

AN EVALUATION OF DAUPHIN COUNTY PRISON'S FOUR THERAPEUTIC  
COMMUNITY PROGRAMS ON THREE DIMENSION OF RECIDIVISM

Final Report  
July 13, 2000

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- \* Throughout the course of this study the assistance of several individuals and their agencies was invaluable and contributed significantly to the study's completion. Dauphin County Prison's Deputy Warden of Treatment, Elizabeth Nichols and her staff provided us with a place to work at the prison and training in accessing prison records. Gregory Bush, Deputy Director and Jeffery Cepietz, Systems Analyst, of Dauphin County's, Department of Electronic Data Processing, provided the tailored data files required for the study and patiently answered our numerous question about them. Deborah Almoney, Program Analyst at the Pennsylvania Commission on Crime and Delinquency matched our data bases with that of the Pennsylvania State Police to provide current recidivism data while Dr. Henry Sontheimer, Statistical Manager, provided insight and guidance in the design and data analysis phases of the study. To each of you a sincere thanks and heartfelt appreciation. Although their assistance was invaluable, responsibility for the study including the data collected, its analysis and interpretation, as well as the conclusions and recommendations drawn from it rests solely with the project consultant.

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## **EXECUTIVE SUMMARY**

Prior research has consistently demonstrated that well conceived and properly implemented prison based Therapeutic Community Programs can have a positive impact on recidivism, especially if they include an aftercare or post-release component (Inciardi et al., 1997; Wexler et al., 1999). Dauphin County Prison, hereafter referred to as DCP, has, for over a decade, been providing inmates with a variety of Therapeutic Community treatment programs and services. These include drug and alcohol treatment, relapse prevention programs for men and women and recently, anger management and control for men. Both management and treatment personnel at DCP believe these programs are having a positive impact on inmate attitudes and behavior including reduced recidivism. However, this is based on informal feedback including testimonial and anecdotal accounts of successes from program participants and staff, rather than any systematic and objective analysis of the programs.

In March of 1998 DCP was awarded a grant from the Pennsylvania Commission on Crime and Delinquency based on a competitively submitted proposal to formally evaluate four of its Therapeutic Community Programs, hereafter denoted as TC. Working with an outside consultant and research assistants hired from grant funds, management and treatment personnel from DCP assisted in implementing the evaluation which called for a comparison study between a sample of TC participants from each of the four programs and a sample of inmates who had not participated in the programs

during the three most recent years. Outcome measures focussed on three dimensions of recidivism and utilized data from a variety of sources including DCP, the County Data Center and the Pennsylvania State Police.

Based on an analytical design that adjusted for differences in inmate characteristics and backgrounds, including legal, social and substance abuse history, findings from study are generally supportive of the majority of TC programs at DCP. TC participants did not underperform the sample of non-participants on any of 12 outcomes examined, performed better on four, performed conditionally better on two, were similar on five and conditionally similar on one. Showing the most improvement is Power and Control. They had both a lower rate of recidivism and a greater number of days between release and re-arrest than non participants. Females in Relapse Prevention also had a lower rate of recidivism than their non-TC counterparts, while males in Second Chance, who did recidivate, were more likely than non-participants to do so for a parole violation rather than a new offense. In addition, Second Chance participants did conditionally better than non-participants on the remaining two outcomes, that is, actual recidivism and the number of days between release and re-arrest.

Among outcomes favoring TC, the magnitude varied between marginal and noteworthy. Compared to non-participants, recidivism rates among the TC programs ranged from 17 percent lower in Power and Control to 11 percent in Second Chance and 8 percent for Females In Relapse Prevention. With respect to reason for

recidivating, individuals in Second Chance were 15 percent more likely to do so for a parole violation than non-participants, while time to re-arrest was 90 days longer in Power and Control and almost the same, 89 days in Second Chance.

Analysis **within** each of the four TCs uncovered few variables that were consistently associated with actual recidivism. Two that came closest were race and age. Black/African American's were more likely to recidivate in three of the four TC programs, the exception being Relapse Prevention For Males. So too were younger inmates, the exception being Second Chance. Substance abuse treatment had a consistent effect in two programs, Second Chance and Relapse Prevention For Males, with those receiving more treatment being more likely to recidivate. And, although education had an effect in two programs it was reversed, with the less educated more likely to recidivate in Relapse Prevention For Females, but the more educated recidivating in Second Chance For Males.

Notwithstanding several limitations associated with the design and methodology of the study, including the lack of random assignment, small sub-samples and the absence of several relevant variables, findings, in general, compare favorably with results from prior research that has examined the impact of prison-based TC programs on recidivism (see Hartmann et al., 1997; Wexler et al., 1999). Where they do not, recommendations include the following: (1) consider adding a post release, or parole aftercare component to existing programs as prior research has shown that the

effectiveness of TC programs is dramatically increased where post release or parole aftercare is included as part of the program; (2) if funds are currently unavailable to do so, consider seeking additional funding from an outside source for a demonstration project to develop and implement aftercare; (3) consider collection and analysis of additional data, especially on dynamic risk factors, in order to determine why participants in Relapse Prevention For Males are under performing those in the other three TCs; (4) in the meanwhile, current therapeutic efforts with this group should be intensified because doing so, especially in combination with post release services, may be the key to reducing recidivism among males in Relapse Prevention; and (5) use the profiles developed in the study to focus on those participants who are most at risk of recidivating.

One facet of the study was to develop an alternative method of calculating monthly recidivism at DCP. The existing method was based on a simple count of inmates who had previously been incarcerated at the prison, without regard to reason. Appendix A contains an alternative method that takes reason into account and provides examples for the first three months of 1999.

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INTRODUCTION

Ever since the field of corrections first assumed the task of rehabilitation, one of its' most daunting challenges has been to reduce recidivism. Correctional history in this country is replete with efforts designed to turn miscreants into law abiding citizens. Broadly speaking, these have ranged from the general practice of banishment, isolation and incarceration in earlier times, to a contemporary view that the key to reducing recidivism lies in the training, education and counseling of the individual. A current and promising approach lies in the concept of Therapeutic Community and its holistic view of offender treatment. This report examines the impact that one Therapeutic Community initiative has had on recidivism.



## THE CONCEPT OF THERAPEUTIC COMMUNITY

According to Lipton (1998), the concept of Therapeutic Community (TC) emerged in England shortly after the end of WWII and can be credited to the pioneering effort of Thomas Main who worked with returning veterans suffering serious neurotic disorders from their experiences in combat and as prisoners of war. Based on a model that combined community therapy with ongoing psychoanalytic and psychotherapy within an institutional setting, the concept, by the late 1950's, had been adopted by the British correctional system in treating psychologically disturbed offenders.

Although correctional based TCs emerged in this country at the same time as in England, they took a different track as well as focus. TC's origins are generally associated with the late 1950's, "community based" Synanon movement of ex-offenders and addicts but it was not until a decade later at Marion, Illinois that a prison based program for addicts was implemented. Moreover, and unlike in England, the approach to TCs in this country has been less psychoanalytically and psychotherapeutically based and has focused less on the criminal offense and/or substance abuse per se and more on changes in inmate lifestyle across more dimensions (Lipton 1998: 107).

In the thirty years that TCs have been operating in U.S. prisons they have undergone significant modification and change. For a variety of reasons many of the early programs were

disbanded after several years (see Pan et al. 1993), but beginning in the mid-1980's the TC movement experienced a rejuvenation, due in part to the Anti Drug Abuse Act of 1986 (Hartmann et al. 1997). Since then the number of states offering programs has increased and programs have been expanded to other correctional settings including jails (Peters 1993).

Many of TC programs in operation today are derived from the Phoenix House community-based model (DeLeon 1995). The TC is a residential treatment environment that provides an around-the-clock learning experience in which changes in participants' conduct, attitudes, values and emotions are implemented, monitored and reinforced on a daily basis. The foundation for change lies in the use of a social learning model which emphasizes peer support for pro-social values and conduct. These values and conduct form a culture within the community which in turn provides the basis for the socialization of new members (DeLeon 1990, 1994). The TC is structured so that individuals are empowered to recognize their destructive patterns and choices and, within the supportive community milieu, able to change. Since most individuals upon release from prison must often return to the environment where they first became involved in crime, one of the major goals of TC's is to provide participants with the ability to solve problems in such an environment (Hartmann et al. 1997:19).

The mechanisms for achieving change are organized around

individual and group counseling although the core of the TC concept rests on the "peer encounter" (DeLone 1986, 1990; Kooyman 1993; Yablonsky 1989). The encounter group uses an intense confrontational approach in order to heighten an individual's awareness of changes that are needed in his/her image, attitude and behavior. This need for change is derived from the observations of peers and staff regarding the individual's daily conduct (Nielsen and Scarpitti 1997). A TC also has a system of rewards used to reinforce positive behavior and as such privileges are earned. Formal rules and regulations are another component of TC programs. They are used to guide the behavior of residents and staff and act as a blueprint for enhancing the safety and well-being of members and in teaching and training residents through the use of discipline (DeLeon 1990).

Keeping residents separate from the larger prison population is another component in the cultural transformation of TC participants (Field 1984; Inciardi et al. 1992). Due to a myriad of factors, prison culture tends to work against rehabilitation (Wexler and Williams 1986; Peat and Winfree 1992). One of the most contaminating effects is "prisonization", a term coined over a half century ago by Clemmer (1940), to indicate "the taking on in greater or lesser degree the folkways, mores, customs and general culture of the penitentiary" (p. 299). Reflected in the traditional inmate subculture, it is

antithetical to the goals of a TC and supports the need for a segregated environment if the TC is to succeed.

Research has show that TC's can be an effective change agent. Two such prison based programs, Stay N' Out in New York and the Cornerstone Therapeutic Community in Oregon, have undergone extensive and rigorous evaluation efforts to measure their effectiveness(Wexler 1994; Wexler et al. 1992; Wexler et al. 1991; Wexler et al. 1990; and Field 1989, 1989). These outcome studies have consistently indicated that inmates who successfully complete the phases of a TC drug treatment program are less likely to be arrested or report using drugs after discharge than similar inmates who did not participate in the program. These findings are supported by more recent evaluations including Delaware's Three Stage Program (Martin et al. 1995; Inciardi et al. 1997); San Diego's Amity Prison Program (Wexler et al. 1999); and Missouri's Ozarks Correctional Center program (Hartmann et al. 1997). These evaluations strongly suggest that TCs, providing they are carefully conceived and implemented, can have a positive effect on behavior both during a period of incarceration and for up to two years after discharge.

## DAUPHIN COUNTY PRISON'S THERAPEUTIC COMMUNITY PROGRAMS

Dauphin County Prison (DCP) contains four housing areas. One of these, the Spring Creek Annex, named for the small creek that runs behind the facility, houses its four in-house therapeutic community treatment programs. Inmates are housed in dormitory style cell areas with each dorm housing approximately 40-50 inmates. Each of the four therapeutic communities run regular group programs that meet six hours per day, five days a week (DCP undated #1:12). A variety of therapeutic services are provided within each community but community members also have access to other institutional programs supported by the Prison's Treatment Department. These programs cover four major areas and include educational programs, counseling services, prison operations and community connections.

Although each of the four communities is characterized by a number of factors that make the programs unique and distinctive, including the clientele they serve and the nature of the therapy they engage in, they have a number of common elements. Most common perhaps is their structure, operation and the tasks and roles of community members. Prior to examining these commonalities a description of the programs is provided in order to familiarize the reader with each program and to address the unique aspects of each community.

