian TC has adequately been modified to adapt to a prison setting. The investigation of factors related to successful outcomes at prison TCs is practically in its infancy, with a little over two decades of research. The data to be analyzed for this study, part of a five year evaluation, derive from probably the most substantial study of its kind. The findings of the study will have significant implications for policy and ramifications for theories of deviance, rehabilitation and therapeutic communities.

An exploding crime wave pushed the nation to drastically increase the prison population since the 1970s. Recidivism remained high and provided additional confirmation for the concept of the validity of the "revolving door" syndrome in the criminal justice system. The drug panic of the 1980s contributed to citizens' fear and legislators' paranoia. The cocaine epidemic, the unexpected appearance of "crack" on urban streets in 1985 and the associated rise in urban violence, and the emergence of injection drug users as one of the main source of AIDS transmission, were troubling to the general public and the policymakers.

Legislation attempted to deal with the situation via persistent felony offender laws and fixed sentences with no parole and longer sentences, but overcrowded prison

conditions tended to ultimately cause many offenders to be pushed back into society. In response to the crack flare-up, new federal laws imposed draconian sentences for use and sales of crack, with penalties one hundred times greater than those for possession of the same amount of cocaine. Subsequently, these laws also exacerbated overcrowding and created an inmate population that now, in both federal and state prisons, is moving toward becoming a majority of drug abusers. The Justice Department's National Drug Use Forecasting (DUF) studies consistently show that some 75% of felony arrestees test positive for illegal drugs. (The New York figures, in recent years, have been around 80-85%)

In the 1990s the criminal justice system began to seriously consider how incarceration might be combined with rehabilitation of drug users, by offering drug treatment services in prison so that otherwise "wasted" time of offenders would serve a useful purpose. Both mental health concerns and drug use would be addressed, while lifestyle changes would be introduced in hopes of impacting recidivism by transforming identities of prisoners. Nevertheless, planning rehabilitative treatment for such individuals, including career criminals and chronic substance abusers, has proven to be complicated. There is a current consensus that the therapeutic community, a program of resocialization developed in England in the 1940s and America in the 1950s, is perhaps the best approach to achieving these ends in a prison population.

ORGANIZATION OF THE STUDY

In the following presentation, the rehabilitation of drug offenders is pursued as a societal goal. This investigation attempts to study the efficiency of a program of resocialization of substance abusers in a prison therapeutic community (TC). Data collected from respondents of the Amity TC at Donovan Prison in California are used to demonstrate the rehabilitative effectiveness of the treatment program.

After attending the prison-based program and after one year in post-release, drug offenders are questioned on drug usage, reincarceration, and employment. The outcome data indicate the relative success or failure of the drug treatment modality. Moreover, the study investigates the impact of client resources, or social support networks, on the resultant outcomes.

Chapter II, **Background Perspectives**, consists of two major parts: a sociolcgical theory of resocialization and an historical overview of drug treatment. The first part details social learning/resocialization theory and its relationship to the TC process. The second part traces the historical background of drug abuse treatment in the United States. It begins by looking at drug treatment and its overlap with the criminal justice system and concludes with a focus on the evolution of the distinctive drug treatment modality, the therapeutic community, from its English roots to its present-day modification to innovative settings.

Chapter III, **Therapeutic Communities in Prisons**, thoroughly discusses drug treatment programs in correctional institutions. First, it reviews the early history of prison-based TCs beginning in 1960s and then it presents the recent development and

success of TC programs in prisons today. Secondly, the chapter gives a detailed description of the Amity TC at Donovan Prison, including the program curriculum, method, structure, and aftercare provisions for its client population.

Chapter IV, **Methodology**, outlines the study of the prison-based Amity TC for program efficiency. The purpose of this chapter is to present the sample population, the method of data collection, and the research design. Instrument development is a major part of the study's design. This section explains the creation of the Treatment Outcome Index, acting as an indicator of treatment success, and the Scales of Client Resources, representing social support mechanisms impacting the lives of the respondents. The assessment of factors related to outcomes, ultimately, utilizes both these instruments.

Chapter V, **Statistical Results**, explains the step-by-step analysis of the Amity TC inmate population. The chapter begins with client demographics for the 12 month community and includes such data as: age, ethnicity, education, and criminal history. The statistical analysis section consists of a twofold investigation. First, the relationship between treatment outcomes and assorted variables found in prior research is explored--testing the validity and reliability of the Treatment Outcome Index begins the protocol. The second statistical analysis delves into the relationship of treatment outcomes and the influence of social networks, represented by the newly created categories of client resources. Tests of correlation and linear regression are used for both analyses.

Chapter VI, **Discussion of the Findings**, reports on the effectiveness of the prison-based Amity TC from the study at Donovan Prison. This chapter is divided into three topical research areas: instrument development, statistical relationships, and group

comparisons. The creation of appropriate measurements, to operationalize the concepts of drug treatment success and its corresponding influential components, is the focus of the initial section. The next part approaches the use of the two instruments, the Treatment Outcome Index and the Scales of Client Resources, for present and future statistical research. Lastly, a comparison of racial/ethnic differences demonstrates the need to advance areas of investigation into the drug treatment process. This final topic raises the question of the interaction of ethnicity on treatment outcomes.

Chapter VII, **Conclusions**, elaborates on research that strives to explain the TC process and uncovers some limitations of the Amity TC study--the sample and the study design. The use of secondary data hinders the study's further investigation of the TC process, while an emphasis on social networking factors in design results in the absence of relevant psychological/behavioral data. Policy and research suggestions are laid out in the next portion of the chapter.

Ancillary services seem to act as a viable solution to the discontinuity of the drug treatment process for inmates. Case studies, such as CREST, show the fostering of success following parole and the probability of recovery and reentry back into society. The recognition of clients' ethnic/minority status within drug treatment programs calls for further research, especially for TC populations that rely on intensive peer interaction. Moreover, this goal needs to be extended to the substance abusers in prison TCs to help balance the lingering effects of ethnic stratification in society.

The concluding remarks sections summarizes a polemic essay that describes incarcerated drug addicts as "toxic wastes." From my teaching experience in the New

York State prison system, a comparison reaction is noted toward college student inmates. It appears that public stereotyping and ill will contributes to the tremendous challenge of inmate reentry back into society after imprisonment. The offering of drug treatment programs in prison, which have been proven highly effective for this particular client population, definitely appears to be the right direction for our society.

Chapter II

BACKGROUND PERSPECTIVES

SOCIOLOGICAL THEORY

The importance of socialization as an interactive process by which individuals become competent members of society has been documented in the sociological literature (Mead, 1934; Cooley, 1902). The learning process that occurs through primary groups and contributes to the development of self is most apparent in early childhood and continues throughout the life cycle.

Peers are also strong agents of socialization. Edwin Sutherland (1939; 1954) first applied sociological thinking to criminology with his theory that falling into "bad company" can introduce new and deviant patterns of behavior. Through the process of differential association, the self image becomes crystalized as the individual internalizes an excess of definitions of behavior favorable to deviance. The acquisition of motive, drives, rationalization and attitudes is also accomplished in the same manner. Even education aspirations are influenced by peers (MacLeod, 1987; Willis, 1977) as well as occupation success (Lin et al., 1981).

Recruitment of drug users through differential association occurs in intimate social networks. The social learning of drug use is also advanced through friendship networks (Goode, 1972; Williams, 1992) and is enhanced by ritual (Becker, 1953; Harding & Zinberg, 1977). The abandonment of old social networks may ultimately result in a cessation of drug dependency (Robins, 1973; Williams, 1989). Social attachments have been found to play a major role in explaining recruitment to new religious

movements as well (Bainbridge, 1978; Lofland & Stark, 1965; Lofland, 1966; Roberts, 1968; Snow et al., 1980; Stark & Bainbridge, 1980).

Defection from cults and sects is the mirror image of recruitment (Bromley, 1988; Hardyck & Braden, 1962). People with weak social bonds to the group are the most likely to leave it. Research on religious conversion indicates the apparent influence of social networks on an individual's acceptance of new beliefs, behaviors and social roles (Harrison, 1974; Heirich, 1977; Jones, 1978; Richardson, 1985; Snow & Machalek, 1983; Straus, 1979). This social process can also describe an individual's drug history, as a sequential learning experience that ultimately can advance to dependency stage.

In leaving a dependency, as part of a treatment program, the person must be resocialized to unlearn former beliefs, behaviors and social roles. The therapeutic community approach is to increase meaningful primary contact with legitimate patterns of behavior and, at the same time, reduce intimate contact with deviant patterns of behavior. The opportunity to create a new identity is also essential. The "righteous dope fiend" has an ideology, skills and a status within his subculture (Sutter, 1966) that he must abandon in a TC. Treatment must "be aware of the importance of identity and the self-concept" (Winick, 1974).

Therapeutic communities may partly rely on a process of conversion to be effective to achieve the transformation of the identities that they seek to develop. Conversion can be understood as "a radical reorganization of identity, meaning and life" (Travisano, 1970:600). Again, social networks will play an important role in fostering a commitment to a conventional lifestyle. "Although little deference is given by the

advocates of the therapeutic community approach to the early work of Sutherland, the relationship is unmistakeable" (Alksne, 1981:84). This has also been acknowledge by other sociologists. Prominent criminologists Volkman and Cressey (1963), in a widely discussed article, held that the TC was the most important development in rehabilitation in criminology in the twentieth century.

Nonetheless, to study the effectiveness of the TC program is a problematic endeavor. Even at the turn of the twenty-first century, a publication on TCs reports that measurement of the complex, multidimensional change in client progress is "a formidable methodological challenge" (Kressel et al., 2000:267). To evaluate the efficacy of the TC process, it appears that social interaction networks should be given credible priority in reference to the aforementioned theoretical perspectives.

Bell (1995) proposes a "logic of connection" in his elaboration on the TC philosophy and process. Through the "art of confrontation," which consists of intense and committed peer/staff encounters that typify the therapeutic community, the community members become engaged in a relationship connection.

> The TC philosophy instructs members that they should care, that they should listen, that they should take responsibility by confronting the new resident's resistances. These norms allow members to 'act as if' they were connected until a personal connection eventually grows. One of the greatest strengths of the TC philosophy is that it motivates community members to place these demands on the new resident (Bell, 1995:536).

In this method of building relationships, trust must be earned and faith developed in a supportive community. Connection theory points to the importance of connection in the treatment process, where the goal "is to help the resident to apply these new skills of connecting in the resident's new and renewed, hopefully drug-free, personal relationships"

(Bell, 1995:538). Moreover, Bell stresses that maximum treatment success will depend upon the client's ability to connect.

He concludes that those who have practiced relationships of connection will be more willing to endure the treatment process and will sustain ongoing relationships when they leave. TC residents with an impaired ability to connect, conversely, will have a more difficult treatment experience and will have few resources with which to build new connections. Furthermore, Bell suggests the possibility of measuring the level of connection in present and past relationships in order to evaluate new residents' ability to connect and their likelihood to sustain treatment.

Extending this analogy from the process within a TC program to reentry back into society following graduation, it is logical that knowing levels of connection would be helpful in understanding factors related to outcomes. The experience of drug abusers' participation in a prison therapeutic community will, it would appear, be influenced by their webs of social affiliations. These social networks of past relationships can have either a positive or a negative impact upon inmates after leaving drug treatment in a prison TC, influencing their return to or rejection of deviant lifestyles in post-release.

Since social support has been considered important in civilian TCs (Arons & Daily, 1976; Winick, 1990), it ought to be functional in a prison-based TC as well. Furthermore, these social support mechanisms or client resources could support successful lifestyle changes that were promoted in the TC program, or contribute to the erosion of the concept of "right living."

The impact of positive client resources for an inmate should produce successful

outcomes--an abstinence from drugs, a lack of recidivism, and successful employment in post-release. These positive resources would consist of: strong family support, conventional friends, an adequate education, a good employment record, and a relatively moderate criminal record as well as level of drug use.

Conversely, inmates with negative client resources would be expected to have poor outcomes--the highest drug use, the worse recidivism rates, and unemployment in post-release. Negative resources would include: dysfunctional families, deviant friendships, an inadequate education, poor work experiences, an extensive criminal record and severe drug dependency.

Even though social and demographic characteristics have generally not been found to predict which clients will stay in treatment the longest or have success in treatment outcomes (Condelli, 1994; Lewis & Ross, 1994); sociological issues are relevant. Arons & Daily (1976) found that some sociological issues did impact male drug addicts who successfully completed the program in a civilian TC.

These sociological variables were concerned with: drug abuse history, family drug and alcohol abuse, family socialization, and socioeconomic status. Though these variables only explained 13.5% of the variance, they represented nearly three-quarters of the explained variance in the study. Therefore, this study of offenders in a prison TC affords us the opportunity to look at social networking practices after the TC experience, when they are operative in post-release.

To understand the interaction of client resources upon outcomes variables, this study involves the creation of a Treatment Outcome Index. Rather than a single indicator

of a successful or poor outcome following drug treatment, a composite score on the index takes into consideration reincarceration, drug usage, and employment a year after reentry back into society. An interrelationship between outcomes and the scales of client resources is expected.

It is also anticipated that the scales of client resources will impact treatment outcomes and be mediated by age and ethnicity. Winick (1990) found for his civilian TC sample that the older clients tended to complete the program in less time than the younger clients, possibly because of the "maturing-out" process (Winick, 1962). Other research also reported age as an important predictor of retention in TCs (Condelli, 1986; 1989). Though ethnicity has not been predictive of retention in one national study (Hubbard et al., 1989), some long-term TCs have reported Hispanics dropping out earlier (De Leon et al., 1993).

The lack of consistent findings on the issue led De Leon et al. (1993) to raise the relevance of cultural factors in TCs. There is a paucity of research on the interaction between TCs and minority group members (De Leon et al., 1993; Longshore et al., 1993). Outcome findings that clarify contributions of cultural factors are scarce. Large-scale examination of ethnic differences in prison TCs has not figured into existing studies. This is an area sorely lacking and very relevant to prison populations, which are disproportionately overrepresented by minority groups.

The creation of a Treatment Outcome Index and scales of client resources will provide vehicles for assessing the prison TC. They can help identify prisoners for whom the TC is most and least effective and encourage creativity in designing structural

variations in the prison TC model. The indices to be developed have not previously been applied and reflect measurement of theoretically important variables.

Studying outcome variables following the TC experience can provide informative and worthwhile data on recidivism as well as drug usage. The proposed study uses data made available by National Development and Research Institutes (NDRI) and collected at a TC in San Diego's Donovan Prison, as part of probably the most comprehensive and large-scale study of a prison TC.

The findings of this study, by expanding the data base for prison TCs, will contribute to their evaluation. It will allow comparisons especially in the study of ethnic factors in prison TCs and civilian TCs. In terms of theory and practice, the prison TC, as an authoritarian structure within an authoritarian structure, represents a quintessential example of this approach to the transformation of identities. Thus, our findings may cast light on the central TC notion of using social structure to achieve therapeutic change.

HISTORICAL OVERVIEW

The historical background of drug abuse treatment in the United States is vital to understanding the rehabilitation of drug offenders in present-day society. Many of our contemporary stereotypes and general impressions reflect ideas that developed with the merger of the criminal justice system and drug treatment, which followed the institution of the Harrison Act in 1914. By 1929 the treatment protocol was narcotic 'farms,' symbolically taking "the addict out of the competitiveness, urban tensions, and crime that had caused his weak personality to succumb to drugs" (Morgan, 1981:135).

In our nation today, current conditions reveal a high proportion of drug offenders within the prison system who are in need of drug abuse treatment. Rather than trust research findings that consistently report the prison-based therapeutic community as a successful modality for controlling recidivism; instead, we tend to find public support, political backing, and financial funding are relatively lacking. Yet the therapeutic community, which originated in the 1940s at an English hospital for the mentally ill, has evolved into a drug treatment program that can be modified to treat diverse populations: women with children, residents of homeless shelters, institutionalized juveniles, prison inmates, etc. The TC for addictions attempts to restructure the life of the addict through peer interaction and is designed to help the individual reentry society. This is a powerful treatment modality for the incarcerated chronic substance abuser.

Drug Abuse Treatment and the Criminal Justice System

During most of the nineteenth century in America, most drugs were licit. In 1914 Congress passed the Harrison Act, a national law growing from scattered local ordinances. "[T]he new legislation went a long way to alter public and criminal justice responses to drug use in the United States for generations to come" (Inciardi, 1992:15). After its passage and further judicial and legislative interpretation, the Harrison Act regulated and criminalized the possession, use, and sale of opiates and cocaine (Phillips, 1992; Courtwright, 1982).

By the 1920s, heroin addicts were systematically being sentenced to federal penitentiaries. In 1929, however, Congress passed the Porter Narcotic Farm Act which opened up treatment centers at Lexington, Kentucky in 1935 and at Fort Worth, Texas in 1938. These public health facilities were in lieu of imprisonment for drug offenders convicted in federal courts. Unfortunately, the hospitals were run like medium-security prisons (Lockwood, et al., 1997; Phillips, 1992).

The "narcotic farms" consisted of a six-month treatment program which included detoxification, psychotherapy, and vocational counseling. Though follow-up studies reported poor retention and high relapse rates, these relatively ineffective programs "represented the first attempt at comprehensive prison-based drug treatment" (Lockwood, et al., 1997:88). A number of contemporary observers felt that lack of community-based aftercare services severely affected the programs' efficacy, foreshadowing conditions observed in today's society.

For forty years there was strong narcotics control during the regime of Harry

Anslinger, the head of the Federal Bureau of Narcotics from 1930 through 1962. During the 1950s policies were increasingly strict, punitive, and rigid; traffickers were targeted (Boggs Act of 1951 and Narcotic Control Act of 1956) and there were also harsh, mandatory sentences for possession and sale. This period marked the zenith of the punitive approach (Courtwright, 1982).

"The 1960s were a decade of experimentation, both on the part of drug users and on the part of drug policy administrators" (Phillips, 1992:138). One such endeavor was a call for medicine and public health to come to the aide of drug addicted offenders. So in 1962, the year in which the U.S. Supreme Court defined narcotic addiction as a disease (*Robinson v. California*), when the White House Conference on Narcotics and Drug Abuse convened, rehabilitation rather than punishment emerged as its theme. In this decade, types of drugs and the people that used them also began to change somewhat.

There was widespread experimentation as substances, such as LSD, amphetamines, marijuana, and prescription drugs became popular with abusers. Increasing numbers of middle and upper class youths were using illicit drugs for "kicks" and for generational symbolism, to show disapproval toward mores and government policies (Phillips, 1992). Treatment approaches continued to draw attention, with methadone maintenance, counseling, and residential TCs, the most predominant modalities. From 1966 to 1971, increasing governmental funding was committed to the treatment of drug addiction (Hubbard et al., 1989).

By 1971 President Nixon called for a "war on drugs" which aimed to curtail the supply side with interdiction, to reduce demand through law and order campaigns, and to

expand treatment nationally through the Special Action Office for Drug Abuse Prevention (SAODAP). After the collapse of his civil commitment program in New York State and in an effort to position himself as a law and order candidate for national office, Governor Nelson Rockefeller in 1973 called for long mandatory prison sentences, and New York passed the country's most severe laws against drug users. Meanwhile federal and state-funded social services were experiencing substantial growth, so the "demarcations between treatment as part of the social welfare and health care systems and the criminal justice system were becoming less clear" (Phillips, 1992:142).

The 1980s "escalating war on drugs engendered a criminal justice process that appeared to be 'drug driven' in almost every respect" (Inciardi, 1993:30). New laws were created, police expanded drug enforcement and increased arrests, courts were bogged down with drug cases, and the prisons became more overcrowded than before. During the decade, societal opposition to drug use was expressed in many jurisdictions' "zero tolerance" policy. Reports of treatment failure, especially for stemming associated crime, had helped to make many people more ambivalent about drug abusers.

"Drug users were being perceived as more bad than sick or ill, so law enforcement and criminal punishment emerged as the dominant public strategy" (Gostin, 1993:265). President Reagan's War on Drugs was supported by a "dope fiend" and national threat ideology (Winick, 1993). The widespread presence of crack cocaine in poor urban neighborhoods and a collateral rising crime rate during the late 1980s intensified the perceived threat of drug use.

More than 50 percent of the total federal drug budget was used for treatment and

prevention in the 1970s, but during the Reagan years it was reduced to between 18 and 27 percent. Law enforcement, interdiction, and eradication instead became the dominant recipients of the drug budget. The 1980s saw a 115 percent growth in the prison population (Gostin, 1993:272) and the discovery that HIV transmission was linked to intravenous users. Although it would appear to have been a crucial time to reassess priorities, during the following decade the war on drugs continued on the same steady, costly path.

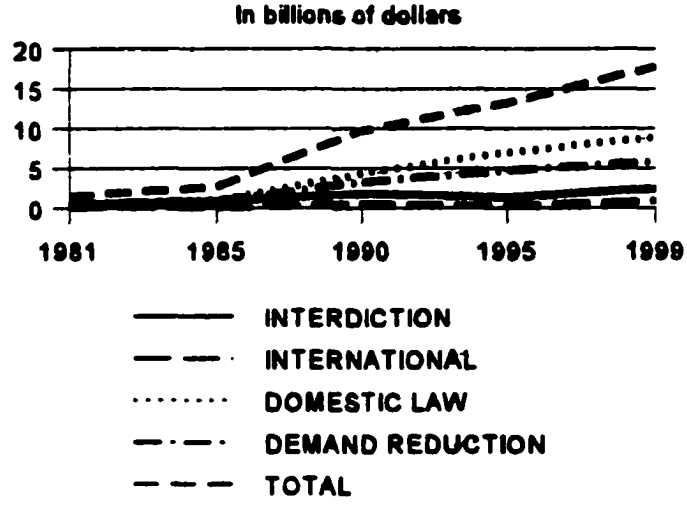
From 1981 to 1999 federal spending on drug problem expenditures grew 12-fold (**Figure 1**). By the year 2000, law enforcement and interdiction dominated the federal budget, receiving two-thirds of more than $17 billion. Only $6 billion was earmarked for demand-reduction strategies, with drug treatment getting 18 percent of the total federal drug control budget (Robert Wood Johnson Foundation, 2001). Politicians tend to follow a hard line, often joining with moral and religious conservatives on drug policy. As Representative John Conyers stated, "Drug education and treatment have gained a name as a wimp activity....If you favor these things, you're a softy" (Courtwright, 2001:202).

Current law enforcement reflects this get-tough attitude, with more than a million and a half drug arrest violations each year. Prison overcrowding escalates as the number of drug offenders increase. From 1985 to 1995, drug offenders accounted for more than one-third of the growth in state prisons and more than an 80 percent increase in the federal prison population (Robert Wood Johnson Foundation, 2001).

More than 70 percent of state prisoners and more than 30 percent of federal prisoners are estimated to need treatment, but currently only fewer than 15 percent of

Figure 1

Federal Drug Control Spending Rises



Source: Adapted from Substance Abuse Chartbook, Robert Wood Johnson Foundation, 2001:85

people in prison receive relevant substance abuse treatment. Social science research should serve as enlightenment:

> Although a large proportion of the nation's prisoners lead a lifestyle associated with problems of drug abuse, only a small percentage receive treatment while in prison....Without effective treatment for their drug use and related lifestyle problems, the likelihood that they will recidivate is quite high....There is enough evidence that drug treatment is an effective means of controlling recidivism and that programs such as therapeutic communities are well suited to serious drug abusers in prison (Falkin, Wexler, & Lipton, 1992:99).

Nonetheless, budgetary concerns and policy issues remain shortsighted.

The Evolution of the Therapeutic Community

The TC first appeared in psychiatric hospitals in England in the mid-1940s and is significantly related to the work of Maxwell Jones. Beginning in 1941 at the Mill Hill Hospital on the outskirts of London, the British psychiatrist tried a new idea and method that brought patients into an active role in their own rehabilitation and reduced the power structure between residents and staff (Kennard, 1998). Jones also used these ingredients at Belmont Hospital, later renamed Henderson Hospital, in Surrey when he treated inmates with severe personality disorders.

This new treatment brought about a transformation from a large-asylum institution approach to a more humane, caring and intimate environment. It is considered a TC of the democratic analytic type, though actually "...Jones saw democracy as giving residents 'that degree of responsibility which is comparable with their capacity at any one time'" (1998:63-64). The Jones TC nevertheless "foreshadows the fundamental concept of community as method in the later addiction TC" (De Leon, 2000:12).

The contemporary TC programs for addictions can trace their evolution through a combination of elements found in the Oxford Group, Alcoholics Anonymous (AA), and first combined in Synanon. Originally the Oxford Group was a religious organization founded by a Lutheran minister, Frank Buchman, circa 1921. Its main focus was a return to the purity of the early church and it dealt with mental illness and alcoholism as signs of spiritual erosion (De Leon, 2000). Group confession of personal failure as well as a membership that was totally open and honest with each other were two features passed on to AA and eventually to Synanon (Kennard, 1998).

In 1934 Bill Wilson was exposed to the Oxford ideas through a drinking buddy and ultimately he experienced a spiritual awakening, which encouraged his maintenance of sobriety. Subsequently, when Bill W. was away on business he experienced a craving for alcohol and sought help. After he met Bob Smith, their experience of mutual sharing was so profound that they decided that this method could also help other alcoholics. Thus AA was established in 1935 by these two recovering alcoholics.

The 12-step process of AA and the Oxford group movement share parallel beliefs (De Leon, 1997). In recovery, both emphasize: confessing to others, making amends, and changing the individual by conversion to the group's dogma. Also both stress a power greater than oneself as a spiritual source of personal change, with the Oxford perspective relating to a Christian God and AA allowing for a private, personal concept of a higher power. In contrast, Synanon relies even less on an external power and instead emphasizes the power of the self and of the group.

Created by Charles Dederich in 1958, Synanon primarily began as a self-help group among AA members. Soon it evolved into an encounter group setting in which verbally aggressive discourse was rife (Kennard, 1998; Yablonsky, 1965). In its program to help alcoholics and drug addicts remain sober and clean, it became an economically self-sufficient residential community that removed individuals from the larger "sick" society. It was run by non-professionals and consisted of a hierarchical structure whereby "decisions were made at the top and obeyed at the bottom" (Kennard, 1998:20).

Moving from the AA 12-step protocol, Synanon prescribed three phases of change and recovery: a) confront denial and engage in change, (b) self-examination and

socialization, and (c) maturation and autonomy (De Leon, 2000:18). It maintained an intensive residential routine consisting of daily job assignments, a range of discussion and therapy groups, and a highly structured reward and punishment procedure (Kennard, 1998). This alternative community "evolved a social learning technology using the totality of community life to achieve complex goals. Thus, the Synanon TC represented an evolutionary step from its precursors, but it was also revolutionary in that it innovated a basically new approach to the treatment of addictions" (De Leon, 2000:21).

The American therapeutic community movement flourished in the 1960s and 1970s. These first generation TCs (e.g., Gateway House, Odyssey House, Phoenix House) as well as the current TCs have all attempted to restructure the life of the addict through social learning. The residential drug-free program is a closed society that provides positive peer pressure to face life experiences, to prioritize goals, and to practice pro-social attitudes and behaviors. Though the American TC was designed for narcotic addicts, the majority of the residents are now non-opioid abusers; polydrug use being the current norm among chronic substance abusers. Whatever recent developments have occurred, "[t]hese changes have not altered the basic or essential elements of the TC approach, but they signal the evolution of the TC from an alternative, esoteric self-help approach to a mainstream human services modality" (De Leon, 2000:24).

A firm belief inherent in this treatment philosophy is that "it is not the drug but the whole person that is to be treated" (41). Recovery involves habilitation, development of a socially productive conventional lifestyle, usually for the first time in one's life. The therapeutic community is hierarchically structured with levels of achievement, designed to

culminate with the individual's reentry to society. The staff often comes from the same background as the resident and this encourages resocialization. Acting as role models of lifestyle and identity change, they help guide residents in the change process.

This treatment approach is uniquely different because it is "the use of the community as the principal method for facilitating growth and change in individuals" (Tims, De Leon & Jainchill, 1994:10). Community as method also distinguishes the TC from other forms of community (De Leon, 2000). The intensive, high-structure treatment TC modality has shown substantial favorable client outcomes in research reports on non-prison populations.

Besides a decrease in drug use, a post-TC reduction in criminality has also been documented. For all 24 TCs in New York City, an overall decline in post-treatment arrests of 46 percent was noted (Winick, 1980). A national study of TC effectiveness showed that predatory illegal activity declined. "Where 60 percent reported at least one act in the year before TOPS treatment, only about one third reported activity in the year after treatment" (Hubbard et al., 1984:60).

For clients with extensive histories of antisocial behavior, research has found dramatic declines in drug use and a significant decline in criminality (De Leon, 1984; De Leon et al., 1979; Sells et al., 1976). The rationale for the prison TC came from the relative success provided by its community-based counterparts. For individuals with criminal histories, the therapeutic community appeared to be a plausible rehabilitation approach.

Chapter III

THERAPEUTIC COMMUNITIES IN PRISONS

REVIEW OF THE LITERATURE

Although the effectiveness of traditional long-term therapeutic communities (TCs) is documented in the literature, adaptations to deal with special populations of substance abusers have developed more recently. The recognition of special needs and problems for various subgroups of clients extended drug treatment to diverse clients, such as, prison inmates. Subsequently, these newly modified TC programs were able to accommodate regulations of outside systems so they were effectively established in correctional facilities.

Drug addicted offenders tend to share characteristics that result in low success for recovery, usually having extensive drug histories, poor work habits, minimal education, unstable lives, and lengthy criminal records. Because drug abuse treatment must deal with much more than an inmate's sobriety, the TC approach of multidimensional changes for the individual appears to be an appropriate program for this client population (Lockwood et al., 1997).

The prison-based TC first appeared the 1960s and by 1977 a system of thorough evaluations began in the Stay 'N Out program of New York State. A consistent report of efficacy resulted in the endorsement of the TC for corrections by policymakers. The large-scale evaluation of Amity TC at Donovan Prison in California is an extension of this practice. The data analyzed thus far show a significant reduction in reincarceration after treatment, especially for those individuals who continued in the aftercare program.

Early History of Prison-Based TCs

"The beginnings of prison-based TCs can be traced to a project initiated by Synanon Foundation in the federal prison on Terminal Island, California" (Mullen, 1997:54). This pilot prison TC ran from 1962 to 1964. Late in 1962 a Nevada state prison, outside Reno, ran a relatively successful Synanon-based program but was closed in 1964. Its demise was attributed to the policy issues of a new governor taking office. In 1967 a TC was established in the federal prison in Danbury, Connecticut (Lockwood et al., 1997).

The 1967 opening of a prison TC program in New York's Rikers Island and Hart Island penitentiaries was most notable. It was patterned after the Phoenix TC approach and although the program eventually closed, it was an important forerunner for the Stay 'N Out prison TC later developed in New York State (Mullen, 1997).

The Federal Bureau of Prisons established a pioneering TC in Marion, Illinois in 1969. Here the TC approach was applied to maximum-security inmates for the first time, contrasting with early prison programs which were offered in institutions with low-to-medium security. The general emphasis on security and low priority on programs at Marion, along with other difficulties, led to the TC closing. Nonetheless, it served as a prototype for other programs (Wexler & Love, 1994).

In the late 1970s there was a demise of federal rehabilitation programs in corrections. When criminal justice concentrated on security and control which implemented the theme of "just desserts," interest in rehabilitation goals for prisoners declined. It is unfortunate that no outcome data had been compiled on the federal TCs to

counteract the widely publicized views of conservative criminologists at the time that "nothing works" (Wexler & Love, 1994).

In state prisons, many TC programs were established and these followed the Marion model. A few less intense TCs were also implemented. But when these were discontinued, once again, outcome evaluations did not enter the literature. A 1979 survey by the National Institute on Drug Abuse (NIDA) found four percent of the total prison population were receiving drug treatment services and, of these programs, 32 percent had a TC model (Falkin, Wexler & Lipton, 1992).

The Stay 'N Out program in New York was the first thoroughly evaluated prison TC (Wexler, 1986; Wexler, Falkin & Lipton, 1990). Ironically, it started in 1977 at a time when many other prison TC programs were closing (Wexler & Love, 1994). The program was based on the Phoenix House model, which had supportive research showing effectiveness in outcomes (De Leon et al., 1984). Since the inception of the Stay 'N Out program, evaluation data were collected at both TCs (Arthur Kill and Bayview) and these environments demonstrated positive, treatment oriented atmospheres (Wexler, 1986).

This evaluation study also presented a timely opportunity to further investigate the time-in-program (TIP) effect previously reported in community-based TCs (De Leon, 1984; De Leon et al., 1979; 1982; Simpson, 1979). Since civilian TCs have excessively high drop-out rates, the prison TC was expected to retain clients for at least three months; thus providing more convincing evidence. As anticipated, analyses of outcome data showed a relationship of TIP to better post-release performance up till one year in treatment (Wexler & Love, 1994).

Other evaluations have also claimed the efficacy of the prison TC modality, such as Cornerstone (Field, 1984; 1989) and Wharton (Platt et at., 1980). Length of stay in the TC program had a positive effect on outcomes for each of these studies. In the late 1980s, the criminal justice system was finally forced to face the intensity of overcrowding and the wide-reaching substance abuse problems among its inmate population. Since then, correctional authorities have come to recognize the value of treating prisoners for their drug problems. Between 1979 and 1987, the percentage of inmates in some form of treatment tripled (Falkin, Wexler, & Lipton, 1992).

With the Anti-Drug Abuse Act of 1986 there was a major policy shift and increased funding for substance abuse treatment occurred with substantial sums directed at correctional facilities. A growing body of research had demonstrated the effectiveness of prison-based TCs and set the stage for Projects REFORM and RECOVERY, established to help state prisons plan and implement prison-based drug treatment programs (Wexler & Lipton, 1993).

A major goal of Project REFORM was to reduce the amount of crime and drug abuse among the incarcerated offenders post-release (Wexler, 1995). During the five years of its operation (1987-1991), it outlined a number of approaches toward the development of prison TCs and also placed a priority on evaluative research (Wexler & Lipton, 1993; Wexler & Love, 1994).

An accomplishment of Project REFORM was "a positive shift in attitude among senior correctional administrators and legislators toward the potential for using prison-based treatment to produce profound change among serious drug-using offenders"

(Wexler & Love, 1993:217). When funding was completed in 1991, Project RECOVERY extended technical assistance to the states for another year. The states that participated in these two projects established a large number of drug treatment programs and many were undergoing evaluation studies (Wexler, 1995).

Research from Projects REFORM and RECOVERY produced the following guidelines for the future planning of drug treatment in corrections (Falkin, Wexler, and Lipton, 1992).

1) Corrections should expand on what currently works and interventions should be carefully evaluated, so that treatment can be modified based on the best available scientific knowledge.

2) A logical starting point is to increase the number of chronic polydrug abusers in prison TC programs and enable them to continue their recovery in residential programs after they are released.

3) In addition to expanding on current practice, new program innovations should be attempted and they must all be properly tested.

In conclusion, researchers stressed that evaluation research is needed to find successful intervention techniques that are also cost-effective, so that programs can be implemented expeditiously and effectively. "The need for effective prison-based drug treatment is obvious; the problem is to provide treatment that works" (Wexler et al., 1990:72).