Second Chance Housed in G-dorm, this program is designed for males with substance abuse problems. Managed by a staff drug and

alcohol counselor, the focus of the therapy is primarily on dependency and its accompanying addictive behaviors. It relies on peer interaction to confront and aid the individual in overcoming denial of addiction, excuses for addiction and resistance to change. One of its major components is a twelve-step program that incorporates the principles of AA/NA in a spirituality based recovery process. In both individual and group counseling sessions, the inmate is encouraged to confront the emotional aspects of his addiction and to deal positively with them. The concept of family and community is strongly projected and encouraged by both the counselor and fellow inmates and serves as a mechanism for facilitating change.

Power and Control(Men Establishing New Directions, MENDS)

Located in I-dorm this program for males focusses on power and control issues. It is managed by a staff counselor and seeks to make men accountable for their aggressive behavior towards others and to eliminate their reliance on violence as a means of control (DCP undated #5:3). Inmates are either court ordered to attend for violating a Protection From Abuse (PFA) order or have charges of a violent nature. The community also deals with sex offenders and provides a sex offenders therapy program once a week, co-facilitated by a female and male counselor. The goal of the therapy is to empower the individual with self-discipline and control and to have him practice respect for others as well as himself. The program seeks to teach inmates how to accept

authority, and gain control over their lives. Self-awareness and self-control are target behaviors for the inmates and these are taught through a series of community therapy programs designed to demonstrate appropriate behavior. These methods allow individuals to practice self-discipline while emphasizing equality within the community.

Relapse Prevention For Males This treatment program, more formally known as Crossroads, is housed in H-dorm. Managed by a staff counselor, the program addresses the emotional needs of men. It is holistic in approach and employs a guided self-help program that focusses on changing patterns of behavior that have led to past criminal activity. The intent of the program is to have the inmate address and confront criminal and addictive behaviors that have led to relapse at various levels and stages of life in the past. The program addresses the mental, physical, and emotional needs of the inmate through both individual and group counseling. It strives to have the inmate recognize the need for structure in his life and to learn how to change destructive into constructive behavior.

Relapse Prevention For Females Housed in J-dorm this program, although similar in several respects to Relapse Prevention for Males, offer a unique residential living community. Managed by a staff counselor, the program deals with chemical dependency issues, co-dependency issues and social skills development. The purpose of the program is to establish

self-worth, discipline and structure in the lives of incarcerated women so that they can practice what they need in order to succeed in their lives (DCP undated #4:2). Individual and group counseling targets destructive behaviors and concentrates on replacing them with constructive, socially acceptable ones. Newcomers are automatically placed into phase one of the program and are assigned a "buddy". Upon successful completion they transition into phase two which signifies regular community membership. The program focuses on fourteen target areas including: responsibility; problem solving; anger; life skills; relapse prevention; self esteem; self-worth; forgiveness; self; tolerance; patience; kindness; understanding; and trust.

Structure For the most part, the communities are structured around a broad set of norms that emphasize, among other things, individual responsibility, identity with the community, respect for others and a willingness to work towards personal change. Maintaining these norms and the orderly community they promote is facilitated by rules and regulations that govern an individual's behavior within the community, as well as towards staff and fellow community members. Although too numerous to mention, for example one of the communities has 45 rules and regulations including subsections within several (see DCP undated #2:4-7), they focus on such concerns as phone use, bathroom facilities, personal hygiene, attendance at meetings,



room noise, as well as a host of other requirements associated with living in a highly structured and physically restrictive group setting. These are in addition to the prison's general rules and regulations governing conduct and behavior required of all inmates and apply even when the counselor is not present, as participants must follow the structure of programming on a round-the-clock basis.

As noted, one of the keys to the success of a therapeutic community is maintaining a structured and orderly environment. To achieve these ends the community uses a series of rules and regulations that holds each inmate responsible for his/her actions as well as the actions of others in the community. There are a variety of "tools" for dealing with inappropriate behavior. Used most frequently are a "hold-up" and an "encounter" (DCP undated #3: 5-6). The former involves an allegation of negative behavior towards the community by a fellow member, the latter a personal 'beef' one community member has with another. These are aired and dealt with during formal group meetings. If the allegation is supported by a majority of the community, treatment for the behavior can result in a variety of outcomes ranging from a "verbal", being advised why the action is against personal growth and development, to a "blackout", being forbidden to communicate with any community member for any reason. Other tools include: a "family concern", where the group leader selects any number of family members to

confront an individual on inappropriate behavior; a "6 To 10" where an individual is required to sit facing a wall during a group meeting in order to get in touch with the actions that led to an infraction; and an "essay" or written presentation to the family on the attitudinal aspect responsible for an individual receiving an infraction. Common to all programs is an "L.E.", or learning experience, where the member is assigned an inmate mentor from the community due to having committed an infraction which affects the orderly running of the block. LE's require that the individual not communicate with anyone, nor can anyone communicate with the individual, save his/her mentor, until termination of the LE. Like most "treatment tools", LE's are not to be regarded as a punishment. Rather, and as the name implies, a learning experience is an opportunity to get in touch with the attitude that led to the inappropriate behavior. However, persistent and non-conforming behavior can eventually result in expulsion from the community and a return to the general inmate population.

Hold-ups and encounters are also used to recognize positive behavior and occur during group meetings as well. They are designed to reinforce a change in a previously non-conforming attitude and/or behavior and allow the individual "to feel the goodness when he has done something well" (DCP undated #3:4).

Organization Each of the communities is organized around a series of daily activities in which members are expected to

actively participate. A typical day, taken from the weekly schedule of Power and Control, includes an early rise followed by breakfast between 6:00 a.m. and 7:00 a.m. Between 7:30 and 9:00 is the Large Community Group meeting. Residents of the community gather at this time to deal with a variety of issues including any that have arisen from the filing of hold-ups and encounters, as well as general issue of the day potentially affecting the community. This is followed by specialty group meetings from 9:00 to 10:30. These vary by the day of the week and include Role Plays on Monday and Wednesday, Domestic Violence and Rape Prevention on Tuesday and Thursday and Control Group on Friday. Lunch, including setup of the table and cleaning up afterwards, lasts from 10:30 to 11:30. It is followed by three and one-half hours of Recreation Time, except Friday, where one hour is reserved for Room Meetings from 2:00 p.m. to 3:00 p.m. From 3:00 to 4:00 Quiet Time is observed on Monday, Wednesday and Friday while Tuesday and Thursday are reserved for AA/NA Group Meetings. After supper, which runs from 4:30 to 5:30, members can engage in Recreational Activities until 9:00. From 9:00 to 10:00 on Monday, Wednesday and Friday Self Awareness Group Meetings are conducted. Lights Out and Quiet Time begin at 11:00 p.m. and last until 6:00 a.m., which signals the start of another day. Although afternoon and evening recreation as well as afternoon quiet time can be spent in these activities, some inmates take advantage of the time to engage in

one or more formal program activities including education, counseling and community connections, as well as taking care of personal necessities including laundry, commissary and if required, medical needs.

Tasks and Roles Within each community there exists a variety of tasks that need to be undertaken in order to maintain the structure and well being of the community. These tasks are assigned to specific individuals and carry with them designated titles. Using Power and Control as an example, some of the tasks include; making sure community members are aware of and understand the rules of the block, the responsibility of the Room Leader; reviewing the rules of the community and handling the signing of forms of incoming inmates, the job of the Orientation Coordinator; insuring beds are made, the room tidy, clean and presentable, assigned to the Room Inspector; and maintaining appropriate noise levels and ensuring that no one is asleep during quiet time, the Quiet Time Monitor. Power and Control, which is typical of the other three communities, has over 15 task and designated titles that are assigned to members (see DCP undated #5:14).

In addition to ensuring a smooth functioning community the assignment of tasks helps to identify the various roles of members in the community. This benefits both the community and the individual. It solidifies the concept of community by making members aware that it is through their collective contribution

that the identity and welfare of the community is preserved. This promotes responsibility among members and gives them a stake in the community, since order and predictability, for most, are two of life's desired outcomes. Having a role in the community also contributes to an individual's own growth and development. Promoting individual responsibility through community accountability acts as a motivator and encourages members to take their roles seriously. In addition to taking pride in a job well done, individuals are reinforced for doing so when recognized through positive encounters and hold-ups. The overall experience is designed to instill a sense of achievement and self-worth that hopefully carries over upon their release and return to society.

Summary Although DCP's four therapeutic communities share a number of common elements they also differ in a number of respects including the clientele they serve, the therapy they provide and the programs they offer. In terms of the clientele, three of the four communities serve males, the other females. Two of the communities are centered around a therapeutic model designed to prevent relapse, another to control stress and anger and the fourth to overcome substance abuse. Each community provides a variety of individual and group counseling programs to deal with these behavioral problems.

On the other hand the four communities share a number of commonalities. Each is structured around a similar set of rules

and regulations designed to keep the community safe and orderly. Daily living is organized around a series of scheduled activities designed to provide relevant therapy and programming. Each program has a similar function which is to replace destructive with constructive behavior during the course of participating in the community and to have this change carry over once released back into society.

The remainder of this study addresses whether or not this goal has been achieved. It does so by examining the behavior of a sample of inmates who participated in the four therapeutic communities and were subsequently released from DCP. The outcome for measuring the behavior focusses on three dimensions of recidivism including whether recidivism occurred and among those who did recidivate, the reason for doing so and the amount of time between last release and the recidivism. Based on the literature review of prior evaluations of therapeutic communities and the many similarities between these programs and DCP's, we anticipate significant difference in these outcomes when compared to a sample of released inmates who did not participate in a therapeutic community program.

## DESIGN AND METHODOLOGY

The design of the evaluation can be characterized as retrospective in nature. That is, relative to the present, a sample is selected from an earlier point in time and then

measured at a later point in time to see what changes, if any, occurred on outcomes of interest. In this study a sample of inmates from each of the years 1995, 1996 and 1997 was selected and then measured subsequent to the selection date for recidivism. The remainder of this sections describes how this was done and the variables employed.

#### **DATA SOURCE AND SAMPLE SELECTION**

Therapeutic Communities Sample selection was first undertaken within each of the four therapeutic communities. The years 1995 through 1997 were initially identified as most relevant and appropriate since they were the most recent and provided a time frame long enough to assess the current impact of the programs. Since Power and Control For Males did not begin operating until late 1995/early 1996 and Relapse Prevention For Females in mid 1996, no earlier cases could be included for these two group.

Until July of 1996 inmate records, maintained by the Dauphin County Data Center but accessible via terminal at the prison, could only be retrieved from the computerized data base as batch subfiles, short a great deal of computer programming. As a result of the data bases being unlinked or non-relational, gathering data on a sample of inmates prior to this date involved either locating multiple data screens on each individual and coding the desired information directly from the computer terminal screen or having the subfiles printed out by

the Data Center and subsequently using the hard copies as the coding source. Beginning in July of 1996 the prison's inmate record-keeping system was upgraded to a linked or relational data base system by the County Data Center. This provided for the retrieval of specific data in an individual record, multiple case, file format. Given the energy, time and cost involved however, it was not feasible to convert records of inmates incarcerated at the prison prior to July of 1996. As a result only half of the therapeutic community data base (the latter half of 1996 and all of 1997) was available in a multiple integrated file and data specific format. Any data retrieval for the year 1995 and the first half of 1996 would have to be done manually on a case by case basis as described above.