Recent History of Prison-Based TCs

As community-based TCs continued to report successful outcomes (De Leon & Ziegenfuss, 1986; Gerstein & Harwood, 1990; Hubbard et al., 1989), along with data from prison studies (Wexler, 1995), policymakers became aware of the promise of post-treatment reduction in drugs, crime, and recidivism. This helped pave the way for recent acceptance of prison TCs, described by Wexler (1995:57), "as a major innovation in American correctional institutions." The prison TC provides a treatment program that is relatively effective and also capable of operating in a correctional setting without undermining discipline and security.

Since intense structure and control are both components of therapeutic communities and prisons, there must be understanding and cooperation between these organizations. Therefore, Wexler (1995:62) asserts that in order to implement a credible TC there must be "full acceptance by program management that the TC is a 'guest' of corrections, and that while treatment is highly important it is secondary to security." Yet remembering at the same time, that prison TC effectiveness must rely on maintaining a sense of autonomy and a total commitment in supporting its members.

Wexler (1995) lists important factors to be considered when designing prison TCs that have been a gleaned from research:

1) the isolation of the program from the general prison population to diminish negative influences and to promote a healthy atmosphere,

2) the use of independent contractors who have a history of successful programs and their maintenance of ongoing communication with the security staff,

3) a program duration that is adequate to produce meaningful results; nine to 12 months appears to be the minimum time to produce a reduction in recidivism,

4) cost-effectiveness of prison TC programs; only an additional cost for personnel since costs of housing already covered by corrections.

In the early history of prison-based TCs, the Stay 'N Out treatment program was described as the first large-scale study providing evidence of that the TC can produce a significant reduction in recidivism rates. Equally important, successful outcomes were also found to be associated with time-in-program (Wexler, Falkin & Lipton, 1990). Furthermore, the Stay 'N Out study also led to changes in future evaluative research methodology.

Researchers (Wexler, Falkin & Lipton, 1990) found that some treatment residents were returned to the general prison population after termination from the TC program and they still had six months or more to go before parole. Since this may have had an effect on the study outcomes, they felt this needed to be remedied. Their suggestion was to release inmates who have successfully completed the treatment phases of the program to the community setting as soon as possible (Wexler, 1995). This process is followed at Cornerstone (Field, 1984; 1989).

The next large-scale NIDA-funded, five-year evaluation "is the most intensive study of a prison therapeutic community to date and extends the earlier work on the Stay 'N Out prison TC" (Graham & Wexler, 1997:69). Data collection began in 1991 on the Amity TC at Donovan prison in California (descriptive data will appear in the following section (pp. 37 to 43). Five groups were identified (N=715): "no treatment," "TC dropouts," "TC completers," "aftercare/Vista dropouts," and "aftercare/Vista completers" (Graham & Wexler, 1997). At the 11-month post-release period, 76 percent of the no-treatment control was rearrested and this was consistent with national statistics of 80

percent.

When the Amity data are analyzed for 12-month follow-up in post-release (Wexler & Graham, 1997), there is a comparison of the no-treatment control and intent-to-treat groups on levels of recidivism. The outcome results show higher levels of reincarceration for the control group (49.7 percent) and a decrease in levels across the four treatment study groups. The cohort that completed both the prison and the aftercare TCs has the lowest rate of all (8.2 percent). Nonetheless, the majority of this group's "at risk time" was spent in a residential-TC (an average of nine out of 12 months); in contrast to TC graduates that paroled directly to the community.

In follow-up after inmates were 12 and 24 months in post-release, reincarceration rates showed a statistical difference between treatment groups, indicative of the TIP effect (Wexler et al., 1999a) The aftercare group, that attended both the prison TC and the aftercare TC, had the greatest reductions. This is similar to findings from a Delaware prison TC with an aftercare work release TC (Lockwood & Inciardi, 1993; Inciardi & Lockwood, 1995; Lockwood et al., 1997) and a TC with an aftercare component (Knight, 1997). A new research direction will be the study of extended care in post-release, especially since this was not systematically studied in the Stay 'N Out project.

Some recent findings from the Amity TC indicate "relatively small effects for prison treatment alone, contradicting the positive time in prison treatment findings reported in the earlier Stay 'N Out study" (Wexler et al., 1999a:149). Therefore, the consideration of inmate characteristics is recommended in the future when comparing different treatment outcomes across studies. Criminal severity should be further

investigated since Donovan data reveal overall higher recidivism and also the most severe criminal histories among the samples being compared.

For the 24-month reincarceration outcome analysis (Wexler et al., 1999a), the aftercare group now has been in the community for at least 12 months after completing all of its TC treatment. Reports indicate very similar results as before and aftercare continues to reflect the lowest rate of all groups, at 14 percent. Looking at mean days until reincarceration as another outcome variable, researchers found an increase across the five study groups. Moreover, both these outcome measures reveal a pattern of positive results for this prison TC program.

The independent client variables, however, are not significantly predictive of reincarceration. This is consistent with findings on nonprison-TCs (Condelli & Hubbard, 1994). However, age, as a predictor of retention, was indicated in some research (Condelli, 1986; 1989). Amity aftercare graduates (Wexler et al., 1999a) are the only treatment group that showed significance with specific client variables, notably higher age, lower criminal history, and less personal distress.

Wexler et al. (1999b) replicate findings of earlier reports with an analysis of 36-month outcomes. By comparing the three treatment groups (TC aftercare dropouts have been combined with TC completers because of small sample size), aftercare graduates reveal a large effect size in the reduction of recidivism.. Unfortunately, studies from the aforementioned Delaware and Texas TCs cannot be directly compared with results found at Donovan prison, because their research focus was on different outcome variables.

For the Amity study (Wexler et al., 1999b), a possible self-selection bias for

aftercare group is considered, primarily because of its voluntary nature and the fact that it was offered to all inmates who completed the prison TC. Thus, the analyses rely on some one-tailed tests and an attempt to control for certain background variables. Another worthwhile finding at this time, greater harm reduction for treated inmates, is reported. As "number of days to return" increases significantly across subgroups, this indicates that increased amounts of treatment result in a greater number of days to reincarceration.

Again the effects of client characteristics are tested in this analysis (1999b). There is an indication that age, previous incarcerations, and aftercare significantly impact return to custody. With background variables controlled, there remains a significant relationship between intensity of treatment and time till reincarceration. From all the follow-up periods (12, 24 and 36-months), aftercare continues to have a positive post-outcome association with the "return to custody" variable.

Nonetheless, the moderate improvements seen at 12 and 24-month for TC graduates disappear at the 36-month follow-up and this indicates only short-term crime reduction (Wexler et al., 1999b). Overall, the longer time in treatment, the longer the subjects remained on parole. The results at 36 months seem to confirm the impact of aftercare, since even the factor of their minimal time in post-release is regarded as probably too small to account for the large differences in outcomes.

The sustained improvement of aftercare was previously considered as just treatment duration or a dose-response effect. "However, because aftercare is a later phase of treatment and takes place in the free community, it can be viewed as a discrete event with potentially unique impact" (Wexler et al., 1999b:334). This would be a promising

endeavor and future research needs to disentangle the effects of aftercare and also must consider the cost of such treatment designs. Yet the value of supporting the initiative of continuing aftercare tends to be affirmed by recent studies.

Furthermore, Wexler et al. (1999b) suggest the enhancement of the inmates' perceived need for aftercare, possibly through motivational interventions which may include: motivational groups/seminars and motivational interviewing. Since all the evaluation studies obtained with different inmate populations, in different prison TCs and aftercare programs, and in different geographic areas show long-term effects of modified prison TC with aftercare, this should be a strong message to policymakers.

DESCRIPTION OF AMITY PRISON TC

The TC is located at the R. J. Donovan Correctional Facility, established in 1987, and the Amity prison TC was set up as a demonstration project funded by the California Department of Corrections (CDC) in 1989. The prison houses a total of approximately 4,000-6,000 medium security inmates. One section consists of five housing units with each unit housing about 200 beds and sharing a yard.

In one unit is the Amity TC, where two trailers are used to create "an open, supportive environment and residents are invited to question the fundamental principles and practices of the treatment project" (Graham & Wexler, 1997:72). An adjacent residence unit occupies the men waiting for the treatment program.

Treatment consists of a planned stay of approximately twelve months. To join the program an inmate must sign a contract, agreeing to comply with TC rules and regulations, waiving rights to other CDC programs, submitting to random urinalysis, intending to act responsibly and planning to participate in all program activities. The TC encourages individual growth and change so that residents can become morally and socially competent.

They must demonstrate the process of change by taking responsibility for oneself, e.g., taking personal risks in the community, trying new behaviors, talking about past vulnerabilities, being honest and truthful, and exposing the self. Another program concept is taking ownership of the community, which entails acting like a big brother and being responsible and accountable for each other (Graham & Wexler , 1997).

Residents form interpersonal relationships within the TC and the process of

bonding between individual and the community allows members to experience meaningful behavior. This may be the first time in their lives that these inmates have been able to feel such closeness and safety within a group and their initial encounter with such a high degree of responsibility.

The twelve-month curriculum at the prison TC consists of three treatment phases: initial phase (for up to three months), which lays the foundation for orientation and change, and consists on clinical assessment, planning interventions and treatment goals; primary treatment phase (for approximately six months), which involves family dynamics and personal, moral development, and allows for increased responsibility in the program including the hardest emotional work; and reentry phase (typically for three months), which demands teaching new members and assisting in daily facility operations, and strengthens planning and decision-making skills while working with program and parole staff. At Donovan, treatment components parallel the standard TC, except that formal individual counseling is relatively limited.

Only in times of crisis is individual counseling available. Even in such cases, the resident to advised to bring the issue back to the community for discussion. The Amity TC encourages residents to share their personal and relationship issues in groups. This "helps residents understand how important support systems can be throughout their lives, and models resolution for other group members" (Graham & Wexler, 1997).

The main therapeutic method is the program community, as in the traditional TC, and the prison also incorporates the other major components: sponsors, group activities, a structured curriculum, video playback, and psychodrama. However, a few distinctions

between the Amity TC and the typical model do exist and are summarized below:

1. Group activities are an extremely vital means of treatment at a prison, since most inmates have experienced primarily negative relationships throughout their lives. TC groups promote positive, corrective relationships and this allows the development of liaisons based on trust, integrity, and cooperative understandings. Also groups help residents to articulate their feelings rather than to act upon them. An outlet to verbally 'act out' their negativity and anger at Amity enables destructive behavior to decrease (Graham & Wexler, 1997).

   a. Rather than marathons, there are "26 hour" workshops lasting two days for 13 hours per day. This adaptation reflects the prison administration's stipulation that all TC residents work prison jobs each day, or 36 hours a week in general population jobs. (There is an allotment of 40 paid inmate positions who make up the core group of residents.)

   b. Video playback is widely used at Amity TC because a resident can view himself and see his body language, posture, and gestures that are obvious to others. It has been reported that seeing their intake interviews enables inmates to face their denial of problems and needs more efficiently (Graham & Wexler, 1997).

2. Program limitations are experienced in a prison TC that are not found in the traditional community treatment program. The time limited program causes a periodic turnover that occurs less often in the community, where staff decides when residents are ready to leave treatment. Also instead of constantly losing

their experienced residents, the traditional TC retains a number of them in staff training roles. Lastly, staff is available to the residents 24 hours a day, seven days a week in the community but this is impossible in a prison environment (Graham & Wexler, 1997).

a. A time limited program at Donovan requires a strict twelve month treatment period. Therefore, Amity TC must deal with an annual influx of new residents as well as suffer the loss of mentors and role models when the older advanced residents are forced to depart. In order to maintain continuity in the program, a limited number of lifers are used as counselor interns and counseling staff.

b. Lack of staff is another problem for prison TCs because staff members cannot be there 24 hours a day nor on weekends. To retain normal operations, the lifers are called upon as live-in staff. Though they are highly motivated and dedicated to the program, their numbers are restricted because the orientation of the therapeutic community is reentry back into society.

3. Rewards and consequences employed by the prison TC program differ from a community based model. Nonetheless, motivation during treatment continues to be acknowledged and rewarded. While at the same time the program limits, lessons and commitment are enforced through negative sanctions appropriate to the situation (Graham & Wexler, 1997).

a. The reward system at Amity TC cannot provide field trips to movies/ concerts, home visits, or financial compensation. Yet those in the treatment

program live in a safe environment separate from the mainstream prison and they enjoy tremendous community care and support. Also, as the residents make progress in the program, they receive more responsibility in the TC which in turn brings respect and recognition from the staff and their peers.

b. Negative consequences vary widely in the prison TC; yet consist of major and minor sanctions. A major consequence for breaking the cardinal rules at Amity, such as use of drugs or acts/threats of violence, is that a resident may receive a 30-day suspension or even dismissal. Also the lack of active participation in the treatment program may, even if very infrequently, bring about dismissal. In a community TC, there are similar consequences for major infractions. Regressing a resident back one or more levels in treatment or being transferred to another facility are some other options. Even house bans, which take away all resident privileges for a period of time, may also exist in the community (De Leon, 2000).

Minor negative consequences are used in TCs to discourage antisoical attitudes and unacceptable behaviors and/or minimal commitment to treatment. In both the prison and community TC, minor infractions will receive constructive criticism in a group meetings called a "pull-up;" or a planned "learning experience," e.g., speaking to the group or writing a letter of explanation. Other disciplinary action in the community include: demotions in jobs or even "bum squad" chores; signs worn to display the infraction; speaking bans for one or more individuals; and loss of privileges,

such as furloughs, semiprivate sleeping quarters, or wearing articles of clothing/jewelry (De Leon, 2000; Graham & Wexler, 1997).

4. Unique components of Amity TC that are rarely found in other community or prison TCs (Wexler et al., 1999a).

a. Use of formal curriculum to supplement informal verbal teachings of the TC, including: workbooks, teacher's guides, and videotapes.

b. Psychodrama groups are used to complement the standard TC groups and meetings. Inmates reenact roles or situations that remain unresolved and these action-oriented groups tend to draw out strong emotion and insights.

The hierarchical structure of the prison TC is important to allow residents to work through authority problems and to assume responsible roles. In the Amity prison TC, unlike contemporary civilian TCs which now are a mix of traditional and non-traditional professionals, most program staff are ex-addict offenders. Their presence demonstrates the realistic possibility of achieving successful rehabilitation and residents trust and accept them (Graham & Wexler, 1997).

1. The TC staff has approximately 20 members and the director of services and training for Amity, Inc. in Tucson oversees the entire San Diego project. (Another TC team operates aftercare services, the Vista community-based TC). There are 12 counselors and each has a caseload of about 20 residents in various stages of treatment.

2. Participation in the therapeutic community is essential and the Amity staff and residents refer to each other as family (Wexler, 1995). Self-disclosure is an expectation of Amity staff and staff openly share emotionally painful issues. Sharing such personal

experiences helps the residents relate to the self-disclosure method and enhances a sense of mutuality and healing within the community. It also builds more trust among TC residents (Graham & Wexler, 1997).

Graduates of the Amity TC program, upon their release from prison, are offered the opportunity to attend residential TC treatment for up to one year. This community facility is operated by Amity in Vista, California. The TC can accommodate up to 40 residents and includes services for the wives and children of the residents. Vista not only builds upon the prison TC curriculum but is individualized for each resident based upon his achievement and progress (Graham & Wexler, 1997).

1. Responsibility for the operation of the TC, under staff supervision, is expected for parolees who first come into the Vista program. After gaining employment, residents are relieved of primary household duties.

2. Community life is now stressed in the Vista community TC. Various forms of counseling concentrate on community living. Activities emphasize day-to-day planning, such as, work schedules, attempting external community interaction, and setting up daily routines. Family services, impossible in a prison setting, are stressed, e.g., weekly meetings are offered for the women (residents' mothers, mates, and sisters).

Chapter IV

METHODOLOGY

THE SAMPLE

The research is based on data collected from a sample of 715 male inmates in Donovan Correctional Facility in San Diego, California. The respondents' ages ranged from 18 to 64 years. Categories for ethnicity were recoded into four groups: White, 38 percent of the sample; Black 34 percent; Hispanic, 24 percent; and Other, four percent of the total population. The Hispanic category was represented by Mexicans, consisting of over 90%, and the Other category was composed of people of Asian descent, Native Americans, and others (possibly biracial, or an undeclared ethnicity).

The prison TC program recruited volunteers actively from the general population. There were presentations made to inmate groups and recruitment information was posted. The Department of Corrections (DOC) and the Amity staff both reviewed records to identify eligible inmates (Wexler et al., 1999b:324). There was an eligible pool of volunteers with a drug problem and between nine to 14 months before parole eligibility; though excluding inmates convicted of arson or sexual offenses with minors.

Subjects were selected randomly and assigned to the TC as bed space became available. However, the system was stratified to maintain relatively equal ethnic proportions. Inmates, who were not selected and had less than nine months to parole, were removed from the eligibility pool and became members of the no-treatment control group. This group did not receive drug abuse treatment within prison, yet were able to obtain limited drug education and join 12-step groups.

DATA COLLECTION

Experienced interviewers conducted frequent face-to-face interviews during an ongoing evaluation of the 200 bed prison TC, administered by Amity, a civilian TC. Baseline data were collected from those who volunteered for treatment and prior to the random assignment to treatment groups. The background interview included information on family, friends, education, occupation, drug use history, and criminal involvement. There also was information collected on psychological and medical health status, attitudes toward substance abuse treatment, and treatment history.

At the conclusion of the study (N=715), a total of five groups were identified. First, the "no-treatment control" (N=290), were inmates who volunteered for the in-prison TC program but who were never selected for participation. In this group 10 percent of the inmates met eligibility criteria but were not admitted to the treatment group for technical reasons, e.g., less than nine months to parole. Second, the "TC dropouts" (N=98) who left treatment prematurely for disciplinary or personal reasons. Third, the "TC completers" (N=194) who completed the prison TC but did not choose to parole to aftercare. Fourth, the "aftercare TC dropouts" (N=38) who completed the in-prison TC and volunteered to attend the aftercare TC but dropped out usually in less than 3 months. Fifth, the "aftercare completers" (N=95) who completed both the prison TC and aftercare programs. For simplicity of analysis, the last two categories will be combined to create the "prison TC plus aftercare" group (N=133).