In May of 1998 a list of all individuals who participated in the four therapeutic programs between January 1, 1995 and December 31, 1997 was generated by "keying in" the code for each therapeutic community in the computerized data base. This yielded 2289 cases; 781 males in Second Chance, 241 females in Relapse Prevention, 546 males in Power and Control and 721 males in Relapse Prevention. The initial sample of 2289 was reduced to 578 based on those who completed the program. Reasons for non-completion included involuntary transfer to another institution/authority including federal, state or local, release from DCP due to charges being dismissed through a court order or assignment to a non-incarceration alternative such as electronic



monitoring or intermediate punishment and dismissal from the program due to unauthorized absences or disciplinary infractions. The 578 completions included 199 males in Second Chance, 75 females in Relapse Prevention, 127 males in Power and Control and 177 males in Relapse Prevention. Of the 578 completions another 215 were dropped for reasons similar to those noted above. Of the 215, 148 were transferred to a state facility after completing the program and there is no way to separate the effect of any programming they experienced during their state incarceration from that experienced while at DCP. The remaining 67 cases include persons transferred to federal authority, persons released on bail but subsequently convicted, dismissed charges, court orders, and non-incarceration alternatives. At this point the study sample consisted of 363 persons who were either directly paroled from DCP or served their full sentence and were released, that is, "maxed-out". Of the 363, 137 are males in Second Chance, 52 females in Relapse Prevention, 69 males in Power and Control and 105 males in Relapse Prevention. Due to problems encountered later on in the study with the Institutional Sample, discussed later, the sample of 363 was eventually reduced to 253 yielding the following numbers; 83 from Second Chance, the original 52 females from Relapse Prevention, 57 from Power and Control and 61 from Relapse Prevention for males.

In August of 1998 the 363 cases along with individual

identifiers including the inmate's name, prison identification number and a list of variables of interest to the study were forwarded to the Data Center. In early October the requested data was received in an excel file format. Due to a communication problem surrounding "in and out" dates, each of the 363 cases had to be examined individually to insure the data, especially dates, were accurate. This was achieved by comparing the data on the excel file to the inmates case history by using the terminal at the prison to access the computerized data base maintained by the County Data Center.

Institutional Sample Each year DCP admits and discharges approximately 5,000 individuals. Reason for discharge covers a wide variety of circumstances such as bail, vacating of a court order, transferred to other institutions, paroled, completed sentence/maxed-out, as well as several others including payment of fines/costs, deaths and escapes. In order to achieve a comparison sample comparable to the therapeutic communities, only paroled and maxed-out individuals were considered for inclusion in the sample. For the most recent year available, 1998, parole discharges numbered 796 while maxing-out numbered 479. The initial plan was to select approximately 150 cases from each of the years 1995 through 1997, using a ratio of two-third male to one-third female. This would provide a sample comparable in size to the four therapeutic communities. Unfortunately the plan had to be aborted as the admission cards used to record

every admission to DCP could not be located for the years 1995 and 1996. Absent a unique identifier such as a name, prison identification or social security number, a sampling frame could not be constructed, short of sorting through the computerized data file one case at a time. For the year and a half of interest this would have involved looking through 7,500 records and it was deemed to be too time consuming given the time frame for completing the project. Thus, data for the first half of the three year time frame (all of 1995 through June of 1996) was not collected and the actual data base for the institutional sample consists of a sample of cases **released** from DCP beginning in July 1, 1996 up through December 31, 1997. This change in design accounts for the therapeutic community sample being reduced from 363 to 253 cases. Doing so maintains comparable time frames in the two groups since the therapeutic community sample also consists of those **released** from DCP between July 1, 1996 and December 31, 1997.

In October of 1998 the Data Center was asked to provide a list of all inmates released, either through parole or maxing-out, between July 1, 1996 and December 31, 1997. This yielded approximately 2,000 cases and it was used to select the sample of institutional cases. Since the therapeutic community sample had already been collected it was used as a guide in collecting the institutional sample. For example, less than one percent of the therapeutic community sample was made up of DUI and Non

Support cases and as a result these cases were excluded from consideration in selecting the institutional sample. An effort was also made to insure comparability on several other variables including race, marital status and education by maintaining a "running tally" as cases were selected. Sampling was based on random selection of every fifth case, skipping DUI and Non Support cases, until names on the list were exhausted. This yielded 305 cases; 120 females and 185 males and was slightly disproportionate of the two-thirds/one third ratio of males to females established initially.

As with the therapeutic community sample the list was forwarded to the Data Center requesting the relevant information. The data was received in early December and as with the therapeutic community data it was similarly checked and edited to insure its accuracy. In early February the two files were merged.

#### **VARIABLE SELECTION**

The County Data Center maintains a wealth of information on individuals admitted to the prison. An individual's data file is continually being updated and added to as s/he receives services, undergoes testing, enters and leaves the prison for court appearances, etc. Based on a master list provided by the County Data Center the number of pieces of data maintained on an individual numbers well into the hundreds of items/variables (DCDC, undated #1). Selection of specific variables was based on

a number of considerations including a review of the current literature on therapeutic communities and recidivism, suggestions from prison staff involved with the four programs and the insights and expertise of the evaluation project team.

Most of the data requested from and provided by the County Data Center contained variables that were directly usable, that is they did not require any modification or recoding. Examples include race/ethnicity, formal education, whether the inmate had previously received drug treatment and/or alcohol treatment, etc. Other variables such as age, the number of days of last incarceration at DCP, whether the individual had been re-arrested and/or re-convicted and if so the number of days between last release from DCP and recidivism, etc., had to be created from the data provided by the data center. Still other variables, primarily those dealing with participation in the therapeutic communities, had to be manually retrieved on a case by case basis from individual file folders maintained by the therapeutic community staff since these variables are not part of the inmate's data record/file maintained by the County Data Center. This program data was then manually added to the data file and along with legal, demographic and substance abuse variables constitutes the data set used in the study. The remainder of this section identifies and describes the variables contained under each of the four categories, that is, legal,

demographic, program and substance abuse.

Legal Variables Current offense and number of prior arrests are two variable that almost all studies include, either to predict recidivism or as control variables (see Peat and Winfree 1992; Hartmann et al. 1997; Wexler et al. 1999; Inciardi et al., 1997; and studies reviewed by Gendreau et al. 1996). Included as well is the number of days of last incarceration (see Jones and Sims 1997; Thistlewaite et al. 1998) and type of release from last incarceration, either paroled or maxed-out. Both are used as a control variable in measuring risk of recidivating. Outcome variables include recidivism and, if it occurred, the offense and the number of days of non-incarceration between last release and current re-arrest. The latter takes into account time at risk and ranges from a maximum of 36 months for someone released in July of 1996 to a minimum of 18 months for someone released in December of 1997.

Recidivism data was retrieved from three sources including the County Data Center, Dauphin County Probation and Parole and the Pennsylvania State Police. Each is discussed in turn. In July of 1999 each of the 558 cases in the data base was checked against the Data Center's Inmate Data Base using a terminal at the prison. This yielded 323 "hits" or instances of recidivism. This information, along with both the date and the offense, were recorded and entered into the evaluation's data base.

In early August of 1999 cases that did not yield a hit were

forwarded to the Data Center. These were "run" against the County Probation and Parole Department's Data Base, also maintained by the Data Center. Results from this run were provided in early September and yielded approximately 28 hits. This information was then entered into the evaluation data base along with the offense and date which had also been requested for cases that yielded a hit.

In mid September the remaining cases were forwarded to the Pennsylvania Commission on Crime and Delinquency (PCCD). The agency has access to the Pennsylvania State Police (PSP) data base and can provide an arrest case history which includes the date of the last known arrest as well as the offense on all individuals arrested in Pennsylvania providing the information is forwarded by local authorities. These records were forwarded on a computer diskette to the prison in mid November. Combing through the arrest summaries yielded 34 hits. However, from the arrest summaries it was not possible to ascertain if a conviction ensued and since over half of the arrests occurred outside Dauphin County it was not feasible to try and determine if a conviction had occurred. Nor was it possible to distinguish whether the offense resulted in a parole violation charge, or a conviction for a new offense. A decision to error on the side of caution resulted in the 34 cases being coded as recidivating and using the most serious offense as the reason.

Eight cases appear in the data base twice indicating that

these individuals recidivated twice. Seven of the cases were from the Therapeutic Community sample. Upon their first recidivism, six of the seven re-enrolled in the Therapeutic Community but in a different program. The other entered the general inmate population. The one dual recidivist was initially in the general inmate population but upon recidivating entered the Therapeutic Community program, was subsequently released, but then recidivated again.

Demographic Variables One or more of age, sex, race, education and marital status are commonly included in most recidivism studies, either as variables of primary interest or as controls (see Jones and Sims 1997; Wexler et al. 1999; Hartmann et al. 1997; Peat and Winfree 1997; and studies reviewed by Gendreau et al. 1996). All five variables were included in the study's data base.

Substance Abuse Variables As part of the intake process individuals are asked about their prior drug use history and two of these variables are included, namely, having received prior drug treatment and prior alcohol treatment. They were eventually merged to create a two variable index of drug/alcohol treatment. Prior studies have noted the importance of including substance abuse as a control variable due to its potential impact on recidivism (see Hartmann et al. 1997; Wexler et al. 1999; and studies reviewed by Gendreau et al. 1996). Two other variables dealing with the individual's own perception as to whether s/he



has a drug/alcohol problem were considered but excluded, as both are more subjective measures than having actually received treatment.

Program Variables Two variables measure program participation. They apply to the therapeutic community sample only and include whether the court required the individual to participate in the program and the number of days of program participation. Although no study was located that used the former, one study, Field (1989), did use the latter.

## RESULTS

Findings are presented in three stages. First, bivariate analysis is used to examine the characteristics of the sample based on each of the six groups. Separate multivariate analyses comparing each of the four therapeutic programs to the institutional samples follows. Last, multivariate analysis is undertaken within each of the four therapeutic programs to identify those variables associated with recidivism.

### **SAMPLE CHARACTERISTICS**

Table 1 contains the variables used in the study, their coded values and descriptive statistics by each of the six groups. Except for two variables, marital status and method of most recent release from DCP, most of the remaining variables show significant variation among the six groups. For example, 40% of those in Power and Control were last incarcerated for a parole violation compared to almost 70% of Females in Relapse Prevention. Similar differences characterize the demographic and substance abuse variables.

As noted previously, the primary approach for assessing the potential impact of the programs is through measures of recidivism including whether it occurred, and if so, the reason as well as the number of days of non-incarceration for those who did recidivate. Results from Table 1 indicate considerable variation among the six groups in actual recidivism and for those who did recidivate, the reason for recidivating and the

number of days of non-incarceration. Recidivism was greatest for those in Relapse Prevention For Males, 79%, and the Institutional Sample of Males, 75% and least in Power and Control, 58% and Relapse Prevention for Females, 60%. For the remaining two groups, namely, Second Chance and the Institutional Sample of Females the figures are 64% and 68% respectively.

Among those who recidivated, similar variation characterizes the reason for recidivating. Committing a new offense accounts for 70% of the recidivism in Power and Control but less than 40% in three of the five remaining groups; 32% in Second Chance, 33% in the Institutional Sample of Females and 35% in Relapse Prevention for Females. Between these extremes a new offense accounts for 47% of the recidivism in the Institutional Sample of Males and 50% in Relapse Prevention for Males.

With respect to the number of days between last release and current recidivism for those who did recidivate, the average was highest in Power and Control and Second Chance, 323 and 322 days respectively and lowest in the Institutional Sample of Males, 233 days. Among the remaining three groups, averages were more homogeneous; 268 days in Relapse Prevention for Males, 271 in Relapse Prevention for Females and 292 in the Institutional Sample of Females.

In order to do a more thorough and complete analysis, the recidivism variables were examined under a multivariate context.

Comparisons were undertaken between the two female groups as well as between each of the three male Therapeutic Community groups and the Institutional Sample of Males.