A follow-up was conducted 12 months after release from prison. At this point there were 532 inmates responding to the 12 month community interview. Data on drug

use, criminality, and employment were self-reported. Also, reincarceration information was obtained from the California Department of Corrections (CDC). These computerized data from CDC's Offender Based Information System was considered less ambiguous than incidents of arrests.

All participants in the study were released from prison for at least 12 months, known as the "period of risk," when their reincarceration records were reviewed and only a return to prison for parole violations or new arrests were included. If an inmate temporarily returned for less than 30 days for a drugs or alcohol relapse, it was not counted. These "dry outs" are acknowledged as treatment intervention and were not found disproportionately representative of any of the study groups.

RESEARCH DESIGN

The primary objective of this study is to evaluate treatment efficacy of a prison TC program. The specific design consists of these research objectives: 1) to develop scales of social support mechanisms, in terms of family, friends, education, occupation, drug history, and criminal background; (2) to create a Treatment Outcome Index, comprised of reincarceration, drug use, and employment, to act an indicator of treatment success; and ultimately, 3) to assess factors related to outcomes, including the interaction of "assorted variables" (age, ethnicity, TIP, etc.) and, most importantly, those of social networks.

Groups under examination are the intent-to-treat cohorts which make up 63 percent of the total population. These groups consist of: the prison TC dropouts (N=72), 14 percent of the total population; prison TC graduates (N=151), 28 percent of the total; and prison TC graduates plus aftercare (N=113), 21 percent of the total sample. The no-treatment control (N=196) represented 37 percent of the total population.

The aforementioned groups spent differential amounts of time in the treatment program (TIP): no-treatment (0 days), TC dropouts (183 mean days), prison TC completers (.370 mean days), TC graduates plus aftercare (604 mean days). An increase in TIP has been negatively associated with reincarceration, therefore, it will also be part of the investigation.

To compare the control and intent-to-treat subgroups in reference to factors relating to outcomes, appropriate statistical tests will be used. These will include chi-square, ANOVA, correlations, and regression analyses. There will be no statistical

compensation for the possibility of self-selection bias previously mentioned. Linear regression will be performed to evaluate the interaction of variables, such as, age, ethnicity, treatment status, and TIP, on outcomes following drug treatment at a prison TC. Regression will be used to help determine the relative contribution of client resources on treatment outcomes.

Factors Related to Treatment Outcomes

To assess the efficiency of the Amity TC, treatment outcome data was used to reveal the successful recovery of the prison inmates and to essentially clarify the interactive nature of the treatment process. The investigation primarily attempts to replicate previous findings by using background characteristics of age, ethnicity, education; and criminal history, which are commonly advanced in research. Other assorted variables include: job in the last 12 months before incarceration, number of times in treatment, primary drug used, and time in program (TIP). These also receive intensive scrutiny.

Furthermore, the influence of social network mechanisms upon treatment outcomes is considered as a potentially powerful source of strength, or weakness, for clients following drug treatment in prison. The scales of client resources, ranging from previous relationships (family and friends), past educational and occupational achievement, to personal histories of drug use and criminal behavior, widen our perspective on intervening factors impacting the process of drug treatment.

Instrument Development

Treatment Outcome Index

Studying outcome variables following the TC experience can provide informative and worthwhile data. The creation of a Treatment Outcome Index will be beneficial. The three relevant dimensions will be: Criminality, Drug Use and Employment in post-release.

This section will utilize information taken 12 months post-release and consider inmate data on drug abuse, criminal behavior, and employment. Also California Department of Corrections (CDC) reincarceration reports were included. As would be expected, criminal behavior and reincarceration are highly correlated at the .835 level. Therefore, the question concerning criminal behaviors in post-release will be skipped, because it may be too subjective. The other three items are commonly used in investigations of drug treatment outcomes.

Each of the three items was recoded with a value of 1 for a positive outcome and 2 for a negative outcome. Then the items are summed to produce a scale that ranges from a high of 6 to a low of 3. A high score would indicate a return to deviance--recidivism, abuse of drugs and unemployment, while a low score would show a strong, positive change in behavior--no arrests, being relatively drug-free and having a job.

Low scoring individuals represent successful treatment outcomes while high scoring respondents reveal poor outcomes. This index tends to capture the essence of treatment outcomes, suggesting the Bauhaus architecture slogan of "less is more." Each person's score on this variable can be later used to measure the effectiveness of the prison drug treatment program.

Scales of Client Resources

To better understand treatment outcomes from a prison TC, the investigation of client resources will allow us the opportunity to consider social networking practices and their possible impact upon the inmates. These experiences affect the clients before, during, and after the TC program. Social networks are a crucial component of lifestyle development, they may influence one's exposure to the TC and they also can be tapped into after treatment.

The variables are clustered into six mutually exclusive dimensions: Family Resources, Friendships, Educational Background, Occupational Achievement, Criminal Record, and Drug Abuse History. Within each dimension the original list of variables was narrowed down by Varimax Rotation. This also provides a form of continuous factor scores which later can be used for correlation and regression analysis (Arons & Daily, 1976). Factor loading coefficients are presented in **Table 1** below.

In conclusion, within each of the six Scales of Client Resources, the dominant variables for an individual are added together to produce a scale representative of his specific social network background. This scale will later be compared with the Treatment Outcome Index to see if there is a relationship between supportive social affiliation and successful treatment outcomes. The opposite relationship, between debilitative social networks and poor treatment outcomes, will also be investigated.

Table 1
Factor Loadings of the Independent "Variables"

Factor Loading	Item
	Family Resources
.680	Raised By Whom?
.671	Father Really A Good Parent
.648	Mother Really A Good Parent
.558	Parents Did Not Get along At All
	Percent of variance = 13.3
	Friendships
.863	People Hang Out With Violate Laws
.853	People Hang Out With Dealing Drugs
.803	People Hang Out With Use of Drugs
.734	People Hang Out With Work A Regular Job
.609	People Hang Out With Get High From Drug/Alcohol
.571	People Hang Out With Gang Involvement
	Percent of variance = 30.7
	Educational Background
.701	Missed Classes Because High Or Hung Over
.698	Drugs Affected School In Lifetime
.679	Number Of Times Used Substances In School
.602	Alcohol Affected School In Lifetime
.579	Trouble In School Because Of Drug Use
	Percent of variance = 13.5
	Occupational Achievement
.862	Alcohol Affected Work In Lifetime
.846	Alcohol Affected Finances In Lifetime
.365	Days Lost From Work In Lifetime
	Percent of Variance = 16.8
	Criminal Record
.815	Number of Arrests Before Age 18
.753	Number of Arrests In Lifetime
.633	Age First Involved In Illegal Activity
.346	Number of Years Spend In Prison In Lifetime
.316	Support From Illegal Activity In Lifetime
	Percent of Variance = 27.4

Table 1 (continued)
Factor Loadings Of The Independent "Variables"

Factor Loadings	Item
	Drug Abuse History
.826	Alcohol Caused Arguments In Lifetime
.755	Alcohol Affected Police Problem In Lifetime
-.450	Primary Drug Used In Lifetime
.310	Alcohol Caused Blackout In Lifetime
	Percent of variance = 14.0

1. **Scale of Family Resources**

These cover a broad range, from socioeconomic background to early family interactions and to later relationships during one's lifetime. Variables that dominate this factor are: raised by whom, father really a good parent, mother a really good parent, and parents did not get along at all.

A person with a high score would come from a relatively dysfunctional family. Such a person would be raised by parents who did not get along, whose father and mother did not have parenting skills, or even by foster parents or in a home. All these factors would suggest poor client resources for the respondent.

Conversely, a low score would show strong family supports. Here the individual had cooperating parents, both acting as good parents, and was probably raised by biological parents or a biological parent and a stepparent.

2. **Scale of Friendships**

Within this dimension, the variables that are most influential include: people hang out with violate laws, deal drugs, use drugs, and work a regular job. However, a closer look at the correlation matrix shows that the variable, people hang out with work a regular job, is highly correlated with the first two items (.571 and .569 respectively). This could indicate that drug dealing is seen as a regular job by the respondents. Other important factors are that friends get high and are involved in gangs.

Respondents with high scores would tend to have friends who are involved in drugs, crimes, and gangs. This peer group would strongly affect deviant behavior as described by Sutherland's (1939; 1956) theory. In contrast, a low scoring person would

show interaction with a less deviant peer group. Having friends who are not drug dealers, nor drug users or gang members, allows one to form a more beneficial social network, and one that could possibly be recreated for future needs.

3. **Scale of Educational Background**

Variables that dominate this dimension are as follows: missed classes because high or hung over, drugs affected school in lifetime, number of times used substances in school, alcohol affected school in lifetime, and trouble in school because of drug use. It is interesting to note that the item, IQ categories usually associated with education achievement, did not even fall into the first component of the Primary Component Analysis nor into the Varimax Rotation.

A high score on the educational dimension shows missed classes because of substance abuse, extensive drug and alcohol use in school, and trouble-making because of such behavior. All these are attributes of a poor student with a lack of concentration and motivation. Such a background would not be conducive to learning knowledge and skills for future endeavors.

But a low score would indicate a student who did not have excessive drug involvement in school. This individual attended classes and avoided becoming a trouble-maker, therefore, he had some opportunity to pursue personal interests and to gain some educational foundations.

4. **Scale of Occupational Achievement**

The most important variables in the cluster, occupational achievement, consist of: alcohol affected finances in lifetime and work as well. Another factor involved is the number of days lost from work in lifetime. These would indicate that a person's involvement in alcohol abuse strongly affects his economic and professional goals. Poor work habits would likely contribute to this also.

A high score on this factor indicates alcohol always affected work and finances in one's lifetime; therefore negatively impacting occupational achievement and success. This group would have poor attendance records which would impede occupational outcome as well.

In contrast, a low score would reveal that alcohol did not interfere with a respondent's work history, thus, increasing one's chances to pursue goals and economic rewards. Also a lack of absences in the labor force could possibly convert into occupational achievements.

5. **Scale of Criminal Record**

Variables dominant to the respondent's criminal record are: number of arrests before age 18, number of arrests in lifetime, and age first involved in illegal activity. Furthermore, number of years spent in prison in lifetime and support from illegal activity in lifetime are influential to this category of criminality.

A high scoring individual on this dimension would have a large number of arrests (20 or more) before the age of 18 and an extensive number of arrests (70 or more) during his lifetime. He would have began his criminal career at an early age, approximately 10

years of age. The number of years spent in prison was highest among respondents in this group (15 or more years) and all their the support came from illegal activity. These represent hardcore criminals.

An individual with a low score would conversely have little criminal activity during his youth and his overall arrest record would be relatively small (two to 10 arrests). In contrast to the prior group, his prison record would be minimal (one year or less) and his support from illegal activity during his lifetime would be none. This lack of an oppressive criminal record may be very helpful when someone is trying to get his life back on tract. Also without such a long history of illegal activity, there may be another social agenda that a person previously was associated with--sports, labor unions, clubs, etc.--that could provide reinvolvement.

6. **Scale of Drug Abuse History**

The Drug Abuse History dimension is strongly impacted by alcohol causing arguments and affecting police problems in lifetime. Primary drug use appears to have an impact too, but in an inverse relationship than would be expected among chronic abusers--'soft drugs' predominant over 'hard drugs.'

The dichotomy is representative of drug regulatory law, in that, alcohol is legalized and other substances are controlled within a scheduled formula of least to most hazardous drug. Thus alcohol is often the drug of choice for abusers when other more preferred substances cannot be obtained. The last important factor to makeup this dimension is alcohol caused blackouts in lifetime.

A high score would indicate alcohol precipitated arguments and police problems

for these individuals. Respondents more readily used alcohol and/or marijuana than heroin and/or amphetamines. Furthermore, alcohol created health issues by causing blackouts. Thus one must learn to cope with negative behavioral traits and health problems. Although 'hard' (illegal) drugs are notable among this population, it appears alcohol is a dominant factor.

On this dimension a low score would show an individual whose life and health are not extensively hampered by alcohol. These respondents are probably more involved with amphetamines and/or heroin than the prior group; yet this drug history did not automatically mean an extremely chaotic lifestyle of aggression, arguments, and police problems. Nonetheless, some if not all of these negative aforementioned social characteristics are definitely a part of each one of the addicted offenders' past.

Chapter V

STATISTICAL RESULTS

CLIENT PROFILES

When background characteristics of the components of the total sample (N=715) were analyzed, the most significant group difference was educational level (**Appendix A**) (Wexler et al., 1999a). The no-treatment control group had a few more participants with an education beyond high school. All the inmates had extensive criminal records (the mean was 80 months of prior prison time before their current sentence) and they would remain at high risk for continued criminality after prison.

Various stimulants (cocaine/crack and methamphetamine) were the most widely used drugs and the majority (nearly 60%) had engaged in HIV risk behavior during their lives. The population sample was reported at considerable risk, after release from prison, for continued drug use and HIV-related behaviors.

The population (N=478) studied at 36 months post-release is described by Wexler et al. (1999b:326) as "a profile of poor social functioning." Over 40 percent lacked a high school education, they had an intensive criminal record (mean of approximately 78 months of incarceration), most had no job a year before being incarcerated (over 65 percent), and again the HIV risk was rampant. A trend for inmates in aftercare is also noted: being older, more apt to be white, and having more incarcerations than the other groups.

Although Wexler et al. (1999b) and this study are analyzing the approximately same data set at different points in time, there will be some differences noted. For instance, the researchers examine only aftercare completers and the present study has a

combined aftercare category, labeled "prison TC plus aftercare." This cohort included aftercare completers and prison TC graduates with some aftercare (previously known as "aftercare dropouts" in Wexler et al., 1999a).

Demographics for the 12-month community sample show that only two background variables at baseline, ethnicity and primary drug used, were statistically significant (**Table 2**). The mean age for the population was 30.80 years (SD 7.41) and there were mean differences between treatment groups. Though not statistically significant, the no-treatment control and prison TC completers fall slightly below the mean, with 30.33 (SD 6.90) and 30.56 (SD 7.04) respectively. Prison TC dropouts were the youngest, mean age of 29.06 (SD 7.04), while prison TC plus aftercare reported the highest mean age, 33.06 (SD 8.43).

The formulation of age categories was attempted for future investigative purposes of testing associations between variables. The four categories created were: 18-24, 25-34, 35-44, and 45-64. Chi square analysis for this variable is significant at the .011 level of probability. Education was found to be minimal, with only four percent achieving a level beyond high school. Previous incarceration time was lengthy (a mean of 78 months) and practically all of the sample lacked employment before coming to prison.

For the comparison of ethnicity, ethnic groups were coded as follows: Whites 1, Blacks 2, Hispanics 3, and Other 4. This relationship is statistically significant ($p<.05$) within the sample and showed the proportions of different ethnicities receiving drug treatment in the prison TC. Less than 40 percent of the inmates were White, approximately 35 percent were Black, and almost 25 percent were Hispanic.

Table 2
Background Characteristics of 12-month Community

Treatment Status	Control (196)	Dropouts (72)	Graduates (151)	Aftercare (113)	% Total (532)
Age (% categories**)					
45-64	2.6	5.6	4.6	9.7	5.1
35-44	21.9	12.5	21.9	31.0	22.6
25-34	51.0	52.8	55.0	44.2	50.9
18-24	24.5	29.2	18.5	15.0	21.4
(mean/SD) n.s.	30.33/6.90	29.06/7.15	30.56/7.04	33.06/8.43	30.80/7.41
Ethnicity (%)**					
White	35.2	30.6	35.1	50.4	37.1
Black	37.2	41.7	35.8	22.1	34.8
Hispanic	22.4	25.0	25.2	26.5	24.2
Other	5.1	2.8	4.0	.2	4.0
Education (%)					
<high school	41.3	55.6	39.7	35.4	41.5
H.S./GED	53.6	43.1	57.6	57.5	54.1
>high school	5.1	1.4	2.6	7.1	4.3
# of mos. Incarcerated (mean/SD)	73.3 (57.26)	90.03 (71.21)	70.86 (55.47)	90.24 (76.07)	77.83 (62.85)
Job in last 12 months (%)	32.1	36.1	34.4	34.5	33.8
# of times in tx (%)					
0	65.3	59.7	61.6	54.0	61.1
once	20.9	30.6	24.5	31.0	25.4
2-3	10.7	5.6	9.3	12.4	10.0
>4	3.0	4.2	4.6	2.7	3.5
Primary drug used (%)**					
alcohol	9.7	8.3	15.9	5.4	10.4
marijuana	17.9	13.9	9.3	7.1	12.6
cocaine	19.0	25.0	23.2	17.9	20.8
amphetamines	31.3	23.6	29.1	37.5	30.9
heroin	20.5	27.9	21.9	31.3	24.2
TIP intent-to-treat**** group only (mean/SD)	.00 (.000)	183.33 (111.60)	369.98 (89.74)	603.75 (183.25)	258.06 (255.64)

**p<.05 ***p<.01 ****p<.0005

A major portion of the 12-month community (61%) did not have any prior drug abuse treatment and another quarter had only received treatment once before; though the chi square was not statistically significant. In contrast, primary drug use for this population, which is described below, was significant ($p<.05$).

Some 31 percent used amphetamines, nearly a quarter preferred heroin, and cocaine users made up 21 percent of the sample. Alcohol and marijuana preference was low, only 10 and 13 percent respectively of the total. Yet among the aftercare cohort this decreased even more--to a mere five percent and seven percent respectively. The aftercare group was highly represented by amphetamine and heroin users.

Time-in-program (TIP) averaged 258 days, with the length of stay significantly different for each treatment group: aftercare (mean of 604 days), TC graduates (mean of 370 days), TC dropouts (mean of 183 days). This comparison was highly significant ($p<.0005$) and verifies the increasing duration and intensity that individuals receive with progressive treatment careers.