TABLE 1:

## Legal, Demographic, Substance Abuse and Program Variables By The Six Groups\*

|   | Second<br>Chance<br>(MALE) |      | Power &<br>Control<br>(MALE) |      | Relapse<br>Prevention<br>(MALE) |      | Relapse<br>Prevention<br>(FEMALE) |      | Sampled<br>Inmates<br>(FEMALE) |      | Sampled<br>Inmates<br>(MALE) |       |
|---|----------------------------|------|------------------------------|------|---------------------------------|------|-----------------------------------|------|--------------------------------|------|------------------------------|-------|
|   | %                          | N    | %                            | N    | %                               | N    | %                                 | N    | %                              | N    | %                            | N     |
| -----                                   |                            |      |                              |      |                                 |      |                                   |      |                                |      |                              |       |
| REASON FOR LAST INCARCERATION AT DCP    |                            |      |                              |      |                                 |      |                                   |      |                                |      |                              |       |
| parole revocation                       | 65                         | (54) | 40                           | (23) | 51                              | (31) | 69                                | (36) | 61                             | (73) | 58                           | (107) |
| person offense                          | 8                          | (7)  | 39                           | (22) | 7                               | (4)  | 12                                | (6)  | 11                             | (13) | 9                            | (17)  |
| property offense                        | 7                          | (6)  | 7                            | (4)  | 16                              | (10) | 6                                 | (3)  | 10                             | (12) | 11                           | (21)  |
| drug offense                            | 16                         | (13) | 5                            | (3)  | 23                              | (14) | 10                                | (5)  | 14                             | (17) | 13                           | (24)  |
| other offense                           | 2                          | (2)  | 5                            | (3)  | 2                               | (1)  | 4                                 | (2)  | 4                              | (5)  | 5                            | (10)  |
| missing/unknown                         | 1                          | (1)  | 4                            | (2)  | 2                               | (1)  | -                                 | -    | -                              | -    | 34                           | (6)   |
| -----                                   |                            |      |                              |      |                                 |      |                                   |      |                                |      |                              |       |
| NUMBER OF PRIOR ARRESTS                 |                            |      |                              |      |                                 |      |                                   |      |                                |      |                              |       |
| none                                    | 12                         | (10) | 18                           | (10) | 15                              | (9)  | 12                                | (6)  | 19                             | (23) | 26                           | (48)  |
| one or two                              | 42                         | (35) | 39                           | (22) | 33                              | (20) | 35                                | (18) | 48                             | (57) | 28                           | (51)  |
| three or more                           | 46                         | (38) | 44                           | (25) | 53                              | (32) | 54                                | (28) | 33                             | (40) | 47                           | (86)  |
| -----                                   |                            |      |                              |      |                                 |      |                                   |      |                                |      |                              |       |
| HOW MOST RECENTLY RELEASED FROM DCP     |                            |      |                              |      |                                 |      |                                   |      |                                |      |                              |       |
| paroled                                 | 81                         | (67) | 74                           | (42) | 77                              | (47) | 79                                | (41) | 76                             | (91) | 68                           | (125) |
| maxed-out                               | 19                         | (16) | 26                           | (15) | 23                              | (14) | 21                                | (11) | 24                             | (29) | 32                           | (60)  |
| -----                                   |                            |      |                              |      |                                 |      |                                   |      |                                |      |                              |       |
| RECIDIVATED SINCE LAST RELEASE FROM DCP |                            |      |                              |      |                                 |      |                                   |      |                                |      |                              |       |
| no                                      | 36                         | (30) | 42                           | (24) | 21                              | (13) | 40                                | (21) | 32                             | (38) | 25                           | (47)  |
| yes                                     | 64                         | (53) | 58                           | (33) | 79                              | (48) | 60                                | (31) | 68                             | (82) | 75                           | (138) |
| -----                                   |                            |      |                              |      |                                 |      |                                   |      |                                |      |                              |       |
| <b>IF RECIDIVATED REASON WHY</b>        |                            |      |                              |      |                                 |      |                                   |      |                                |      |                              |       |
| parole revocation                       | 68                         | (36) | 30                           | (10) | 50                              | (24) | 65                                | (20) | 67                             | (55) | 53                           | (73)  |
| person offense                          | 13                         | (7)  | 39                           | (13) | 17                              | (8)  | 16                                | (5)  | 7                              | (6)  | 13                           | (18)  |
| property offense                        | 6                          | (3)  | 9                            | (3)  | 15                              | (7)  | 6                                 | (2)  | 10                             | (8)  | 13                           | (18)  |
| drug offense                            | 6                          | (3)  | 9                            | (3)  | 4                               | (2)  | 6                                 | (2)  | 6                              | (5)  | 15                           | (21)  |
| other offense                           | 8                          | (4)  | 12                           | (4)  | 15                              | (7)  | 6                                 | (2)  | 10                             | (8)  | 6                            | (8)   |
| -----                                   |                            |      |                              |      |                                 |      |                                   |      |                                |      |                              |       |
| RACE/ETHNICITY                          |                            |      |                              |      |                                 |      |                                   |      |                                |      |                              |       |
| black/aa                                | 57                         | (47) | 60                           | (34) | 74                              | (45) | 79                                | (41) | 62                             | (74) | 65                           | (120) |
| hispanic                                | 10                         | (8)  | 4                            | (2)  | 5                               | (3)  | 6                                 | (3)  | 3                              | (4)  | 7                            | (12)  |
| white                                   | 34                         | (28) | 35                           | (20) | 21                              | (13) | 12                                | (6)  | 33                             | (40) | 28                           | (51)  |

|       |   |   |        |   |   |        |        |        |
|-------|---|---|--------|---|---|--------|--------|--------|
| other | - | - | 2 ( 1) | - | - | 4 ( 2) | 2 ( 2) | 1 ( 2) |
|-------|---|---|--------|---|---|--------|--------|--------|

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|               |    |      |    |      |    |      |    |      |    |      |    |       |
|---------------|----|------|----|------|----|------|----|------|----|------|----|-------|
| AGE           |    |      |    |      |    |      |    |      |    |      |    |       |
| 25 or younger | 27 | (22) | 37 | (21) | 33 | (20) | 21 | (11) | 26 | (31) | 39 | ( 72) |
| 26 to 35      | 42 | (35) | 35 | (20) | 34 | (21) | 54 | (28) | 50 | (60) | 37 | ( 68) |
| 36 or older   | 31 | (26) | 28 | (16) | 33 | (20) | 25 | (13) | 24 | (29) | 24 | ( 45) |

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\* Percentages may not equal 100 due to rounding

TABLE 1(Continued): Legal, Demographic and Substance Abuse Variables By The Six Groups\*

|   | Second<br>Chance<br>(MALE) |      | Power &<br>Control<br>(MALE) |      | Relapse<br>Prevention<br>(MALE) |      | Relapse<br>Prevention<br>(FEMALE) |      | Sampled<br>Inmates<br>(FEMALE) |      | Sampled<br>Inmates<br>(MALE) |       |
|---|----------------------------|------|------------------------------|------|---------------------------------|------|-----------------------------------|------|--------------------------------|------|------------------------------|-------|
|   | %                          | N    | %                            | N    | %                               | N    | %                                 | N    | %                              | N    | %                            | N     |
| <hr/>                                       |                            |      |                              |      |                                 |      |                                   |      |                                |      |                              |       |
| FORMAL EDUCATION                            |                            |      |                              |      |                                 |      |                                   |      |                                |      |                              |       |
| less than high school                       | 21                         | (17) | 21                           | (12) | 34                              | (21) | 52                                | (27) | 38                             | (45) | 21                           | ( 38) |
| high school/GED graduate                    | 64                         | (53) | 60                           | (34) | 57                              | (35) | 37                                | (19) | 51                             | (61) | 61                           | (112) |
| some college including degree               | 4                          | ( 3) | 16                           | ( 9) | 7                               | ( 4) | 12                                | ( 6) | 5                              | ( 6) | 11                           | ( 21) |
| missing/unknown                             | 12                         | (10) | 4                            | ( 2) | 2                               | ( 1) | -                                 | -    | 7                              | ( 8) | 8                            | ( 14) |
| <hr/>                                       |                            |      |                              |      |                                 |      |                                   |      |                                |      |                              |       |
| MARITAL STATUS                              |                            |      |                              |      |                                 |      |                                   |      |                                |      |                              |       |
| single                                      | 71                         | (59) | 74                           | (42) | 75                              | (46) | 75                                | (39) | 78                             | (93) | 70                           | (129) |
| married                                     | 12                         | (10) | 14                           | ( 8) | 18                              | (11) | 15                                | ( 8) | 7                              | ( 8) | 9                            | ( 17) |
| separated/divorced                          | 6                          | ( 5) | 4                            | ( 2) | 5                               | ( 3) | 6                                 | ( 3) | 8                              | ( 9) | 9                            | ( 17) |
| missing/unknown                             | 11                         | ( 9) | 9                            | ( 5) | 2                               | ( 1) | 4                                 | ( 2) | 8                              | (10) | 12                           | ( 22) |
| <hr/>                                       |                            |      |                              |      |                                 |      |                                   |      |                                |      |                              |       |
| EVER RECEIVED DRUG AND/OR ALCOHOL TREATMENT |                            |      |                              |      |                                 |      |                                   |      |                                |      |                              |       |
| neither                                     | 33                         | (27) | 60                           | (34) | 46                              | (28) | 29                                | (15) | 33                             | (40) | 57                           | (106) |
| one of the two                              | 16                         | (13) | 14                           | ( 8) | 16                              | (10) | 37                                | (19) | 25                             | (30) | 12                           | ( 23) |
| both  | 41                         | (34) | 23                           | (13) | 33                              | (20) | 33                                | (17) | 35                             | (42) | 21                           | ( 39) |
| missing/unknown                             | 11                         | ( 9) | 4                            | ( 2) | 5                               | ( 3) | 2                                 | ( 1) | 7                              | ( 8) | 9                            | ( 17) |
| <hr/>                                       |                            |      |                              |      |                                 |      |                                   |      |                                |      |                              |       |
| ORDERED BY COURT TO ATTEND TC               |                            |      |                              |      |                                 |      |                                   |      |                                |      |                              |       |
| no  | 59                         | (49) | 72                           | (41) | 87                              | (53) | 86                                | (45) | NA                             |      | NA                           |       |
| yes   | 41                         | (34) | 28                           | (16) | 13                              | ( 8) | 14                                | ( 7) | NA                             |      | NA                           |       |

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|   |          |           |          |          |            |           |
|---|----------|-----------|----------|----------|------------|-----------|
| **MEAN NUMBER OF PRIOR ARRESTS              | 3.2 (83) | 3.2 (57)  | 3.1 (61) | 3.2 (52) | 2.6 (120)  | 3.0 (185) |
| -----                                       | -----    | -----     | -----    | -----    | -----      | -----     |
| MEAN NUMBER DAYS LAST INCARCERATION DCP     | 302 (83) | 351 (57)  | 309 (61) | 223 (52) | 205 (120)  | 210 (185) |
| -----                                       | -----    | -----     | -----    | -----    | -----      | -----     |
| <b>IF RECIDIVATED</b> MEAN NUMBER DAYS FREE | 322 (53) | 323 (33)  | 268 (48) | 271 (31) | 292 ( 82)  | 233 (138) |
| -----                                       | -----    | -----     | -----    | -----    | -----      | -----     |
| **MEAN AGE                                  | 32.1(83) | 30.8 (57) | 31.8(61) | 31.4(52) | 30.7 (120) | 29.7(185) |
| -----                                       | -----    | -----     | -----    | -----    | -----      | -----     |
| **MEAN YEARS OF FORMAL EDUCATION            | 11.4(73) | 12.0 (55) | 11.5(60) | 11.2(52) | 10.9 (112) | 11.8(171) |
| -----                                       | -----    | -----     | -----    | -----    | -----      | -----     |
| MEAN NUMBER DAYS IN TC PROGRAM              | 137 (83) | 139 (57)  | 135 (61) | 125 (52) | NA         | NA        |
| -----                                       | -----    | -----     | -----    | -----    | -----      | -----     |

\* Percentages may not equal 100 due to rounding

\*\* Same variables as ones listed above that were presented in tabular format, but in a numerical format.

## **MULTIVARIATE ANALYSIS (BETWEEN PROGRAMS)**

Due to the small number of case in several categories of some variables in Table 1, categories were collapsed to form dichotomous variables in order to provide a more reliable analysis. For example, the categories Hispanics and Other for the variable Race/Ethnicity were included with White so that the variable is now composed of two categories, Hispanic/White/Other coded (2) and African American/Black, retaining the code (1). Similarly, all valid offense categories of the variables, Reason For Last Incarceration At DCP and If Recidivated Reason Why, were collapsed into one category and re-labelled, new offense, coded (2), with parole violation remaining unchanged and retaining the code (1). Marital status was similarly collapsed with married/separated/ divorced forming one category with the code (2) and single retaining the code (1).

Since recidivism, and for those who did, the reason, are both categorical variables, logistic regression was an appropriate multivariate technique for examining the effect of the legal, demographic and substance abuse variables on the association between recidivism and each of the four, two group pairings. With respect to number of days between last release and recidivism for those who did recidivate, linear regression was an appropriate multivariate technique for examining the effect of the legal, demographic and substance abuse variables



on the association between recidivism and each of the four, two group pairings. Both approaches have been used previously in studies similar to this one (Inciardi et al. 1997; Wexler et al. 1999).

Employing the two approaches to examine the three outcomes would reduce the possibility that differences in recidivism between the two groups was a product of a third variable associated with both recidivism and the two groups. As an example, consider that prior research has shown that at the sentencing phase of the criminal justice process women generally receive less severe sentences than men. However, the reason has less to do with gender and more to do with the fact that men generally commit more serious offenses and those who commit more serious offenses receive more severe sentences. In the current study similar reasons might account for differences in recidivism between one or more of the Therapeutic Community groups and the Institutional Samples. As an example, Table 1 indicates that recidivism in Second Chance was lower than in the Institutional Sample of Males. However, Table 1 also indicates that the average age in Second Chance is greater than in the Institutional Sample. Prior research has shown that age mitigates against recidivism; as individuals age, criminal activity decreases and thus lower recidivism in Second Chance may be accounted for by the so-called, "maturing or aging-out of

crime process", rather than the program. Conversely of course, higher recidivism in the Institutional Sample may be due to the fact that it contains a greater proportion of younger individuals and they are more likely to continue to engage in criminal activity. Controlling for the potential effect of such factors in a multivariate analysis enhances the likelihood that any link between participation in the program and lower recidivism is genuine rather than due to a third variable, or variables, common to both.

To assess these possibilities comparisons were undertaken in each of the four pairings beginning with the Second Chance Program for Males and the Institutional Sample of Males.

Second Chance (Males) The first step in undertaking the multivariate analysis was to determine whether the two groups differed significantly on any of the legal, demographic and substance abuse variables within each of the three outcomes. If they did, then this would indicate that those variables should be included in the multivariate analysis for the reasons discussed previously. A Type I error, denoted by the letter  $p$ , is the probability level for including a variable in the multivariate analysis. It was liberally set at .10 in order to not overlook any possible effect the variables might have on any of the three outcomes. All bivariate correlation coefficients are based on Pearson's correlation coefficient and are denoted

by the letter r.

With respect to actual recidivism, five variables, two of them legal, two demographic and the substance abuse treatment variable were significantly associated with the group variable. Compared to the Institutional Sample, males in Second Chance were less educated ( $r=.12$ ,  $p=.07$ ), more likely to have received substance abuse treatment ( $r=-.26$ ,  $p=.001$ ), served more days during their most recent incarceration ( $r=-.25$ ,  $p=.001$ ), were older ( $r=-.13$ ,  $p=.04$ ) and their most recent release from DCP was through parole rather than maxing-out ( $r=.14$ ,  $p=.03$ ).

These five, along with the group variable, were entered into the multivariate analysis to determine their effect on actual recidivism. The first column of Table 2 contains these results while the other two columns contain results for the remaining two outcomes. Of primary interest in Table 2, as in all other tables, is the effect of the variable labelled Groups Being Compared on each of the three outcomes.

Three variables affected actual recidivism. They are the variable that contains the two groups, as well as age and education. Having no significant effect are the number of days of last incarceration at DCP, how most recently released from DCP and substance abuse treatment. To assure that interaction effects were not masking any association with actual recidivism, the latter three variables were individually correlated with

recidivism. None yielded a significant effect ( $r=.05$ ,  $p=.38$ , for days of prior incarceration;  $r=-.04$ ;  $p=.52$ , for how previously released; and  $r=.03$ ,  $p=.67$ , for substance abuse treatment).

The remaining three variables were then re-entered into the multivariate analysis with surprising results. The effect of the group variable was slightly diminished ( $B=.095$ ,  $SE=.064$ ,  $p=.138$ ) but age ( $B=-.062$ ,  $SE=.018$ ,  $p=.0001$ ) and education ( $B=.168$ ,  $SE=.096$ ,  $p=.081$ ) continued to have an effect (MODEL: chi-square=24.076,  $p=.0001$ ). Three additional analyses were undertaken using age and education separately paired with group to see why the group variable no longer had as strong an effect on recidivism. Results revealed the following. In two of the three comparisons both variables affected recidivism; the combination age and education (MODEL: chi-square=21.907,  $p=.0001$ ; AGE:  $B=-.064$ ,  $SE=.017$ ,  $p=.0001$ ; EDUCATION:  $B=.180$ ,  $SE=.095$ ,  $p=.058$ ), and group and education (MODEL: chi-square=9.461,  $p=.009$ ; GROUP:  $B=.117$ ,  $SE=.061$ ,  $p=.057$ ); EDUCATION:  $B=.193$ ,  $SE=.093$ ,  $p=.037$ ). However, for the combination group and age, only age had an effect (MODEL: chi-square=18.098,  $p=.0001$ ; GROUP:  $B=.080$ ,  $SE=.059$ ,  $p=.173$ ; AGE:  $B=-.058$ ,  $SE=.015$ ,  $p=.0002$ ).

These results provide a simple explanation regarding why the group variable is no longer significant in accounting for recidivism. As discovered previously, those in Second Chance

were older than those in the Institutional Sample ( $r=-.13$ ,  $p=.04$ ) and as shown in Table 2, older individuals are less likely to recidivate. Conversely, the Institutional Sample is comprised of younger individuals than those in Second Chance and they are more prone to recidivate. Thus, if the Institutional Sample contained the same proportion of older individuals as Second Chance, or Second Chance contained the same proportion of younger individuals as the Institutional Sample, recidivism should be similar for both groups.

With respect to the reason for recidivating, only three variables, all from the same group as those associated with actual recidivism, yielded differences between the two groups. Compared to the Institutional Sample, persons in Second Chance were older ( $r=-.15$ ,  $p=.03$ ), more likely to have received substance abuse treatment ( $r=-.31$ ,  $p=.001$ ) and had served more days during their most recent incarceration at DCP ( $r=-.17$ ,  $p=.02$ ).

The three, along with the group variable, were entered into the multivariate analysis in order to see what effect they had on reason for recidivating. The second column of Table 2 contains these results and shows that only the group variable has a significant effect. Those in Second Chance are more likely to recidivate due to a parole violation, whereas committing a new offense is more likely for the Institutional Sample. Again,

and to assure that interaction effects were not masking any association with reason for recidivating, the three non-significant variables were individually correlated with reason for recidivating. None yielded a significant effect ( $r=-.03$ ,  $p=.66$ , for days of prior incarceration;  $r=-.10$ ,  $p=.16$ , for age; and  $r=-.02$ ,  $p=.80$ , for substance abuse treatment).

Ideally we wanted to examine the number of days of non-incarceration between last release and recidivism within each of the two reasons for recidivating, that is, for a parole violation and for a new offense. However, we decided against this due to the small number of cases that did recidivate within each of the four therapeutic communities (see Table 1); a number which becomes even smaller when separated into each of the two reasons for recidivating. Instead, reason for recidivating was employed as a legal variable and included in the analysis of days between last release and rearrest. Also included were the three variables associated with the group variable from the previous analysis that examined reason for recidivating and the group variable itself.

The third column of Table 2 contains these results and shows that three of the five variables had a significant effect. Older individuals, as well as those who received substance abuse treatment and those whose recidivated due to a new offense rather than a parole violation were more likely to remain

unarrested for more days. Neither the group variable nor the number of days last incarcerated at DCP had an effect. Surprisingly, however, when the two variables were individually correlated with number of days between release and re-arrest the group variable showed a significant association ( $r=-.17$ ,  $p=.02$ ) but number of days last incarcerated at DCP did not ( $r=-.06$ ,  $p=.38$ ). This suggested an interaction in the multivariate analysis between the group variable and one or more of the three variables that were associated with number of days between last release and recidivating.

To assess this possibility, the group variable, along with the three variables, were reexamined under 11 different scenarios reflecting the various combinations of the four variables and days between release and recidivism. These include one combination of four variables, four combinations of three variables and six combinations of two variables. Results from these analyses (not shown but available from the author) revealed that in the four instances when both the group variable and substance abuse treatment were included in the analysis the group variable did not effect days at large. However, in all three instances where the group variable was included in combination with just age and reason for recidivating it did effect days at large. Moreover, in the remaining four combinations, which excluded the group variable and involved

only age, reason for recidivating and substance abuse treatment, all four had an effect on days at large. These results provide an explanation for the group variable not having an effect on days at large in Table 2. The reason for the anomaly is that those in Second Chance, as previously discovered, were more likely to have received substance abuse treatment ( $r=-.31$ ,  $p=.001$ ) and those who receive substance abuse treatment are more likely to remain unarrested longer, as indicated in Table 2. When substance abuse treatment is excluded from the analysis those in Second Chance remain unarrested longer than those in the Institutional Sample. But when substance abuse treatment is included in the analysis there is no significant difference between the two groups in terms of time to rearrest. Thus, substance abuse treatment helps interpret the circumstances under which those in Second Chance remain unarrested longer. Conversely, those in the Institutional Sample were less likely to receive substance abuse treatment and those who did not were more likely to be rearrested in a shorter period of time. With substance abuse treatment, their time to rearrest should be close to that of those in Second Chance.