STATISTICAL ANALYSES

Correlations and regression analyses are conducted to further clarify the relationships between variables. First, the relationship between the Treatment Outcome Index and Assorted Variables will be analyzed. The assorted variables consist of background characteristics listed in the previous table (see page 60). Primarily, this section attempts to replicate previous findings by substituting the Treatment Outcome Index for the commonly used dependent variable, treatment status.

Secondly, the relationship between the Treatment Outcome Index and the Client Resource Scales was statistically explored. This investigation is of utmost importance to this project. Since a major hypothesis of the study is that social networks have an impact on treatment outcomes, a test of this assumption will follow forthwith.

Relationship Between Treatment Outcome Index and Assorted Variables

This section attempts to more fully understand the Treatment Outcome Index, which included criteria for judging post-treatment behavior: being drug-free, crime-free, and employed at the 12 month follow-up interview. The reliability of the Treatment Outcome Index will be explored--testing confidence in the different measures used to indicate outcomes following drug treatment. Furthermore, a possible check on the validity of the Treatment Outcome Index will be ascertained by comparing it to the treatment status category, since this variable is consistently reported in the literature as having a relationship to treatment outcomes.

Reliability and Validity of the Treatment Outcome Index

The creation of the Treatment Outcome Index is an attempt to evaluate the efficiency of a prison TC. Whereas recidivism is often used as an outcome measure of unsuccessful drug treatment, this index is more complex and would appear to more thoroughly reflect what social science research intends to measure.

The reliability of the Treatment Outcome Index is measured by Cronbach 's Alpha, which shows the internal reliability for multi-item summed indexes. The statistic for this index is .46 and it reflects just a slight measure of intercorrelation. The variable, job at the 12 month follow-up, is the least correlated with the others and this will be discussed further in the next chapter.

In so much as, treatment status, is consistently used to describe subgroups in analyses, the relationship between the Treatment Outcome Index and treatment status appears to a worthwhile examination for validity. The Treatment Outcome Index, by treatment status in the chi square contingency table below, shows the control group (N=189) representing 37 percent of the sample; the intent-to-treat group is composed of the remaining 63 percent (Table 3). This group can then be subdivided into prison TC dropouts (14%), prison TC graduates (28%), and TC plus aftercare (21%).

Since the chi square statistic is significant ($p<.0005$), the null hypothesis can be rejected and there appears to be a relationship between the two variables. The highest proportion of inmates with successful outcomes (3 on the index) falls into the aftercare category, a total of 52.9 percent. If this is combined with TC graduates, the total is 76 percent. The aftercare cohort is 29 percent of the second most successful outcome group

Table 3

Crosstabulation of Treatment Outcome Index by Treatment Status

	Treatment Outcome Index				
	3.00 (70)	4.00 (114)	5.00 (217)	6.00 (111)	Total (512)
Control	17.1%	28.1%	44.2%	44.1%	36.9
Prison TC Dropouts	7.1%	15.8%	14.3%	15.3%	13.9
Prison TC Graduates	22.9%	27.2%	29.0%	29.7%	27.9
Prison TC plus Aftercare	52.9%	28.9%	12.4%	10.8%	21.3
	100.0%	100.0%	100.0%	100.0%	100.0%

(4 on the index) and combined with TC graduates, the total grouping is 56 percent.

Turning to a less successful outcome category (5 on the index), the control makes up 44 percent and if it is combined with prison TC dropouts, the total is 58.5 percent. For the very poorest outcome category (6 on the index), the control group also is 44 percent of the total. This least successful outcome, or poorest outcome, increases slightly to 59.4 percent when both control and the prison TC dropouts are taken into consideration.

A correlation matrix of the Treatment Outcome Index and Treatment Status for the 12-month Community appears in the next section (page 70). The Pearson's correlation coefficient shows an association between the Treatment Outcome Index and treatment status (-.287), indicating an increase in the index (a poor outcome rating) correlates with a lower treatment career (probably no-treatment control or prison TC dropouts). This relationship is significant (p=.01).

Equally important is the result of relationship between time-in-program (TIP) and treatment status. These measures are often considered interchangeable, primarily because their association is so strong (reported as .910 in this matrix). Looking at the Treatment Outcome Index and TIP, the correlation (-.315) is close to the previous association reported above and it has the same statistical significance (p=.01). This means that a higher outcome value on the index, which represents the worst possible outcomes of 5 or 6, correlates with less time-in-treatment. Conversely, a low score on the index of a 3 or 4 is associated with a longer retention rate or a larger TIP.

Comparisons Between Groups

The category, treatment status, is consistently used to describe subgroups in statistical analyses implemented in TC evaluation studies. Since a statistical inverse association between the Treatment Outcome Index and treatment status was determined, the replacement of the Treatment Outcome Index as the dependent variable appears to be a viable solution to further investigate the data. A continuation of the comparison between groups that began in the section on client profiles will now be concerned with the 12-month community sample that completed the treatment outcome questions (N=512).

Table 4 shows the same "assorted variables" as before but it refers to the Treatment Outcome Index groups, which range from a good score of 3 to a poor score of 6. The important variables, as previously mentioned, are: age, ethnicity, education, number of months incarcerated in lifetime, job during last 12 months before incarceration, number of times in drug treatment, primary drug used, and time-in-program (TIP).

Demographics discussed above are replicated: low educational achievement, a high lifetime incarceration (a mean of seven years), and a majority that was unemployed before becoming incarcerated. The mean age of the population remains 31 years. For the two poorest outcomes--(a score of 5 or 6 on the index), the ages are lower than the mean, 30.14 (SD 6.22) and 29.57 (SD 7.15) respectively. In contrast, a higher age is reported for the most successful outcomes--a score of 3 or 4 on the index, 34.26 (SD 8.11) and 31.50 (SD 8.19) respectively. Although this difference was not statistically significant, the chi square by age categories is significant ($p<.01$).

Comparing ethnic groups within the sample, the chi square was statistically

Table 4

Background Characteristics of Amity TC by Treatment Outcome Index

12-month follow-up	3.00 (70)	4.00 (114)	5.00 (217)	6.00 (111)	% Total (512)
Age (% categories***)					
45-64	12.9	6.1	4.1	1.8	5.3
35-44	32.9	22.8	18.0	23.4	22.3
25-34	40.0	51.8	51.2	55.0	50.6
18-24	14.3	19.3	26.7	19.8	21.9
(mean/SD) n.s.	34.26/8.11	31.50/8.19	29.57/7.15	30.14/6.22	30.77/7.49
Ethnicity (%)**					
White	47.1	33.3	42.9	27.0	37.9
Black	28.6	38.6	25.8	48.6	34.0
Hispanic	22.9	24.6	28.1	18.0	24.4
Other	1.4	3.5	3.2	6.3	3.7
Education (%)					
<high school	31.4	38.6	39.7	53.2	41.2
H.S./GED	62.9	57.0	55.3	45.0	54.5
>high school	5.7	4.4	5.1	1.8	4.3
# of mos. Incarcerated (mean/SD)	76.83 (71.48)	66.49 (68.04)	81.09 (59.33)	86.11 (60.29)	78.52 (63.25)
Job last 12 mos. (%)****	41.4	45.6	31.3	18.0	33.0
# of times in tx (%)**					
0	51.4	64.9	61.3	63.1	61.1
once	28.6	28.1	21.7	27.9	25.4
2-3	18.6	4.4	12.0	7.2	10.2
>4	1.4	2.6	5.0	1.8	3.3
Primary drug used (%)					
alcohol	14.7	14.0	9.2	8.1	10.3
marijuana	5.9	16.7	12.4	13.5	13.0
cocaine	16.2	19.3	18.9	27.9	21.2
amphetamines	30.9	33.3	32.7	22.5	29.9
heroin	29.4	15.8	25.8	27.0	24.6
TIP only TC group** N=323 (mean/SD)	438.01 (278.85)	308.40 (266.98)	215.34 (241.99)	179.54 (193.07)	258.74 (257.20)

**p<.05 ***p<.01 ****p<.0005

significant (p=.002). (Although three cells, or 18.8%, had a count less than 5, which may indicate the observed significance level could possibly be incorrect). Whites made up 47 percent of the highest outcome score (3) and Blacks were 39 percent of the second highest outcome score (4). Whites had 43 percent in the lower outcome category (score 5), while Blacks reached 49 percent in the lowest outcome category (score 6). Within their specific ethnicity, the Other category composed 74 percent of the two lowest outcomes and Hispanics represented 65 percent (scores of 5 and 6 on the index).

Employment in the last 12 months before incarceration shows high statistical significance for the Treatment Outcome Index ($p<.0005$), although this was not evident for the total sample nor for the 12-month community. Forty-eight percent of inmates who received a score of 3 or 4 on the index held jobs, whereas 70 percent of respondents with 5 or 6 on the index were unemployed (not shown). For those with the most successful outcome (score of 3), 41 percent had a job before coming to jail in comparison to 18 percent who did not hold a job and were the least successful on the index (score of 6).

Prior drug abuse treatment and the Treatment Outcome Index had a chi square of $p>.05$. One of the distinctions between the outcomes (not shown) is that 40 percent of inmates with one prior treatment experience received a high treatment outcome (score of 3 or 4). Also for the poorest outcomes (score of 5 or 6), 77 percent of inmates had a treatment history of four or more drug treatment exposures.

Primary drug use and outcomes reveal the highest outcome (score of 3) was obtained by amphetamine and heroin users, representative of the aftercare results in the previous analysis. Though the chi square was not statistically significant, an interesting

observation was that inmates who are alcoholics have increased their percentage of success. Fifteen percent received the highest outcome rating (a score of 3 on the index), compared with five percent of alcoholics who were previously found in the aftercare category.

Time-in-program (TIP), as indicated before, is a very important correlate of success in treatment outcome. The mean was 259 days, with the length of stay significantly different for each group: highest outcome (score of 3), mean of 438 days; next highest outcome (score of 4), mean of 308 days; lower outcome (score of 4), mean of 215 days; and the lowest outcome (score 6), mean of 180 days. The chi square statistic was highly significant ($p<.0005$) and this affirms consistent findings in the literature that retention impacts treatment outcomes (Wexler, 1995; Wexler & Love, 1994; Wexler et al., 1990; Wexler et al., 1999a; 1999b).

Correlation Procedure

Age has been mentioned in the literature as a mediator of treatment outcomes and has been related to the notion of maturing out of addiction (Winick, 1962). In the correlation matrix found on **Table 5**, a significant association is seen between client's age and outcomes (-.176), suggesting an association between older inmates having more successful outcomes and, conversely, younger clients being less successful following drug treatment. The matrix approaches but does not quite achieve significance between ethnicity and outcomes.

Since being employed in the last year before incarceration and number of times in drug treatment had significant chi squares, they were also included in the matrix. The

Table 5

Pearson Correlation Coefficient Matrix:
Between Assorted Variables and Treatment Outcome Index

	I	II	III	IV	V	VI	VII
I	1.000	-.129**	.014	.084*	.122**	.103**	-.176**
II		1.000	.021	-.060	-.067	-.067	.064
III			1.000	.039	.019	-.029	-.187**
IV				1.000	.054	.048	-.042
V					1.000	.910**	-.287**
VI						1.000	-.315**
VII							1.000

Assorted Variables:
I Age
II Ethnicity
III Employment Last 12 Months
IV Drug Treatment Background
V Treatment Status
VI Time-In-Program (TIP)

VII Treatment Outcome Index

**Correlation is significant at the .01 level (2-tailed).
*Correlation is significant at the .05 level (2-tailed).

Pearson Correlation for the latter is not statistically significant. But for the former (-.187), it is significant at the .01 level and this suggests that better treatment outcomes are associated with holding a job the last year before incarceration.

As indicated above, there is a significant inverse correlation (-.287) between treatment status and the Treatment Outcome Index. A higher outcome rating is expected with increased treatment; conversely, a poor outcome tends to reflect a lack of drug treatment or a client's dropout status.

The independent variable, time-in-program, was reported as negatively associated with reincarceration rates in the Wexler et al. (1999a, 1999b) research and the relationship was statistically significant. Though this correlation coefficient of -.315 was previously mentioned in the section on the validity of the Treatment Outcome Index, it should be noted as part of this examination of the relationship between outcomes and assorted variables.

Statistical significance was found for TIP; however, this is the first time a Treatment Outcome Index has been used in the equation. Thus the findings strongly confirm that more positive outcomes are associated with retention in a prison TC drug treatment program. The relationship between the Treatment Outcome Index and assorted variable will further be examined by using the regression procedure.

Regression Analysis

To continue to test the importance of independent variables affecting former TC inmates in post-release, linear regression analysis will use the variables which impacted the Treatment Outcome Index. Age, employment in last year, treatment status, and TIP were all significantly correlated to treatment outcomes, although no significance was reported for ethnicity and drug treatment background.

Because there was such a high correlation between treatment status and time-in-program (.910), a stepwise regression equation will include only three of the four independent variables. An initial investigation revealed TIP as a stronger predictor of Treatment Outcomes than treatment status; thus, age, job last year, and time-in-program are analyzed below. See **Table 6** for a breakdown of this analysis.

The F statistic is highly significant for this regression model ($p<.0005$). The proportion of variance predictable in the dependent variable from the regression equation is 16 percent. Each independent variable is statistically significant at the .001 level or higher. Comparing beta coefficients, TIP is the most powerful predictor for the Treatment Outcome Index (-.301) and this shows retention in treatment yields the most successful outcome scores.

Having a job in the last year before incarceration is also a strong predictor of treatment success (-.189), indicating the highest outcomes for such individuals. Lastly, age influences positive results following treatment (-.143), with older inmates being the most successful.

These results are similar to frequent research findings reporting the interaction of

Table 6

Standardized Regression Coefficients for Assorted Variables

Dependent Variable: Treatment Outcome Index

Independent Variables:	beta	p
Age	-.143	.001***
Job Last Year	-.189	.000****
Total TIP	-.301	.000****
N	511	
R-Square	.156	

*** p<.005 ****p<.0005

age and time-in-program on successful drug treatment outcomes. Interestingly in this sample, employment in the year before incarceration impacted positive results following the TC treatment program.

The Treatment Outcome Index appears to be a relative measure of success and failure following drug treatment in a prison TC. Previously reported indicators were reaffirmed by the statistical analyses. The Index has demonstrated its capability in this project.

Relationship Between Treatment Outcome Index and Client Resources

Correlation Procedure

The Pearson's correlation coefficient matrix shows client resources are significantly correlated with successful outcomes on two dimensions (**Table 7**). This would imply that individuals with negative resources did poorly on the treatment outcomes for the same dimensions.

Friendship (.128) is correlated with treatment outcomes and it is highly significant (p=.01). This indicates good friends will provide support for a drug treatment client and that it should aid one's recovery in post-release. For respondents with deviant friends, drug treatment outcomes would suffer as individuals returned to friends, places, and activities that they associated with before incarceration.

The second variable that correlated with treatment outcomes is Criminal Record (.119) at the .05 significance level. A moderate criminal background, therefore, will be helpful following drug treatment and will have some influence upon treatment outcomes. Hardcore criminals will increasingly find it difficult to adjust upon reentry back to society, since their past entirely consisted of employment in illegal activities and acquaintances involved in a life of crime and drugs. Though it would appear that the first variable will probably have a stronger impact on the recovery process than the second.

Family resources, educational background, occupational achievement, and drug abuse history, however, did not correlate with outcomes as predicted.

Table 7

Pearson Correlation Coefficient Matrix:
Between Client Resources and Treatment Outcome Index

	I	II	III	IV	V	VI	VII
I	1.000	.042	.110*	.108*	.126**	.010	.013
II		1.000	.155**	.024	.120**	.056	.128**
III			1.000	.235**	.334**	.255**	.112
IV				1.000	.139**	.527**	-.030
V					1.000	.154**	.119*
VI						1.000	.015
VII							1.000

Client Resource Dimensions:
I Family Resources
II Friendships
III Educational Background
IV Occupational Achievement
V Criminal Record
VI Drug Abuse History

VII Treatment Outcome Index

**Correlation is significant at the .01 level (2-tailed).
*Correlation is significant at the .05 level (2-tailed).

Regression Analysis

To continue with hypothesis-testing procedures, there will be a transformation of the six dimensions of client resources to remove the negative values. Each dimension was increased by 2.5, thus, eliminating the negatives and retaining the same distribution. (See histograms in **Appendix B-F**).

The Friedman Test and Kendall's W Test were used to determine if the related dimensions were different from each other. The measurements within sample pairs were sufficiently disparate so it appears that the six client resources have different effects upon treatment outcome. Both tests were significant ($p<.005$).

The influence of the client resources upon the treatment outcomes will be investigated by linear regression. Since two scales of client resources were highly correlated in the Treatment Outcome Index, Friendship and Criminal Background are used in the regression model. **Table 8** outlines the relevant data.

Regression analysis reports the model as statistically significant ($p=.001$). Furthermore, it indicates that both independent variables are significant predictors of treatment outcomes, at the $p<.01$ and $p<.05$ level respectively. Good friends are the strongest predictors of successful treatment outcomes (.127) and this solidly supports the general hypothesis of this paper. An individual with a less severe criminal record will also tend to have more positive outcomes following drug treatment (.116).

Also, another two regression analyses advance the importance of friendship. When the six client resource dimensions are put into a stepwise regression equation for a select population, inmates who completed treatment, friendship is the only significant

Table 8

Unstandardized and Standardized Regression Coefficients for Client Resources

	Dependent Variable: Treatment Outcome Index		
Independent Variables	b	beta	p
Example 1			
Friendship	.118	.127	.008**
Criminal Background	.110	.116	.015*
N	434		
R-Square	.031		
Example 2			
Friendship	.364	.260	.031*
N	69		
R-Square	.068		
Example 3			
Friendship	.236	.395	.004**
N	51		
R-Square	.156		

*p<.05 **p<.01

predictor variable ($p<.05$) for the dependent variable, Treatment Outcome Index. The b coefficient is .364 and this represents positive friendships impacting higher scores on the treatment outcome index.