TABLE 2: **Males Second Chance vs Institutional Sample of Males:**  
 Regression Estimates of Legal, Demographic and  
 Substance Abuse Variables for Recidivism, Reason For Recidivism  
 and Number of Days Between Last Release DCP and Current  
 Arrest  
**NOTE:** blank entry indicates variable not used in  
 analysis

| Variables                           | Recidivism | Reason     |       |
|-------------------------------------|------------|------------|-------|
| DaysFree                            | (0)no      | (0)parole  |       |
| And Coded                           | (1)yes     | (1)new off | value |
| number=                             | Coff B     | Coff B     | Coff  |
| Values                              | (SE)       | (SE)       | (SE)  |
| -----                               |            |            |       |
| ---                                 |            |            |       |
| Groups Being Compared               | .169**     | .140*      | -     |
| 12.195                              |            |            |       |
| (1)males 2nd chance (2)males inst.  | (.072)     | (.079)     |       |
| (8.053)                             |            |            |       |
| Reason For Last Incarceration DCP   |            |            |       |
| (1)parole revocation (2)new offense |            |            |       |
| Number Of Prior Arrests             |            |            |       |
| number equals value                 |            |            |       |
| Number Days Last Incarceration DCP  | .001       | .000       | -     |
| .018                                |            |            |       |
| number equals value                 | (.001)     | (.001)     |       |
| (.010)                              |            |            |       |
| How Most Recently Released From DCP | -.187      |            |       |
| (1)paroled (2)maxed-out             | (.347)     |            |       |
| Race/Ethnicity                      |            |            |       |
| (1)black/aa (2)hispanic/white/other |            |            |       |
| Age                                 | -.071***   | -.019      |       |
| 5.548***                            |            |            |       |
| number equals value                 | (.017)     | (.020)     |       |
| (2.113)                             |            |            |       |

Formal Education .188\*  
number equals value (.102)

Marital Status  
(1)single (2)mar/sep/div

Ever Receive Drug-Alcohol Treatment .166 .071  
34.462\*  
(1)neither (2)one of the two (3)both (.187) (.181)  
(19.028)

Reason For Recidivating NA NA  
92.682\*\*\*  
(1)parole violation (2)new offense  
(33.344)

-----  
---  
Model Chi Square/F for # of days 32.118 4.850 4.544  
Probability .001 .303  
.001  
N 237 176 176  
Missing Cases 31 15 15

\* p < .10  
\*\* p < .05  
\*\*\* p < .01

Power and Control (Males) Only two variables were significantly associated with the group variable. Compared to the Institutional Sample, males in Power and Control were more likely to have been most recently incarcerated at DCP for a new offense, those in the Institutional Sample for a parole violation ( $r=-.16$ ,  $p=.02$ ). They were also more likely during their most recent incarceration at DCP to have been confined for a greater number of days than the Institutional Sample ( $r=-.28$ ,  $p=.001$ ).

These two variables, along with the group variable, were

entered into the multivariate analysis to see what effect they might have on actual recidivism. The first column of Table 3 shows that two of the three variables, group and reason for most recent incarceration at DCP, affect actual recidivism. To determine if any interaction effects were present, the number of days of last incarceration at DCP was individually correlated with recidivism. It showed no effect ( $r=-.04$ ,  $p=.53$ ).

The two variables were then re-entered into the multivariate analysis and both continued to affect recidivism(MODEL: chi-square=10.648,  $p=.005$ ; GROUP:  $B=.192$ ,  $SE=.082$ ,  $p=.019$ , REASON PRIOR INCARCERATION:  $B=-.573$ ,  $SE=.296$ ,  $p=.054$ ). These findings support those observed in Table 1 and indicate that although those in Power and Control were most recently incarcerated at DCP for a more serious reason than the Institutional Sample, a new offense as opposed to a parole violation, they were nonetheless, substantially less likely to recidivate than the Institutional Sample.

Among those who did recidivate, the same two variables were also the only ones associated with the group variable regarding reason for recidivating. Compared to the Institutional Sample, males in Power and Control were more likely to have been most recently incarcerated at DCP for a new offense, those in the Institutional Sample for a parole violation ( $r=-.22$ ,  $p=.01$ ) and they were also more likely during their most recent

incarceration at DCP to have been confined for a greater number of days than the Institutional Sample ( $r=-.13$ ,  $p=.09$ ).

The two variables along, with the group variable, were entered into the multivariate analysis and the results, located in the second column of Table 3, shows that the same two variables affect reason for recidivating. Number of days of last incarceration at DCP had no effect and its individual correlation with reason for recidivating eliminated any possible interaction affect ( $r=.02$ ,  $p=.76$ ).

The two variables were then re-entered into the multivariate analysis. The effect of the group variable on reason for recidivating became a little more pronounced whereas reason for prior incarceration become a little less (MODEL: chi-square=7.300,  $p=.026$ ; GROUP:  $B=-.190$ ,  $SE=.108$ ,  $p=.078$ , REASON PRIOR INCARCERATION:  $B=.531$ ,  $SE=.332$ ,  $p=.110$ ). Coupled with the previous finding that a greater proportion of those most recently incarcerated at DCP for a new offense were in Power and Control ( $r=-.16$ ,  $p=.02$ ), these subtle changes indicate that those in Power and Control who recidivated were more likely to do so for a new offense, rather than a parole violation (see Table 3). Conversely, the Institutional Sample was disproportionately composed of individuals who were last incarcerated at DCP for a parole violation and they were more likely to recidivate for the same reason. This suggests that the

reason for recidivating should be similar if both groups were comprised of proportionately similar individuals in terms of the reason for last incarceration at DCP.

The same three variables, along with reason for recidivating, were examined to assess their effect on the number of days between last release and rearrest. Results, located in the third column of Table 3, show that except for number of days of last incarceration, the three remaining variables all had a significant effect on the number of days. Compared to the Institutional Sample, those in Power and Control remained unarrested longer, as did those who were last incarcerated at DCP for a parole violation and those whose current reason for recidivating was a new offense. Number of days of last incarceration at DCP had no effect and its individual correlation with reason for recidivating eliminated any possible interaction effects ( $r=-.04$ ,  $p=.59$ ).

The three variables were then re-entered into the multivariate analysis and all three continued to have a significant and independent effect on the number of days between release and rearrest (MODEL:  $\chi^2=4.362$ ,  $p=.006$ ; GROUP:  $B=-22.720$ ,  $SE=11.212$ ,  $p=.044$ ; REASON PRIOR INCARCERATION:  $B=-66.378$ ,  $SE=.35.786$ ,  $p=.065$ , REASON FOR RECIDIVATING:  $B=86.339$ ,  $SE=34.641$ ,  $p=.014$ ). Regardless of why they were last incarcerated or why they recidivated, those in Power and Control

remained unarrested longer than those in the Institutional Sample.

TABLE 3: **Males Power and Control vs Institutional Sample of Males:**

Regression Estimates of Legal, Demographic and Substance Abuse Variables for Recidivism, Reason For Recidivism and Number of Days Between Last Release DCP and Current Arrest

**NOTE:** blank entry indicates variable not used in analysis

| Variables                            | Recidivism | Reason     |       |
|--------------------------------------|------------|------------|-------|
| DaysFree                             | (0)no      | (0)parole  |       |
| And Coded                            | (1)yes     | (1)new off | value |
| number=                              | Coff B     | Coff B     | Coff  |
| Values                               | (SE)       | (SE)       | (SE)  |
| Groups Being Compared                | .185**     | -.180*     | -     |
| 25.431**                             |            |            |       |
| (1)males power&control(2)males inst. | (.087)     | (.109)     |       |
| (11.358)                             |            |            |       |
| Reason For Last Incarceration DCP    | .559*      | .571*      | -     |
| 76.933**                             |            |            |       |
| (1)parole revocation (2)new offense  | (.304)     | (.341)     |       |
| (36.519)                             |            |            |       |
| Number Of Prior Arrests              |            |            |       |
| number equals value                  |            |            |       |
| Number Days Last Incarceration DCP   | .000       | .001       | -     |
| .141                                 |            |            |       |
| number equals value                  | (.001)     | (.001)     |       |
| (.103)                               |            |            |       |
| How Most Recently Released From DCP  |            |            |       |
| (1)paroled (2)maxed-out              |            |            |       |
| Race/Ethnicity                       |            |            |       |
| (1)black/aa (2)hispanic/white/other  |            |            |       |
| Age                                  |            |            |       |
| number equals value                  |            |            |       |

Formal Education  
number equals value

Marital Status  
(1)single (2)mar/sep/div

Ever Receive Drug-Alcohol Treatment  
(1)neither (2)one of the two (3)both

Reason For Recidivating NA NA  
88.379\*\*\*  
(1)parole violation (2)new offense  
(34.581)

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---  
Model Chi Square/F for # of days 10.717 7.606 3.754  
Probability .013 .051 .006  
N 233 165 165  
Missing Cases 9 6 6

\* p < .10  
\*\* p < .05  
\*\*\* p < .01

Relapse Prevention (Males) With respect to actual recidivism only two variables were significantly associated with the group variable. Compared to the Institutional Sample, males in Relapse Prevention were more likely to have been confined for a greater number of days during their most recent incarceration at DCP than the Institutional Sample ( $r=-.24$ ,  $p=.001$ ) and more likely to have received substance abuse treatment ( $r=-.13$ ,  $p=.05$ ).

These two variables, along with the group variable, were entered into the multivariate analysis. The first column of Table 4 shows that only one of the three, number of days of last incarceration at DCP, significantly affected recidivism. When correlated separately with recidivism neither the group variable



nor substance abuse treatment were significant, thus eliminating any possible interaction effects ( $r=-.04$ ,  $p=.52$  and  $r=.07$ ,  $p=.32$ , respectively).

Since the group variable had no effect on actual recidivism, reason for recidivating was examined. Among those who recidivated, four variables were associated with the group variable. Compared to the Institutional Sample, males in Relapse Prevention were older ( $r=-.13$ ,  $p=.07$ ), more likely to have had substance abuse treatment ( $r=-.19$ ,  $p=.01$ ), had been confined at DCP for a greater number of days for their most recent incarceration ( $r=-.23$ ,  $p=.01$ ), and were less educated than the Institutional Sample ( $r=.15$ ,  $p=.05$ ).

The four variables, along with the group variable, were entered into the multivariate analysis and the results, located in the second column of Table 4, show that none of the five variables, including the group variable, significantly effect reason for recidivating. Moreover, separate correlations between each of the five and reason for recidivating did not suggest the possibility of any interaction effects as all five correlations were not significant; group ( $r=-.03$ ,  $p=.73$ ), number of days last incarcerated at DCP ( $r=.02$ ,  $p=.73$ ), age ( $r=-.01$ ,  $p=.88$ ), education ( $r=.11$ ,  $p=.14$ ), and substance abuse treatment ( $r=-.01$ ,  $p=.95$ ).

The same five variables were examined to assess their effect

on the number of days between last release and re-arrest; reason for recidivating was excluded since it had no effect ( $r=-.03$ ,  $p=.73$ ).

Results, located in the third column of Table 4, show that three of the variables; group, substance abuse treatment and number of days of last incarceration at DCP, had no significant effect on the number of days between release and recidivism. Nor were any of the three significantly correlated with number of days when examined separately; group ( $r=-.07$ ,  $p=.34$ ), substance abuse treatment ( $r=.09$ ,  $p=.26$ ), number of days last incarcerated at DCP ( $r=-.01$ ,  $p=.93$ ).