Using stepwise regression again for the same independent variable and six independent variables, friendship is even more statistically significant for another select population--those who had the two highest scores on the outcome index ($p<.01$). Good friends positively influence successful outcomes and the proportion of variance explained by this variable is 16 percent. In this section the expectations of client resources affecting treatment outcomes has been substantiated, at least for friend and peer group interaction upon success following treatment in a prison TC.

Nevertheless, information gleaned from the statistical analyses in the last section on assorted variables can now be applied to further expand on the current topic. A regression analysis, including: age, job last year, TIP, criminal background, and friendships, will be helpful in the investigation of predictors of successful post-treatment outcomes.

Stepwise regression for this equation reveals the significance for four of the five independent variables ($p<.0005$). As indicated on **Table 9**, TIP and job in the last year show the highest statistical significance, both at the $p<.0005$ level. Next age and criminal history have t-statistics at the $p<.01$ and $p<.05$ level respectively. In this particular case, friendship was excluded from the equation.

Time-in-program is the strongest predictor of good treatment outcomes on the index (-.282), while having a job the year before incarceration also acts as an indicator of

Table 9

Unstandardized and Standardized Regression Coefficients for Assorted Variables and Client Resources

	Dependent Variable: Treatment Outcome Index		
Independent Variables:	b	beta	p
Example 1			
Total TIP	-1.101	-.282	.000***
Job Last Year	-.342	-.169	.000***
Age	-1.860	-.146	.001**
Criminal Background	.116	.111	.013*
N	434		
R-Square	.152		
Example 2			
Total TIP	-2.466	-.428	.000***
Friendship	.349	.249	.023*
N	69		
R-Square	.250		
Example 3			
Friendship	.229	.382	.004**
Total TIP	-5.010	-.290	.026*
N	51		
R-Square	.240		

*p<.05 **p<.01 ***p<.0005

success (-.169). A higher age relatively affects more positive outcomes (-.146) and less criminality in one's past tends to influence post-treatment rewards (.111).

Though in order get a clearer perspective of friendship's role in treatment outcome, it might be germane to compare the same population of inmates especially one which previously had revealed a consequential interaction. A stepwise regression analysis for the same sample of inmates, all inmates that completed the Amity TC program, appears as Example 2 on the last table.

Only two independent variables are significant in the equation ($p<.0005$) and these are TIP and friendship. They explain 25 percent of the variance of the Treatment Outcome Index. The most powerful predictor is retention in the program (-.428) and it has the same high probability ($p<.0005$). The impact of strong, positive friends upon success following treatment (.249) is also statistically significant at the $p=.02$ level.

Furthermore, examination of another relevant population, inmates that scored 3 or 4 on the Treatment Outcome Index, continues to support the relationship between good friends and success after treatment. The stepwise regression analysis reveals that two independent variables, friends and TIP, significantly influence index scores ($p=.001$) and they are 24 percent of the variance explained.

Friendship is positively related to favorable scores (.382) and it is statistically significant ($p<.005$). The second variable affecting successful scores is retention in treatment (-.290) and, surprisingly, the significance level for this variable is lower ($p<.05$). The findings from these particular examples are compelling and should initiate future research into the interactive nature of drug treatment.

Chapter VI

DISCUSSION OF FINDINGS

PRELIMINARY RESULTS

The findings of this evaluation study indicate that the prison TC program was effective in reducing inmate drug abuse and crime, and even promoting employment, in post-release. This would help fulfil the societal goal of a successful rehabilitation process, and the 'wasted' time in prison would have also served a useful purpose. The impact of the treatment program was quite apparent.

Assignment to the intent-to-treatment group or to the no-treatment control was random. Unfortunately, self-selection was influential during the aftercare period because of California Department of Corrections (CDC) rules. The comprehensive data set that was collected may be minimally compromised by this limitation so the results of the category, prison TC plus aftercare, should be reviewed in light of this external requirement. Notwithstanding these limitations, the Amity-Donovan findings are consistent with developing research on the effectiveness of prison TCs for substance abusers.

Topical areas, receiving further elaboration below, include the creative development of research instruments and the innovative investigation of the impact of social networking upon treatment outcomes. Lastly, the potential interaction of ethnicity and drug abuse treatment is presented and discussed. This topic is especially relevant to the investigation of prison-based TCs.

INSTRUMENT DEVELOPMENT

Treatment Outcome Index

The creation of a Treatment Outcome Index contributes to the literature on the evaluation on drug treatment TC services in prison. It adds a more complex component to the often minimal measurement of recidivism as representative of treatment failure, or else, the lack of recidivism as an indication of its success. The addition of employment in the outcome index even advances the concept to included a successful reentry into society.

Unfortunately, the Cronbach's Alpha indicates a relatively weak internal reliability for the index. Further testing found that an index of only two items, reincareration and drug use, would not increase the statistic very much (from .46 to .54). A highly significant score, however, was obtained if an index of three items--reincarceration, drug use, and criminal behaviors--were used as a measure of outcomes. Nevertheless, multicollinearity is suspected in such a construction because criminality in post-release is highly correlated with reincarceration rates.

Testing the validity of the index allows its measurement capabilities to be considered. It was found to replicate previous studies for most, if not all, major independent variables. The influence of age, treatment status or career, and time-in-program (TIP) again was substantiated. In this sample, employment in the last 12 months before incarceration also continually predicted successful outcomes following treatment. Nonetheless, it must be considered that this may be a 'proxy measure of impairment,' reflecting the drug severity of individuals, rather than the job experience itself.

Scales of Client Resources

The process of therapy via peers in the prison TC, known as "community as method," logically should encourage researchers in considering how other social influences also have an important effect on the drug offender over time. But this formulation has received little attention in research. Furthermore, since studies show the prison TC modality to be most beneficial to the severely addicted and major offender, the absence of social considerations becomes even more acute; instead often leading to more studies of psychological and personality problems.

The findings suggest that research should include social networks occurring before, during, and after the drug offenders' incarceration. Can it strictly be the philosophy/structure/method of the TC affecting treatment outcomes or do other client resources possibly also impact the future success or failure of individuals after undergoing the drug treatment process in prison? Thus, the development of the scales of client resources contains a specific purpose, to investigate the possibility and strength of such interactions.

The client resource scales are an attempt to investigate webs of social affiliations from past experiences and to see if they impact inmate outcomes once they leave drug treatment and reenter society. A thorough analysis of the positive and negative influences of social networking practices not only enhances prison TC research, it also provides a better understanding of the therapeutic community process.

STATISTICAL RELATIONSHIPS

Treatment Outcome Index

For the relationship between the Treatment Outcome Index and assorted variables, the consistent primary variables reported in the literature are reiterated: age, intensity of treatment, and retention. The use of correlation and regression analyses replicated these findings.

The significance of employment in the last 12 months before incarceration introduced a consideration that could be further researched. When Hubbard et al. (1989:137) studied drug treatment modalities, it was mentioned that "employment before treatment is a major predictor of employment after treatment." However, it was also noted that the employment factor was not crucial for residential facilities (civilian TCs), because clients had such poor work histories to begin with.

A review of the correlation matrix created in the previous chapter, between the Treatment Outcome Index and assorted variables, also revealed other interesting associations that were not discussed. For instance, age and ethnicity are negatively associated, -.129 on the matrix, with a statistical significance at the .01 level. The matrix shows a positive relationship between age: drug treatment background, treatment status, and time-in-program (TIP). Treatment status and TIP are strongly correlated with age (at the .01 level), whereas drug treatment history has a weaker relationship (at the .05 level).

Since the ethnic categories are coded with societal discrimination in mind, this would indicate that minorities in the sample population are likely to be relatively old. Older inmates tended to have a higher rate of reaching the treatment status of TC graduate

and aftercare clients in the prison TC. Furthermore, increased age is associated with more drug treatment experiences and so is retention in the prison TC program.

The relationship of treatment status as well as TIP being correlated with age have been reported in the literature. Age and an expansive treatment career has been mentioned too. But this matrix introduced the possibility of giving some research attention to minority group members, especially the older segment, and to individuals with one or more encounters with drug treatment, who are older.

Are these subgroups representative of prison TC populations or do they only appear in this particular sample population? This central research question should receive further consideration in future evaluation studies.

Scales of Client Resources

Testing the strength of relationship between the individual scales of client resources and treatment outcomes identified two important components: friends and criminality. A correlation matrix showed a statistical significance for both variables, though the latter had a weaker relationship.

These findings supported the expectation that client resources have a dynamic influence on treatment outcomes. Good friends and a minimal criminal record were predictors of scores of 3 or 4 on the index, representing successful outcomes. Regression analyses continued to verify that strong, positive friendships impacted the achievement of success following drug treatment.

The four scales that were expected to impact treatment outcomes and failed to show significance are family, education, occupation and drug history. Family may not be

prevalent because such involvement occurred much prior to treatment and the effect may have attenuated since the individual's early years. Also the family may maintain a "wait-and-see" attitude following treatment. This was found in a Hong Kong study, which reported that there was a "lack of a significant relationship between family support and drug use after treatment" (Cheung & Cheung, 2000:3).

For the majority in this group education was a wasted experience during their teens: a time to rebel against authority, cop-out of responsibility, and/or party with friends. Limited educational opportunities in poorer neighborhoods possibly were a hindrance too. By adulthood, most individuals found their educational background probably lacking and a minimal resource to help them turn their lives around.

Since occupational achievement may affect one's life rather in a fluctuating manner, therefore it may not be as relevant as friends and criminality. The possibility of drug- and crime- related careers is also high for this population (.527) and not that amenable to investigation. Lastly, drug history probably needs to focus on intensity and duration of drug use to provide better results in this analysis. The makeup of this dimension may have been too weak to reveal any worthwhile correlation.

It is possible that the components of the other four scales of Client Resources--Family Resources, Friendships, Educational Background, and Occupational Achievement --are deficit as well. Only Criminal Record and Friendships reached over 25 percent of the variance explained, 27.4 and 30.7 percent respectively. The remaining variables ranged from a low of 13 percent to a high of 17 percent.

Nevertheless, by looking at the correlation matrix more intently, the introduction

of other noteworthy associations between the scales of client resources can now be given further consideration. Four of the client resource variables, for instance, correlate significantly with Criminal Record at the .01 level. Education has the highest impact at .334 and this may indicate that less drugs and trouble-making in school allows learning to take place. One would then have other options besides crime, and the process would prevent the foundation of crime early in life.

Drug History's correlation with criminality (.139) shows that less involvement with drugs/alcohol would probably mean less reason to commit crime (to possibly maintain one's habit) and would help one to avoid arguments and police issues. Also Friendship being related to Criminal Record (.120) probably refers to the Sutherland hypothesis, not hanging out with deviant associates helps decrease criminal behaviors.

Furthermore, Family Resources correlates with criminality (.126). Parents can steer their charges from crimes by supplying strong role models and creating incentives for behavior. A dysfunctional family, conversely, can initially set the stage for a lifetime of crime. Consequently, deficient experiences in the past and social networking failure add to a climate of dysfunction. The more client resources available to inmates, ultimately, provide better prospects for the future. But it must be reiterated, the self-determination factor can limit success even with numerous social assets and the expected potential that they afford.

The motivation and behavior of each individual person helps determine the manner in which social networking is utilized. Therefore, an inmate with a productive and supportive family should, in theory, have a less intensive criminal record and probably

would have become involved in deviance during the turbulent teenage years. He should be able to rely on these intimate relationships, as well any contacts and connections extended to his family, to turn his life around. However, in reality such a person may have engaged in criminality over many years and continuously refuse to accept any familial offers of assistance. In this case social assets are unrealized.

GROUP COMPARISONS

Client profiles reported in this paper closely match other studies but some evidence of differences not found by others can be demonstrated. It was originally mentioned in the last chapter that the chi square statistic for ethnicity and treatment outcomes was significant, but this association did not hold true for the correlation matrix. It was noted that nearly 50 percent of Whites were in the most successful outcome category. Previous researchers surmised that the Amity aftercare cohort may even be reflective of self-selective bias (Wexler et al., 1999b).

Another implication of the relationship between ethnicity and treatment was found in the lack of treatment success. Whites were in the fortieth percentile for a score of 5 on the Treatment Outcome Index (poor outcomes), while Blacks made up nearly 50 percent of the respondents reporting a score of 6 on the index (worst outcomes).

Giving further consideration to the possibility of an interrelationship between ethnicity and the process of drug treatment allows for a better understanding of the working of the TC. The study of ethnicity in prison TCs is a relevant area of research, especially because of the disproportionately high number of minorities within the criminal justice system.

Historical and Sociological Implications

As previously outlined in Chapter 1, the prison population in the United States has increased sharply in recent years and this phenomenon is reflective of drug legislation. Arrests for drug abuse violations increased from 580,900 in 1980 to 1,532,200 in 1999 (Bureau of Justice Statistics, 2002). In the decade of 1985 to 1995 drug offenders in

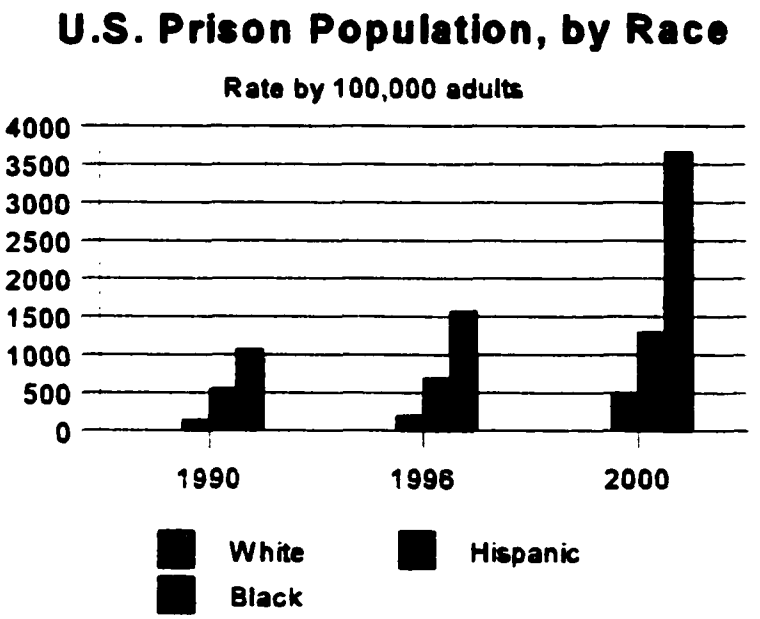
federal prisons grew from 34 to 60 percent. While during the same time period, drug abuse offenders increased from nine to 23 percent of all state prisoners (Robert Wood Johnson Foundation, 2001).

The incarceration rate for White inmates rose from 1990 to 1996, as did the rates for Blacks and Hispanics (see **Figure 2**). For Blacks, the highest rate of imprisonment was found for prisoners between 25 to 29 years of age (a rate of 4,131 per 100,000) and for Hispanics it was for prisoners between 20 to 24 years of age (a rate of 1,514 per 100,000). This recent explosion of criminal justice population has also had a profound affect upon inner city neighborhoods. The same poor minority communities that have suffered from a century of "vice market segregation" (Kornblum, 1993).

The containment of red light districts and illegal drug markets has helped "to produce a population debilitated by addictive drugs, alcohol, and fratricidal violence" argues Kornblum (1993:131). Historical policies of racial and class segregation were noted as the basis for this development. Furthermore, past economic exclusion and recent deindustrialization have pushed minority populations into the underground economy, where they encounter a proliferation of turf wars and police action in their neighborhoods.

Racial discrimination has been seen historically operating in our drug laws as well (Courtwright, 2001; Courtwright et al., 1989; Inciardi, 1992; Morgan, 1981). In the 1870s, California implemented anti-opium laws directed at Chinese immigrants and one underlying component was the fear that white women may be seduced. A generation later, cocaine use among Black males in the South produced hysteria, especially concerning the rape of white women. Marijuana use by Mexicans during the 1920s and

Figure 2



Source: Bureau of Justice Statistics,
U.S. Department of Justice, 1999;2002.

1930s was seen as alien and dangerous; thus, the drug was specifically targeted for prohibition legislation. More recent drug epidemics, heroin in the 1970s and crack cocaine in the 1980s, were associated with Blacks and Hispanics in urban ghettoes. Again racial imagery preyed on fear and the result was draconian penalties for crack cocaine.

Federal penalties are one hundred times greater than those for the possession of the same amount of powered cocaine. The Omnibus Anti-Drug Abuse Act of 1988 called for a mandatory sentence of five years for five grams of crack cocaine. Meanwhile, the possession of an equal amount of cocaine power, a drug more commonly associated with middle- and upper-class Whites, receives no minimum sentence. Even federal judges have complained about this disparity.

Sociological studies of racial/ethnic stratification and discrimination impinging on various aspects of one's life have received wide recognition (Baca Zinn & Eitzen, 1996; Kitano, 1997; Kornblum, 1993; Ringer & Lawless, 1989; Rubin, 1994; Stack, 1974; Steinberg, 1989; Waterston, 1993). Areas affected include: family formation, educational opportunities, occupational pursuits, criminal justice, and drug abuse.

Though a number of current ethnographies have adequately made this situation become a 'real' and understandable experience (Bourgois, 1996; Williams, 1989; 1992), the field of substance continues to be limited in its interest of social inequalities. Yet the recognition of a racial/ethnic bias in society should be a concern when examining minority groups in drug treatment programs, especially therapeutic communities. Such injustices could impact group dynamics and possibly influence the treatment outcome results for individuals as well.