TABLE 4: Males Relapse Prevention vs. Males Institutional Sample:

Regression Estimates of Legal, Demographic and Substance Abuse Variables for Recidivism, Reason For Recidivism and Number of Days Between Last Release DCP and Current Arrest

**NOTE:** blank entry indicates variable not used in analysis

| Variables   | Recidivism                                |                                  | Reason                    |
|---|---|----------------------------------|---------------------------|
| DaysFree<br>And Coded<br>number=<br>Values                                  | (0)no<br><br>(1)yes<br>Coff B<br><br>(SE) | (1)new off<br>Coff B<br><br>(SE) | value<br>Coff<br><br>(SE) |
| Groups Being Compared<br>(1)males power&control(2)males inst.<br>(12.774)   | .039<br>(.131)                            | -.098<br>(.124)                  | -12.538<br>(.124)         |
| Reason For Last Incarceration DCP<br>(1)parole revocation (2)new offense    |   |                                  |                           |
| Number Of Prior Arrests<br>number equals value                              |   |                                  |                           |
| Number Days Last Incarceration DCP<br>.072<br>number equals value<br>(.093) | .002**<br><br>(.001)                      | .001<br><br>(.001)               |                           |
| How Most Recently Released From DCP<br>(1)paroled (2)maxed-out              |   |                                  |                           |
| Race/Ethnicity<br>(1)black/aa (2)hispanic/white/other                       |   |                                  |                           |
| Age<br>5.069***<br>number equals value<br>(2.006)                           |   |                                  | .005<br><br>(.020)        |

|                                      |       |        |        |
|--------------------------------------|-------|--------|--------|
| Formal Education                     |       |        | .199   |
| 21.649*                              |       |        |        |
| number equals value                  |       |        | (.129) |
| (12.637)                             |       |        |        |
| Marital Status                       |       |        |        |
| (1)single (2)mar/sep/div             |       |        |        |
| Ever Receive Drug-Alcohol Treatment  | .201  | -.074  | 12.826 |
| (1)neither (2)one of the two (3)both |       | (.199) | (.179) |
| (18.429)                             |       |        |        |
| Reason For Recidivating              | NA    | NA     |        |
| (1)parole violation (2)new offense   |       |        |        |
| -----                                |       |        |        |
| ---                                  |       |        |        |
| Model Chi Square/F for # of days     | 5.460 | 3.317  | 2.648  |
| Probability                          | .141  | .651   | .025   |
| N                                    | 226   | 175    | 175    |
| Missing Cases                        | 20    | 11     | 11     |

- \* p < .10
- \*\* p < .05
- \*\*\* p < .01

Relapse Prevention (Females) With respect to actual recidivism, the two groups differed on only one variable; the group White/Hispanic/Other comprised a greater proportion of the Institutional Sample than in Relapse Prevention. Conversely, the African American/Black comprised a greater proportion of women in Relapse Prevention than in the Institutional Sample ( $r=.17$ ,  $p=.03$ ). This can be substantiated by the data in Table 1 for the variable, Race/Ethnicity.

Race/Ethnicity was also the only variable that the two groups differed on with respect to both the reason for recidivating and number of days between last release and

recidivism. The difference mirrors that found above for actual recidivism ( $r=.23$ ,  $p=.02$ ).

Table 5 contains results from the multivariate analysis and includes separate analyses for each of the three outcomes, that is, recidivism and for those who did, the reason, as well as the number of days between release and re-arrest. Since race and the group variable were the only variables included the analysis interpretation of results is relatively straight forward.

Results in all three outcomes mirror those previously observed in Table 1. Regardless of race, females in Relapse Prevention are still less likely to recidivate than females in the Institutional Sample but if they do recidivate they are more likely to do so in a shorter amount of time than their institutional counterparts. Similarly, among those who do recidivate, committing a new offense is the more likely reason for females in Relapse Prevention compared to a parole violation for the Institutional Sample of females. Among the three outcomes however, only the difference in actual recidivism is large enough to be viewed as probable, since differences between the two groups on reason for re-arrest and number of days between release and re-arrest are too small to be considered reliable.

As a side note, Table 5 shows that regardless of what group they are in, that is, Relapse Prevention or the Institutional

Sample, the group of Hispanic/White/Other women are less likely to recidivate than their African American/Black counterparts, but if they do, they are more likely to recidivate in a shorter amount of time than the African American/Black women. Although African American/Black women are more likely to be re-arrested for a new offense, compared to a parole violation for the group of Hispanic/White/Other women, the difference is small and again should be considered unreliable.

TABLE 5: Females Relapse Prevention vs Institution Sample Females:

Regression Estimates of Legal, Demographic and Substance Abuse Variables for Recidivism, Reason For Recidivism and Number of Days Between Last Release DCP and Current Arrest

**NOTE:** blank entry indicates variable not used in analysis

| Variables   | Recidivism              | Reason                      |      |
|---|-------------------------|-----------------------------|------|
| DaysFree<br>And Coded<br>number=<br>Values<br>value                                 | (0)no<br><br>(1)yes     | (0)parole<br><br>(1)new off |      |
|   | Coff B                  | Coff B                      | Coff |
|   | (SE)                    | (SE)                        | (SE) |
| Groups Being Compared<br>41.376<br>(1)females rel. prv. (2)female inst.<br>(50.553) | .604*<br><br>(.364)     | -.181<br><br>(.457)         |      |
| Reason For Last Incarceration DCP<br>(1)parole revocation (2)new offense            |                         |                             |      |
| Number Of Prior Arrests<br>number equals value                                      |                         |                             |      |
| Number Days Last Incarceration DCP<br>number equals value                           |                         |                             |      |
| How Most Recently Released From DCP<br>(1)paroled (2)maxed-out                      |                         |                             |      |
| Race/Ethnicity<br>89.991*<br>(1)black/aa (2)hispanic/white/other<br>(51.641)        | -1.081***<br><br>(.351) | .297<br><br>(.462)          | -    |
| Age<br>number equals value  |                         |                             |      |

Formal Education  
number equals value

Marital Status  
(1)single (2)mar/sep/div

Ever Receive Drug-Alcohol Treatment  
(1)neither (2)one of the two (3)both

| Reason For Recidivating<br>(1)parole violation (2)new offense | NA     | NA    |
|---|--------|-------|
| -----   |        |       |
| ---   |        |       |
| Model Chi Square/F for # of days                              | 10.899 | 0.476 |
| 1.614   |        |       |
| Probability   | .002   | .788  |
| .204  |        |       |
| N   | 172    | 113   |
| Missing Cases   | 0      | 0     |

- \* p < .10
- \*\* p < .05
- \*\*\* p < .01

#### MULTIVARIATE ANALYSIS (WITHIN PROGRAMS)

In order to provide some insight on which variables within each of the four programs affect actual recidivism, analyses were undertaken within each of the four programs. Each of the legal, demographic, substance abuse treatment and program variables was individually correlated with recidivism. Those that showed a significant relationship with recidivism were then entered into a multivariate analysis in order to see if they jointly affected recidivism. Each of the four therapeutic communities is examined in turn beginning with the Second Chance Program for Males.



Second Chance (Males) Table 6 contains results from the analysis. Five variables, reflecting each of the four domains, were significantly associated with recidivism at the bivariate level. More likely to recidivate are those with more prior arrests, those who have had substance abuse treatment, those who volunteered as opposed to being court ordered to participate in the program, those who were more educated and Black/African American compared to the group of White/Hispanic/Other. A typical profile of a Second Chance recidivist would be a less educated, Black/African American male with a number of prior arrests who has received substance abuse treatment but who volunteered for the program. However, results from the multivariate analysis indicate that none of the five variables are significant in predicting recidivism. Given that the overall results from the analysis are significant (model probability equals .04), but that individual variables are not, strongly suggests interaction effects among the five variables and recidivism. We reran the analysis several times dropping and adding the five variable, but to little avail. Inspection of the correlations among the five independent variables (not shown) revealed that several ranged between  $r=.20$  to  $r=.35$ . For example, the correlation between race and education indicates that Black/African American had less education than the White/Hispanic/Other group ( $r=-.28$ ,  $p=.02$ ); the correlation

between race and prior arrests indicates that Black/African American had a greater number of prior arrests ( $r=-.32$ ,  $p=.01$ ); and the correlation between education and substance abuse treatment indicates that the more educated received substance abuse treatment ( $r=.23$ ,  $p=.05$ ). The overall effect of the correlations among the independent variables was that they canceled the effect that any individual one of them might have had with recidivism when the effects of the remaining ones were taken into account. Thus, in the multivariate analysis of recidivism, no one variable stands out as a key element in distinguishing between those in Second Chance who do and do not recidivate.

TABLE 6: **Second Chance (Males):** Bivariate Correlations and Logistic

Regression Estimates for Recidivism and the Legal, Demographic, Substance Abuse and Program Variables

| Variables<br>Multivariate<br>Coded Values                          | Bivariate                                   |   |
|--|---|---|
|  | Correlations<br>(0)no<br>(1)yes<br>r<br>(p) | Regression<br>(0)no<br>(1)yes<br>Coff B<br>(SE) |
| -----  |   |   |
| Reason Last Incarcerated DCP<br>(1)violate parole (2)new offense   | -.09<br>(.40)                               |   |
| Number Of Prior Arrests<br>number equals value                     | .30***<br>(.01)                             | .208<br>(.137)                                  |
| Number Days Last Incarcerated DCP<br>number equals value           | -.13<br>(.23)                               |   |
| How Recently Released From DCP<br>(1)paroled (2)maxed-out          | .05<br>(.66)                                |   |
| Race/Ethnicity<br>(1)black/aa (2)hisp/white/other                  | -.25**<br>(.02)                             | -.333<br>(.589)                                 |
| Age<br>number equals value   | -.17<br>(.12)                               |   |
| Formal Education<br>number equals value                            | .23**<br>(.05)                              | -.174<br>(.162)                                 |
| Marital Status<br>(1)single (2)mar/sep/div                         | -.15<br>(.21)                               |   |
| Receive Drug-Alcohol Treatment<br>(1)neither (2)one of two (3)both | .21*<br>(.08)                               | .360<br>(.309)                                  |
| Court Ordered To Attend Program<br>(1) no (2)yes                   | -.19*<br>(.09)                              | -.446<br>(.544)                                 |
| Number Days In Program<br>number equals value                      | -.12<br>(.28)                               |   |
| -----  |   |   |
| ---  |   |   |

|                  |        |
|------------------|--------|
| Model Chi Square | 11.584 |
| Probability      | .041   |
| N                | 70     |
| Missing Cases    | 13     |

- \* p < .10
- \*\* p < .05
- \*\*\* p < .01

Power and Control(Males) Table 7 contains results from the analysis. Three variables, number of days last incarcerated at DCP, along with age and race, were significantly associated with recidivism at the bivariate level. More likely to recidivate are those whose last incarceration at DCP was for fewer days, those who are younger and Black/African Americans. The profile of Power and Control recidivist is a young Black/African American male who served less time at DCP during his last incarceration than other inmates.

Results from the multivariate analysis indicate that each of the three variables had a unique and individual effect on recidivism, a conclusion supported by the separate and non-significant correlations among the three variables ( $r=-.01$ ,  $p=.96$ , between age and number of days last incarcerated at DCP;  $r=.14$ ,  $p=.29$ , between race and number of days last incarcerated at DCP; and  $r=.11$ ,  $p=.42$ , between age and race).

TABLE 7: **Power and Control (Males):** Bivariate Correlations and Logistic Regression Estimates for Recidivism and the Legal, Demographic, Substance Abuse and Program Variables

| Variables<br>Coded Values  | Bivariate<br>Correlations<br>(0)no<br>(1)yes<br>r<br>(p) | Multivariate<br>Regression<br>(0)no<br>(1)yes<br>Coff B<br>(SE) |
|--|--|---|
| -----  |  |   |
| Reason Last Incarcerated DCP<br>(1)violate parole (2)new offense   | .07<br>(.60)   |   |
| Number Of Prior Arrests<br>number equals value                     | .13<br>(.33)   |   |
| Number Days Last Incarcerated DCP<br>number equals value           | -.29**<br>(.03)  | -.003*<br>(.002)  |
| How Recently Released From DCP<br>(1)paroled (2)maxed-out          | .11<br>(.43)   |   |
| Race/Ethnicity<br>(1)black/aa (2)hisp/white/other                  | -.31**<br>(.02)  | -1.250**<br>(.627)  |
| Age<br>number equals value   | -.31**<br>(.02)  | -.079**<br>(.037)   |
| Formal Education<br>number equals value                            | -.17<br>(.23)  |   |
| Marital Status<br>(1)single (2)mar/sep/div                         | -.17<br>(.22)  |   |
| Receive Drug-Alcohol Treatment<br>(1)neither (2)one of two (3)both | -.12<br>(.38)  |   |
| Court Ordered To Attend Program<br>(1) no (2)yes                   | -.02<br>(.88)  |   |
| Number Days In Program<br>number equals value                      | -.04<br>(.77)  |   |
| -----  |  |   |
| Model Chi Square   |  | 15.206  |

|               |      |
|---------------|------|
| Probability   | .002 |
| N             | 57   |
| Missing Cases | 0    |

- \* p < .10
- \*\* p < .05
- \*\*\* p < .01

Relapse Prevention (Males) Table 8 contains results from the analysis. Four variables, two legal, one demographic and the other substance abuse treatment, were significantly associated with recidivism at the bivariate level. Recidivism was more likely for those who were last incarcerated at DCP for a parole violation as opposed to a new offense, those whose last release from DCP came by way of maxing-out as opposed to being paroled, younger individuals and those who had received substance abuse treatment. The profile of a Relapse Prevention recidivist would be a younger male who previously received substance abuse treatment, was most recently incarcerated at DCP for a parole violation and was most recently released from DCP by maxing out.