Research Findings

Studying cultural relevant factors in the therapeutic community is the exception (De Leon et al., 1993; Longshore et al., 1993) though, rather than the norm. Research by De Leon et al. (1993) found that retention rates in the civilian TC varied by racial/ethnic composition. Therefore, it would be predicted that the Donovan Prison TC sample would have similar findings. An ethnic group's extensive system (or lack thereof) could be further tested by the Client Resource Scales designed for this study. Differences among groups may be representative of the societal pressures of discrimination and lend support to the hypothesis outlined above.

Whites in the Amity TC showed the highest (285.92) mean days in treatment, followed by Hispanic (277.43) mean days, Black (224.31) mean days, and, lastly, Other (154.21) mean days. Why are Blacks more readily leaving the treatment program? Is it not culturally relevant? This statement may certainly be true for the 'numerical minority' of minorities in the population, but how does interaction of ethnicity and the treatment process play out?

Hispanics are possibly faring relatively well from their high number of Mexican members. Since the Hispanic category in America is made up of many diverse cultures, this is an area that definitely needs to be examined more thoroughly. For instance, are Puerto Ricans highly representative in New York and New Jersey drug treatment programs? If they are, can findings in these states replicate the results reported here?

Looking at the Scales of Client Resources for minority groups should be informative to the investigation of the discrimination hypothesis. A simple means test

shows that all the scales reflect statistical significance except for Drug History. Blacks and Hispanics report more supportive family situations, results seen on **Table 10**, while friendships for both groups were considered poor resources.

Education and occupation relatively represent societal trends: highest education for Whites and lowest for Blacks, and career achievement very low for Blacks and Hispanics. Exceptions were also found: Hispanics having relatively high education levels and the category, Other, indicating very high scores on the occupational scale. Yet these results may reflect immigration rates, or else, drug- and crime-related occupations. In conclusion, Whites reported the highest criminality among the four groups, while the Black mean was the lowest.

At work here may be racial/ethnic discrimination in society, which impedes the life chances of individuals and, in this case, their successful recovery. Though a thorough discussion of this topic is outside the scope of this paper, investigating the interrelationship between race/ethnicity in the TC process can be a rewarding endeavor. It can enhance success following treatment, accommodate the nation's ethnically diverse and growing population, and eventually, if communicated adequately to various publics, may contribute toward easing such destructive inequalities.

Table 10

Comparison of Means for Scales of Client Resources by Ethnicity

	White	Black	Hispanic	Other
Family Resources	2.7007	2.3070	2.3526	2.9254
Friendships	2.3646	2.5666	2.6232	2.3687
Educational Background	2.7757	2.2342	2.6191	2.6505
Occupational Achievement	2.6171	2.3598	2.3777	3.0997
Criminal Record	2.6370	2.2823	2.5421	2.6034
Drug Abuse History	2.3984	2.5084	2.4462	3.1349

Chapter VII

CONCLUSIONS

PRISON TC PROCESS

This study substantiates the efficacy of the prison TC and contributes to the understanding of the drug treatment process of the TC. Recent researchers (De Leon, 2000; Nielsen & Scarpitti, 1997) have noted this lack of appreciation concerning the workings of the TC. "Although the TC model is widely used with documented effectiveness," state Nielsen & Scarpitti (1997:280), "its theoretical underpinnings remain ambiguous at best."

Their research strives to explain the TC process with a holistic approach, taking into account dynamics at both the individual and group levels involved in producing change in the context of the TC setting. From data obtained from inmates attending the CREST TC program in Delaware, they produce a TC model based on a developmental process of change. Albeit this innovative TC has a work release component, it is representative of the typical workings of a therapeutic community. They report that theorists agree, that the most important mechanism for change is provided by the community of peers who provide confrontation, positive and negative behavior reinforcement, and role models to the client(s).

The goal of our research, in contrast, was to focus on factors related to TC outcomes, with an additional intent of understanding the social mechanisms involved in the process of change during TC treatment. To "visualize" the interactive nature of drug treatment in a prison TC, our study accounts for the potential benefits/deficits of prior

social relationships impacting the TC's relationships of responsibility and, ultimately, the resultant outcome relationships operative in post-release.

Nielsen and Scarpitti (1997) also refer to "tools" provided by the TC program to impact drug-free living after treatment. These include: educational seminars/groups and survival lessons--change friends, places, and activities; ask people for help when needed; and think before you act. Recovery is reinforced through aftercare and promoted while in treatment by having clients attend AA and NA meetings. This practice gets them in the habit of attending self-help sessions and allows them to observe people who are in recovery. It also provides an opportunity to develop a support network.

While CREST supplies "tools" in preparation for former-inmates to live in society, the authors (Nielsen & Scarpitti, 1997) acknowledge that a lack of educational and/or occupational skills, or even economic situations may push a former user back to the old neighborhood and to association with the same people as before. This would probably minimize an individual's retention of a new drug- and crime-free identity that was cultivated in drug treatment.

In addition to individual motivational and situational conditions, supportive social networks are equally important for recovery, perhaps even more so. Social relationships and networking must work against societal nonacceptance of inmates in post-release: helping them to overcome being labeled "doubly deviant," assisting them to endure the ethnic stratification system, and replacing community linkages for them that are currently lacking in our impersonal, fast-paced, and goal-oriented society.

LIMITATIONS

Sample

The data collected from the Amity TC at Donovan Prison in California helped provide support for prison TC effectiveness and also contributed to analyzing the workings of the TC process. However, part of the project's attempt to evaluate prison TC inmates' involvement in social networks before, during, and after drug treatment could not be realized by the data available. The use of secondary data limited the investigation to a certain degree.

Baseline data collected during initial interviews were used to establish prior client resources and outcome data were considered applicable to client social relationships after treatment in post-release. The psychological testing during treatment, however, was not relevant to this present study. Therefore, social involvement in the actual prison TC process, or the "relationships of mutual responsibility," a term denoted by Lockwood & Inciard (1993:61), were lacking. Social connections during the therapeutic community experience, consequently, needed to be deduced from the pre- and post-treatment variables.

Social adaptation of inmates after release from prison also could not be assessed; such as making new friends, being involved in community service groups, nor joining religious organizations. The latter relationship would have been of primary interest because of the theoretical-related recruitment and conversion research on social networks. Since religious associations would emphasize a less deviant way of life and more conventional values, they would be ideal networks for promoting recovery identities as

well as being a strong source of group formations.

Another limitation of data collection was the information compiled on employment, especially "job in last 12 months before incarceration" and "employed during 12 month follow-up." The questions did not specify "legal job" nor "full-time job" as advanced by Hubbard et al. (1989). Clarification of this terminology would allow the issue of job potentiality and productivity to be ascertained. In addition, a deeper understanding of this matter would allow more accurate and reliable results to be reported when presenting the effectiveness of prison TCs to policymakers.

Study Design

The specific design of this project study was to examine the crucial importance of social networking in the lives of inmates experiencing the TC process and to test how these social relationships impacted outcome variables. Therefore, background data on mental and physical health, though part of data collection, was intentionally absent in design construction; primarily to overemphasize social components and to creatively investigate new areas of research.

Since psychometric measures have been associated with penology in the past and because present research studies rely on their scientifically rigorous approach, it appeared to be a unique challenge to attempt an evaluative study of a prison TC with only the inclusion of social relationship data and a few background characteristics. In the late 1970s, this method received public acknowledgment in *The Rehabilitation of Criminal Offenders: Problems and Prospects* (Sechrest, White & Brown, 1979).

Sechrest et al. (1979) pointed to the limitations of classification schemes in the

implementation of effective rehabilitation services. These classifications were for the purpose of maximizing response to treatment, or in other words, acting as predictive measures. They note (1979:53):

> Perhaps there are better approaches to classification than have characterized past efforts, which still locate the essential basis for classification within the offender, e.g., maturity level, personality type. Beginning instead with prisoners' problems and *resources* [italics added], for example, might be worth trying. Such a classification scheme would have the virtue of being a bit closer to the treatment planning process.

Thus, with full recognition that psychological/behavioral circumstances play a major role in the prison TC treatment process, it is clear that full examination of treatment efficacy would need to include their relevant impact. Furthermore, recent TC findings (Wexler, 1995; Wexler et al., 1999a) indicate that adult inmates in treatment often have diagnoses of comorbidity.

For the total Amity (N=715) TC sample, Wexler et al. (1999a:157) report that psychiatric disorders were prevalent, with more than half receiving antisocial personality diagnosis. To a lesser degree, phobias, posttraumatic stress, depression, and dysthymia were also found. "Of special interest," say Wexler et al., "is the number of inmates who had a diagnosis of Adult Attention Hyperactivity Disorder (33%)."

Moreover, the researchers presume the Amity TC program was particularly successful with this high-risk population because of its focus on antisocial behavior. According to the "risk principle" of rehabilitation treatment (Wexler et al., 1999a:164), one that is responsive to criminogenic needs; including, antisocial attitudes and behaviors in the areas of authority, interpersonal relationships, peers, leisure activities, substance work, and work; would ultimately benefit offenders at the highest risk. More relevant

research should be forthcoming.

Another highly relevant topic, though omitted from this analysis, is HIV prevention and its associated variables. Policymakers have sponsored effective drug abuse treatment to reduce risk behaviors related to the spread of HIV/AIDS since 1988 (Fletcher et al., 1993). Once there was a recognition that the spread of the epidemic occurred through shared needles by injection drug users and by sexual transmission, with multiple sexual contacts and partners of infected addicts, a clear need for increased public support ensued. Prison populations have received a large share of attention in this crusade and research attention in this area is highly beneficial.

Lastly, the strict criteria used for the selection of the Treatment Outcome Index variables may have posed a "limiting effect" when interpreting outcome results. The factors included in the index were: drug abstinence, a lack of reincarceration, and employment in post-release. The possibility of an affirmative response, to the question of "abuse of any drug" in the 12 months after being released from prison, leads to the exclusion of former-inmates out on parole with a job from the most successful category.

Incidents of drug relapse may provide, as De Leon (2000:73) describes, opportunities for learning (how much, or how little, an individual has internalized TC teachings and how one is applying these lessons to the real world). Thus, relapse becomes an integral element of recovery and may reflect improvement in this area rather than failure as the index would imply.

The variable concerning "employment during the 12 month follow-up" lacks clear terminology (discussed in the last section) and also the tangible possession of a job may be

the least important indicator of success, at least, to the general public. Consequently, an employed, drug-free, former in-prison TC client could be reincarcerated and yet he would receive the exact same score on the index as the law-abiding individual described above.

Since return to prison is a severe break with the teachings of the TC program and even possibly a threat to society, this variable is most vital in evaluative studies. Thus, a viable solution for future research is the use of weighted scores for reincarceration in the study of outcome measures via an index. In this way, exploration can continue on definitions of "success" and "failure" after treatment in a prison TC.

SUGGESTIONS FOR POLICY AND RESEARCH

The preponderance of evidence supports the conclusion that prison TC treatment programs are effective in producing successful outcomes for inmates. This is encouraging. It can also be seen that the program was associated with reduced risks of deviance and replaced by the creation of pro-social attitudes and behaviors; subsequently, TCs have the most effect in reducing specific behaviors and social risks among this particular population.

Ancillary Services

Yet the connection between prison rehabilitation and reintegration back into society upon release is a feeble link in the criminal justice system (Wexler & Williams, 1986). Discontinuity in the treatment process is a problem for all substance abuse clients. Hubbard et al. (1989) found that their research clients tended to ebb in the months following treatment, as supervision, support, and restrictions on their behavior decreased.

Ancillary services act as a viable solution, fostering the relative chance of success for inmates after being paroled and affecting their overall recovery and productive reeentry into society. Hubbard et al. (1989:172) state: "Our findings...suggest that greater emphasis be placed on reintegrating clients to society once their addiction is controlled, through meaningful vocational and educational services, post-treatment support groups, and family counseling." Relapse prevention, transitional services, and aftercare are all potential devices.

CREST (Lockwood & Inciardi, 1993; Lockwood et al., 1997) is a modified-TC that attempts to study community-based transitional TC treatment and aftercare, with 25

percent of its clients coming from KEY, an in-prison TC program. The six-month work release component concludes with the inmate obtaining and maintaining a job outside the TC while continuing to reside at CREST. During its last seven weeks, one tries to find appropriate housing and enters the recovery stage of treatment. The inmates from the prison TC are expected to progress through the entire process more rapidly.

The aftercare phase, described by Lockwood & Inciardi (1993), involves a recovery plan, such as participation in Alcoholics Anonymous (AA) and/or Narcotics Anonymous (NA), as well as individual outpatient counseling. CREST graduates, moreover, are expected to donate one day a month to CREST--participating in TC activities and serving as role models for other residents. Weekend retreats open to residents and graduates are also considered a part of the recovery process.

The potential for paid employment, as a counselor trainee in the program after graduation, acts as a smooth transition from prison to community. This is encouraged by CREST which provides stipends for clients who have an interest in counseling careers. Thus, two or three such positions are continually occupied by TC graduates. Preliminary research shows over 90 percent of KEY/CREST respondents remaining drug- and arrest-free at their six month follow-up, though later interviews indicate "slippage" in their drug-free status. Notwithstanding, Lockwood & Inciardi (1997) clearly present evidence of the positive effect of TC treatment and, in particular, the continuum of treatment for drug-involved offenders.

As mentioned in Chapter 2 under the section, Recent History of Prison Based TCs, research in this direction should be encouraged. Wexler et al. (1999b) even suggest

enhancing inmates' perceived need for aftercare with motivational interventions. The recent findings from Amity TC as well as TCs with aftercare components, in Texas and Delaware, are important indicators to policymakers of the additional need for the continuity of drug treatment care. Upon the inmate's reentry in society, ancillary services for the individual and his family facilitate a smooth transition. Also these services help ensure the recovery process, initiated in the prison TC, has the opportunity to take hold and to remain influential in the former-addicted offender's life span.

De Leon (2000:267-8) addresses a problem of aftercare service delivery that can result in undesirable clinical consequences.

> Lacking a single authority, manager, or credible role model, an uncoordinated service delivery system inadvertently becomes an enabler of relapse and/or recidivism in a way analogous to a dysfunction family or household of divided parents....These problems of discontinuity of care can reinforce negative perceptions and behaviors of clients who are in aftercare. Without affiliation with an authentic recovery community that supports and guides the use of aftercare services, the individual either avoids what is perceived as cold and irrelevant system of care givers or reverts to manipulation of the system for immediate needs and gratification.

He suggests a model, the Integrated Systems Approach (ISA), which would consist of interrelated social services and clinical interventions with a constant perspective of recovery for the individual. Not just to simply provide the social, vocational, and educational services for reentry back into society, but to merge primary care and aftercare into a single concept of continuance of recovery. Though such modified TCs with integrated systems are presently in the developmental stage, he points to the KEY/CREST TC as a promising example for criminal justice clients.

Ethnic/Minority Cultures

> It must be conveyed to policymakers that now is the time to shift resources from building and operating prisons, which we know does not work, to investing in effective substance abuse intervention and treatment programming. Such programming needs to be devised that responds to the special, and differential, needs of men and women, *offenders of different races and cultures* [italics added], as well as for youth who are incarcerated. Without such programming, these offenders will reemerge from their institutions more damaged than when they entered, and therefore more dangerous to society, or at best essentially unchanged and prepared to resume their predatory ways.

This preceding quotation by Wexler & Lipton (1993), calling for change in drug treatment for prisoners, points out a topic that receives little or no attention. A detailed study of ethnic differences in prison TCs remains to be done. There is a paucity of research on the interaction between TCs and minority group members. Ethnicity, seemingly not a significant predictor of retention for any drug treatment modality (Hubbard et al., 1989), has not been seriously addressed.

In an article on cultural relevance in TCs, it was noted that this issue was initially debated in 1976 (De Leon et al., 1993). Three major themes have emerged since then which include: the stress on subgroup members who must assimilate into the majority White culture ("cultural dissonance"), the efficacy of the TC approach for minority group members, and the lack of TC curricula including cultural relevance.

The cultural dissonance theory considers that the "confrontational techniques" of TCs may be unsuited to Hispanic clients because the techniques are at odds with their values and interaction style. De Leon et al. (1993) observe that the Hispanics' firm loyalties to their families may impede their acceptance of the TC as a surrogate family and that self-disclosure of vulnerability or weakness in groups may be resisted because it is in

opposition to the Latino image of machismo.

Research into ethnic differences in TC retention report that Hispanic rates are significantly lower than that of Blacks and Whites for 30 days in treatment (De Leon et al., 1993). Hispanics show the highest one year dropout rates, perhaps reflecting subjects' age in this particular study--younger males. Nevertheless, in contradiction to cultural dissonance, Hispanics had the overall lowest retention even when they were a larger numerical minority than the White minority.

There are other possibilities that may also impact cultural differences and drug treatment. Longshore et al. (1993) find that Hispanics are less likely to perceive treatment needs and are less inclined to see their personal problems as appropriate for mental health services. Blacks were reported as showing less favorable attitudes toward treatment; subsequently, heavy users were less likely than all groups to report needing treatment.

Therefore, other areas of research need further study, for instance, recruitment, client perceptions, and outcomes for ethnic/minority groups in drug treatment and especially in a TC setting. For retention improvement, De Leon et al. (1993) recommend cultural relevant TC programs to increase ethnic minorities participation with the use of: staffing, materials in seminars, and special groups; all to foster an unique expression of traditions, rituals, and dress.

Longshore et al. (1993) suggest treatment perceptions may improve with closer ties to the ethnic community (introducing role models, interacting with community-based resources, and adding cultural pertinent materials). Changes to increase ethnic/minority

recruitment into drug treatment include: referral and intake services that are "cultural congruent," available bilingual accommodations, and the use of a "reconfigured" approach to the issue of denial--using social rather than personal motivations for abstinence, such as, community concern or the importance of being a role model for one's children.

De Leon et al. (1993) conclude that TC treatment must ascertain individual distance from or immersion into mainstream society to improve services. If an ethnic minority accepts TC teachings as assimilation into the dominant culture, then de facto loss of their cultural heritage is implied. Such individuals would be more successful in a specialized setting, such as those previously discussed.

Additionally, the extension of programming for addicted offenders in prison TCs needs to encompass these ethnic cultural differences and this should be one direction in future research. This would produce strong ethnic role modeling, engage local community support, and show societal recognition and acceptance of different cultural perspectives. Perhaps ethnic stratification may finally be acknowledged as a severe hindrance to societal advancement in the next few decades as the composition of ethnic minorities in the nation grow and change. This type of research would be a supportive addition to this ideological awakening.

CONCLUDING REMARKS

Late in my research I came across Mullen's (1996:46) polemic piece, entitled "Therapeutic Communities in Prisons: Dealing with Toxic Waste." I was impressed with his metaphor of treating criminal addicts like toxic waste and could entirely relate to his description.

> The true cost of avoidance can be better understood by following drug users through their wasted lives, criminal activities, lost productivity, arrests, trials, and incarcerations....As with industrial toxic waste, we pause in dismay at the most violent crimes, the worst human suffering, but we see no `quick fix' and move on to other concerns. Like the infamous garbage barge that originated in New York City and traveled from port to port being denied entry, few neighborhoods or communities want drug addicts or offenders in prison or in treatment settings in their vicinity. They are considered to be noxious, like garbage, never to be `recycled' or reintegrated back into society.

While teaching college courses for SUNY New Paltz for over five years in three different state prisons, I was questioned all the time about my line of work. People outside the prisons spoke with gall, disgust, apprehension, or fear. They would ask such curious questions: why would you do it, are you scared, or do you get paid a lot of money? Many just considered it a waste of time to teach inmates in college classes. Another college teacher once inquired, what are they like? I assumed he meant academically or possibly their ethnic/minority composition? But he quickly clarified the sentence: what kinds of crimes did they commit?

The general public seems to have a deep-seated curiosity or even loathing about the prison population and this includes some people who even work in the field of corrections. The use of Mullen's term, "toxic waste," suggests that such stereotyping and ill will permeates much of our society. I chose to think of the inmates as my students and

judged them only by their classroom standards. They were individuals to me and not stereotypes.

Some prison settings were rather bleak, but it was pleasurable to interact with my students. Many were extremely intelligent and hard-working, and only once did I ever feel intimidated by a student. I taught primarily anthropology, sociology of race relations, and sociology of women and my classes were always engaged in lively debates. For the class on race and ethnicity, people tended to watch their words but the gender class often caused the most turmoil of all.

I enjoyed attending prison graduations since they were such lively affairs. You were able to meet students' family and friends and most everyone was in good spirits. Once one of these dates almost clashed with my daughter's graduation day. No one believed I had any decision to make and my family was furious at me for even thinking about it. The date at the prison eventually changed and then there was no longer a conflict of interest.

People close to me relatively accepted what I was doing, but neighbors, acquaintances, or even strangers could be nasty. All these reactions made me realize how hard it must be to reenter society after being paroled. Never having direct contact with inmates nor experiencing any serious crime, most of the community still held tight to their old beliefs and did not want to hear anything to the contrary.

Nevertheless, most recently, effective prison drug treatment programs have shown impressive success. Especially successful are the therapeutic communities staffed by recovering addicts, where seemingly toxic inmates are changed into the productive

citizens. Perhaps TC prison graduates should be considered assets, acting as "antibodies" within our troubled social system (Mullen, 1996).

In the final analysis, Mullen's conclusions (1996:64) are equally potent and they are a fitting summary to this dissertation and its contents:

> ...It is time for the United States to stop treating drug abusers as toxic waste. We have been no more successful in handling their toxicity by incarcerating them than we have been in burying wastes from nuclear reactors in so-called safe containment facilities. Toxic waste invariably leaks into our groundwater and soil, affecting all of us for hundreds of years. And so, in the same vein, it goes with criminal drug abusers. Within the next few years we will have more and more outcome studies and statistics demonstrating the effectiveness of drug treatment in reducing the 'toxicity' of addicts. In the meantime, we already know enough to significantly [advance public awareness, rally political support] and increase the [financial] resources devoted to drug treatment in prison and jails.

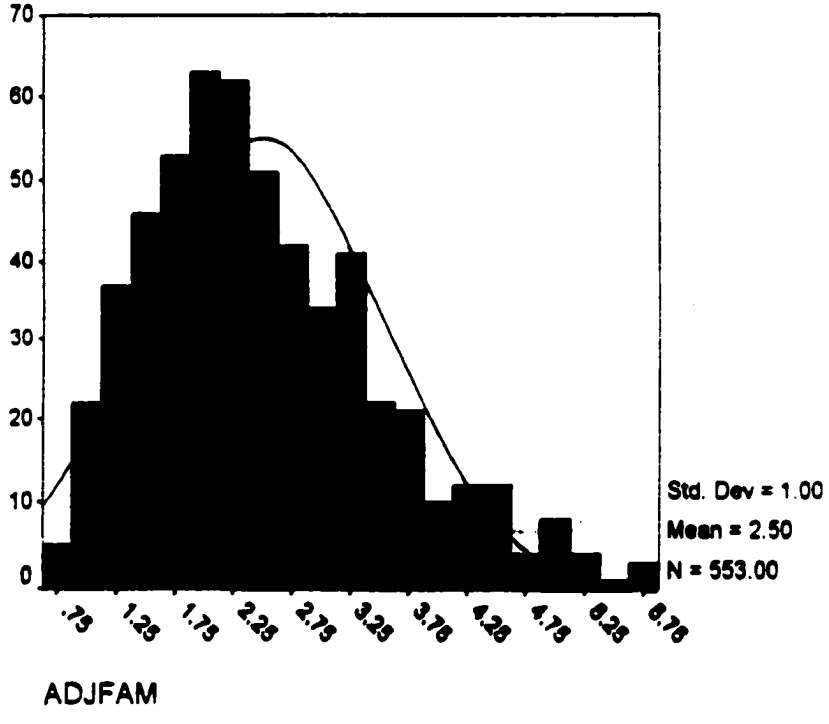
Appendix A
Background Characteristics of Total Sample

Treatment Status	Control (290)	Dropouts (98)	Graduates (194)	Aftercare (133)	%-Total (715)
Age (% categories**)					
45-64	3.8	5.1	5.7	9.8	5.6
35-44	22.4	14.3	23.7	30.1	23.1
25-34	49.3	50.0	52.6	45.9	49.7
18-24	24.5	30.6	18.0	14.3	21.7
(mean/SD) n.s.	30.53/7.10	29.04/7.02	31.01/7.27	32.98/8.24	30.91/7.44
Ethnicity (%)*					
White	35.9	30.6	35.6	50.4	37.8
Black	35.5	42.9	36.1	22.6	34.3
Hispanic	22.8	23.5	25.3	24.8	23.9
Other	5.9	3.1	3.1	.4	4.1
Education (%)***					
<high school	41.7	55.1	41.8	34.6	42.2
H.S./GED	51.0	43.9	56.2	59.4	53.0
>high school	7.2	1.0	2.1	6.0	4.8
# of mos. Incarcerated (mean/SD)	77.31 (63.08)	83.02 (67.49)	78.92 (58.61)	86.78 (71.88)	79.98 (64.14)
Job last 12 month (%)	35.5	35.7	33.0	33.8	34.5
# of times in tx (%)					
0	63.8	59.2	62.9	51.9	60.7
once	23.4	29.6	23.7	30.1	25.6
2-3	9.7	8.2	8.8	13.5	9.9
>4	3.1	3.1	4.6	4.5	3.8
Primary drug used (%)**					
alcohol	9.0	7.1	16.5	7.6	10.5
marijuana	19.8	18.4	11.9	6.8	15.0
cocaine	17.4	23.5	22.7	17.4	19.7
amphetamines	30.6	24.5	25.3	36.4	29.4
heroin	22.2	25.5	22.7	31.1	24.4
TIP intent-to-treat**** group only (mean/SD)	.00 (.000)	173.05 (107.64)	377.30 (93.47)	589.65 (178.99)	235.77 (248.48)

*p<.05 **p<.01 ***p<.005 ****p<.0005

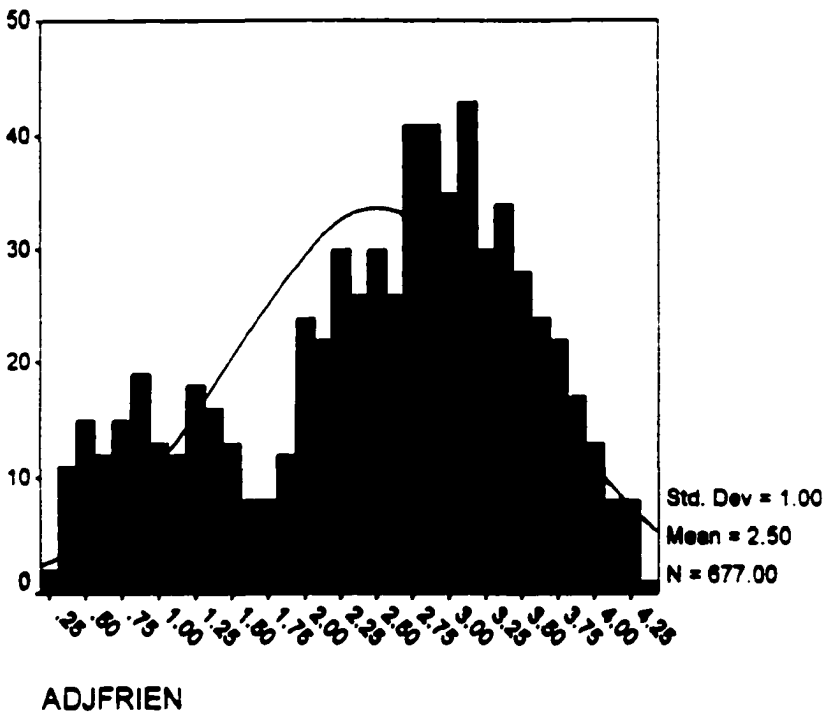
Appendix B

Histogram of Family Resources



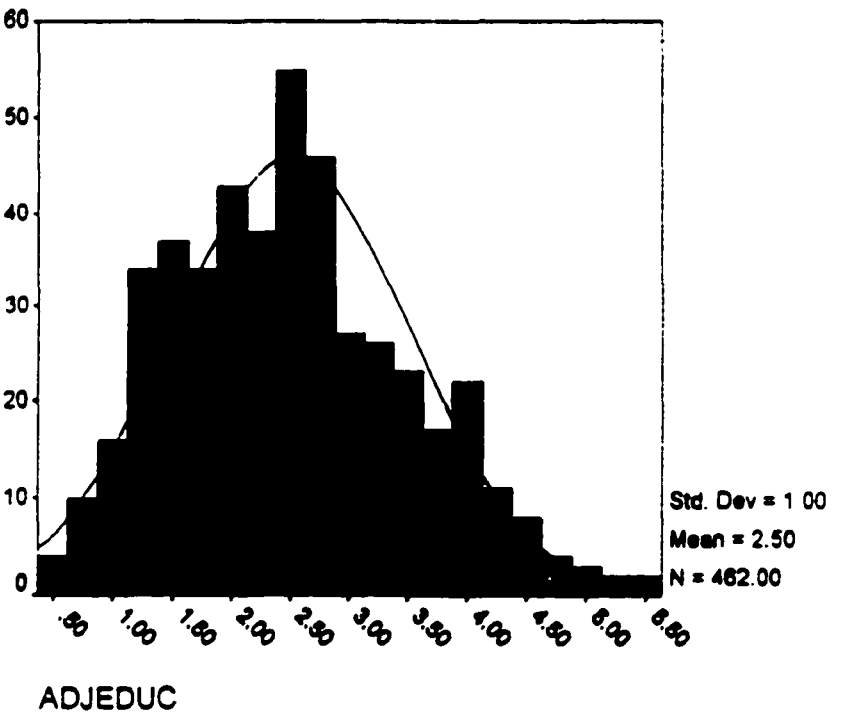
Appendix C

Histogram of Friendships



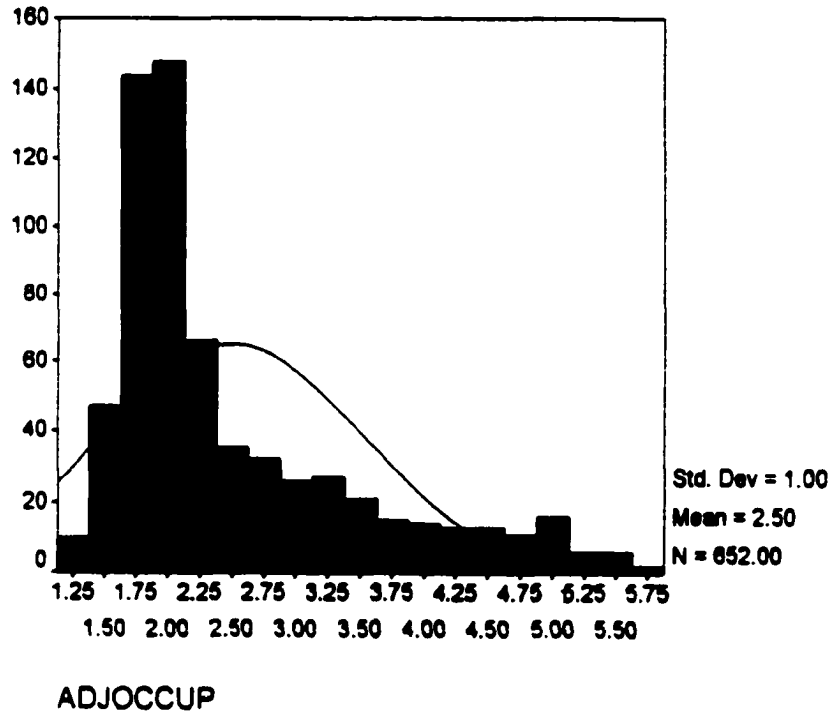
Appendix D

Histogram of Educational Background



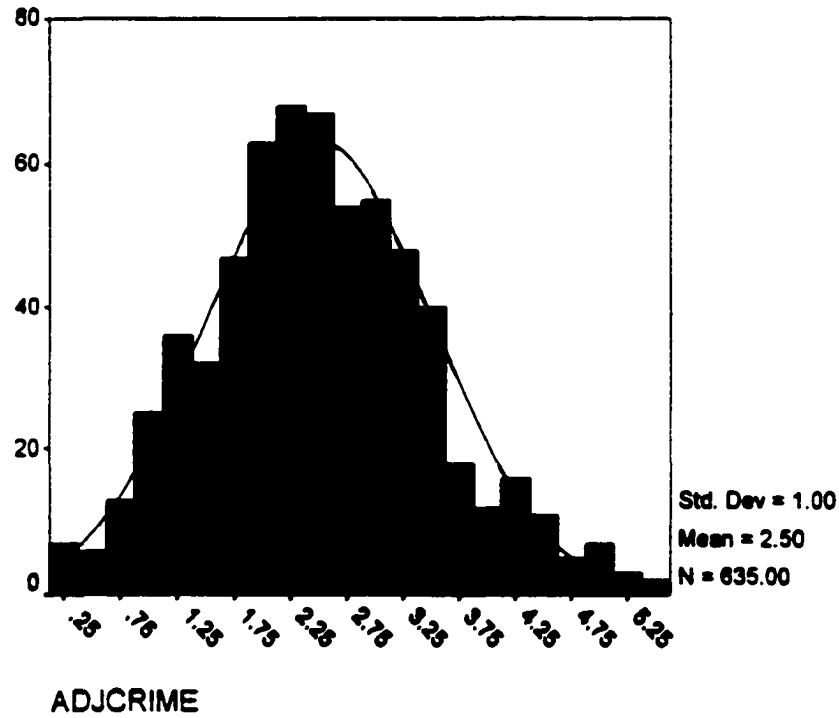
Appendix E

Histogram of Occupational Achievement



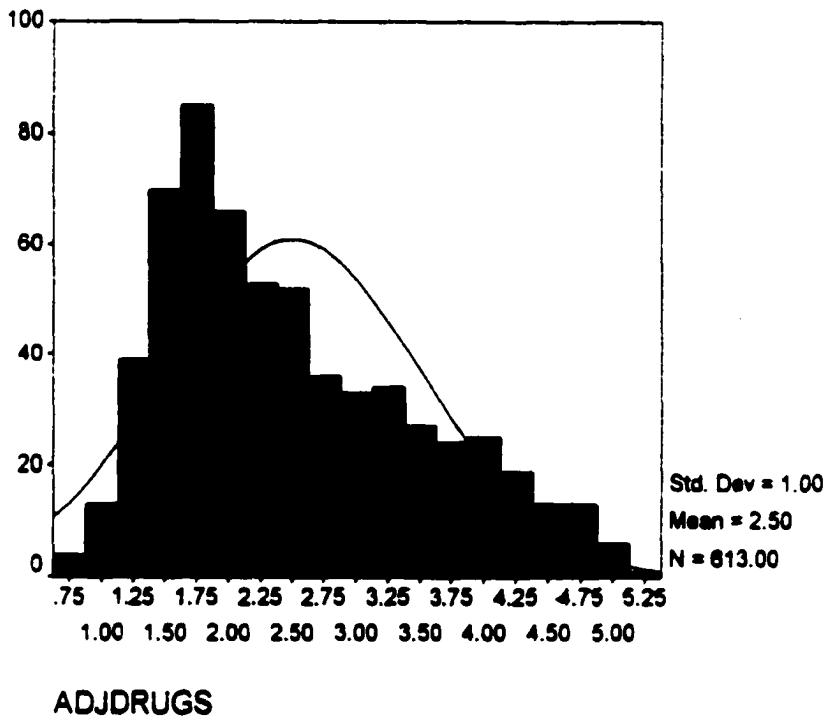
Appendix F

Histogram of Criminal Record



Appendix G

Histogram of Drug Abuse History



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