Results from the multivariate analysis indicate that only three of the four are statistically significant, indicating that the effect of how most recently released is due to one of the remaining three variables. Inspection of the correlations among the four variables(not shown) revealed a relatively simple explanation; those previously incarcerated for a parole violation were most recently released by maxing-out ( $r=-.30$ ,

p=.02), and those who recidivated were more likely to have these two characteristics in common. Thus, one is a surrogate of the other and the redundant effect is eliminated in the multivariate analysis. Moreover, neither of the two remaining variables were significantly associated with how most recently released ( $r=-.14$ ,  $p=.28$ , between age and how most recently released; and  $r=-.10$ ,  $p=.45$ , between substance abuse treatment and how most recently released). We dropped the variable how most recently released and reran the multivariate analysis. All three were associated with recidivism and highly significant: reason for prior incarceration at DCP

( $B=-2.717$ ,  $SE=1.033$ ,  $p=.009$ ); age ( $B=-.135$ ,  $SE=.051$ ,  $p=.009$ ) and substance abuse treatment ( $B=2.040$ ,  $SE=.776$ ,  $p=.009$ ) (MODEL:  $\chi^2=22.993$ ,  $p=.0001$ ). Thus, each of these three has for the most part a unique and individual effect on recidivism.

TABLE 8: **Relapse Prevention (Males):** Bivariate Correlations and Logistic Regression Estimates for Recidivism and the Legal, Demographic, Substance Abuse and Program Variables

| Variables<br>Coded Values  | Bivariate<br>Correlations<br>(0)no<br>(1)yes<br>r<br>(p) | Multivariate<br>Regression<br>(0)no<br>(1)yes<br>Coff B<br>(SE) |
|--|--|---|
| -----  |  |   |
| Reason Last Incarcerated DCP<br>(1)violate parole (2)new offense   | -.30**<br>(.02)  | -2.714**<br>(1.156)   |
| Number Of Prior Arrests<br>number equals value                     | .09<br>(.50)   |   |
| Number Days Last Incarcerated DCP<br>number equals value           | .10<br>(.44)   |   |
| How Recently Released From DCP<br>(1)paroled (2)maxed-out          | .28**<br>(.03)   | 11.371<br>(58.346)  |
| Race/Ethnicity<br>(1)black/aa (2)hisp/white/other                  | -.04<br>(.78)  |   |
| Age<br>number equals value   | -.24*<br>(.07)   | -.209***<br>(.080)  |
| Formal Education<br>number equals value                            | -.10<br>(.46)  |   |
| Marital Status<br>(1)single (2)mar/sep/div                         | -.19<br>(.15)  |   |
| Receive Drug-Alcohol Treatment<br>(1)neither (2)one of two (3)both | .25*<br>(.06)  | 3.328***<br>(1.283)   |
| Court Ordered To Attend Program<br>(1) no (2)yes                   | -.08<br>(.52)  |   |
| Number Days In Program<br>number equals value                      | -.09<br>(.47)  |   |
| -----  |  |   |
| Model Chi Square   |  | 32.512  |



|               |       |
|---------------|-------|
| Probability   | .0001 |
| N             | 61    |
| Missing Cases | 4     |

\* p < .10  
 \*\* p < .05  
 \*\*\* p < .01

Relapse Prevention (Females) Table 9 contains results from the analysis. Four variables, all demographic, were significantly associated with recidivism at the bivariate level. The Black/African American group are more likely to recidivate than the group of White/Hispanic/Others, as are those who are younger, those with less education and those who are single as opposed to those married/separated/divorced. Thus, a profile of the typical recidivist would be a young, single, less educated black/aa female. Results from the multivariate analysis indicate that the key variable is race as it is the only one of the four that is statistically significant.

TABLE 9: **Relapse Prevention (Females):** Bivariate Correlations and Logistic Regression Estimates for Recidivism and the Legal, Demographic, Substance Abuse and Program Variables

| Variables<br>Coded Values  | Bivariate<br>Correlations<br>(0)no<br>(1)yes<br>r<br>(p) | Multivariate<br>Regression<br>(0)no<br>(1)yes<br>Coff B<br>(SE) |
|--|--|---|
| -----  |  |   |
| Reason Last Incarcerated DCP<br>(1)violate parole (2)new offense   | .12<br>(.38)   |   |
| Number Of Prior Arrests<br>number equals value                     | .05<br>(.73)   |   |
| Number Days Last Incarcerated DCP<br>number equals value           | .10<br>(.46)   |   |
| How Recently Released From DCP<br>(1)paroled (2)maxed-out          | .04<br>(.77)   |   |
| Race/Ethnicity<br>(1)black/aa (2)hisp/white/other                  | -.34***<br>(.01)   | -1.805**<br>(.863)  |
| Age<br>number equals value   | -.24*<br>(.08)   | -.083<br>(.059)   |
| Formal Education<br>number equals value                            | -.26*<br>(.06)   | -.286<br>(.252)   |
| Marital Status<br>(1)single (2)mar/sep/div                         | -.28**<br>(.05)  | -.353<br>(.858)   |
| Receive Drug-Alcohol Treatment<br>(1)neither (2)one of two (3)both | -.01<br>(.95)  |   |
| Court Ordered To Attend Program<br>(1) no (2)yes                   | .21<br>(.14)   |   |
| Number Days In Program<br>number equals value                      | .20<br>(.16)   |   |
| -----  |  |   |
| ---  |  |   |

|                  |        |
|------------------|--------|
| Model Chi Square | 12.400 |
| Probability      | .015   |
| N                | 50     |
| Missing Cases    | 2      |

\* p < .10  
 \*\* p < .05  
 \*\*\* p < .01

### SUMMARY, DISCUSSION AND LIMITATIONS

Overall, results from the comparative analysis can be characterized as supportive of the majority of Therapeutic Community Programs at DCP. Table 10 below shows that Therapeutic Community participants did not underperform the institutional sample on any of the 12 outcomes, performed better on four, performed conditionally better on two, were similar on five and conditionally similar on one.

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 TABLE 10: Effect of Participation in a Therapeutic Community Treatment Program on Three Dimensions of Recidivism  
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| Dimension<br>Relapse<br>of<br>Prevention<br>Recidivism<br>(Female) | Second<br>Chance<br>(Male) | Power&<br>Control<br>(Male) | Relapse<br>Prevention<br>(Male) |
|--|----------------------------|-----------------------------|---------------------------------|
| Actual Recidivism  | +?                         | +                           | +/-                             |
| Reason For Recidivism  | +                          | +/-?                        | +/-                             |
| Days Non-Incarceration   | +?                         | +                           | +/-                             |

+ = did better than institutional sample  
+? = did better than the institutional sample but  
conditionally  
+/- = did the same as the institutional sample  
+/-? = did the same as the institutional sample but  
conditionally

-----  
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Showing the most difference is Power and Control. They had both a lower rate of recidivism and a greater number of days between release and re-arrest than the Institutional Sample. Females in Relapse Prevention also had a lower rate of recidivism than their female counterparts in the Institutional Sample while males in Second Chance, who did recidivate, were more likely than the Institutional Sample to do so for a parole violation rather than a new offense.

In addition, Second Chance participants did conditionally better than the Institutional Sample on the remaining two outcomes, that is, actual recidivism and the number of days between release and re-arrest. In both instances however, doing better was due to the effect of one of the control variables. With respect to actual recidivism, those in Second Chance were on average older than the Institutional Sample and age mitigated against recidivism. With respect to days between release and recidivism, those in Second Chance were more likely than the Institutional Sample to have received substance abuse treatment and this mitigated against recidivating in a shorter time period. Had the Institutional Sample been older and had they

received drug abuse treatment, actual recidivism as well as days between release and re-arrest would be comparable. Although "ageing-out" provides a reasonable explanation for the lower recidivism of those in Second Chance, having had substance abuse treatment does not as readily account for their longer time frame between release and re-arrest than the Institutional Sample. Having drug treatment may interact with some existing but as yet unidentified factor(s) to prolong the time until recidivism occurs.

The only instance where a Therapeutic Community group did worse than the Institutional Sample was conditionally and involved the reason for recidivating. Compared to the Institutional Sample, those in Power and Control were more likely to recidivate due to a new offense rather than a parole violation. However, this could be attributed to the majority of them having previously been arrested for a more serious reason, that is, a new offense rather than a parole violation, whereas the latter characterized the majority of prior arrests of the Institutional Sample. Had the Institutional Sample been composed of a greater proportion of individuals whose last incarceration was due to a new offense, then the reason for their current incarceration would likely be similar to that of Power and Control. Since Power and Control is designed for those with anger management problems, the inability to control their

feelings in emotionally charged situations may account for them being more prone to committing a new offense rather than violating conditions of parole.

In only one of the four Therapeutic Communities, namely, Relapse Prevention For Males, did findings on all three outcomes show no significant difference with the Institutional Sample. Actual recidivism and for those who did recidivate, the reason, as well as the "number of days free", were generally similar for both groups. Neither the multivariate analysis involving the Institutional Sample nor the analysis within Relapse Prevention yielded notable clues regarding their sub-par performance. Although recidivists from Relapse Prevention were younger and more likely to have received substance abuse treatment, so too were participants in one or more of the other three therapeutic community programs. Speculation suggests that other factors not examined in the analysis are contributing to their sub-par performance, including dynamic variables, discussed below.

Among outcomes favoring TC, the magnitude varied between marginal and noteworthy. Compared to the Institutional Sample, rates of actual recidivism among the three TC programs ranged from 17 percent lower in Power and Control to 11 percent in Second Chance and 8 percent for Females In Relapse Prevention. With respect to reason for recidivating those in Second Chance were 15 percent more likely to do so for a parole violation than

the Institutional Sample. Time to re-arrest was 90 days longer in Power and Control and almost the same, 89 days, in Second Chance compared to the Institutional Sample. And although not large enough to be statistically reliable, it was 35 days greater in Relapse Prevention for Males but 21 days shorter in Relapse Prevention for Females than in the Institutional Samples.

In general, these findings compare favorably with results from prior research examining the impact of prison-based Therapeutic Community programs on recidivism. These include the earlier evaluation of the Stay'n Out program in New York (Wexler et al. 1990), the later evaluation of the Ozarks Correctional Drug Treatment Program in Missouri (Hartmann et al. 1997) and the more recent evaluation of the Amity program in San Diego (Wexler et al. 1999). Although not directly comparable in that all three studies utilized different criteria to create treatment/control groups, employed different outcomes measures of recidivism and varied in the degree and sophistication of the data analysis undertaken, results for the Amity study come closest to being comparable to the current study in terms of sample composition, outcome measures, analytical design and timeliness. Researchers there found that TC compared to non-TC participants exhibited a lower rate of recidivism and among those who did recidivate, a greater number of days between

release and recidivism (Wexler et al. 1999:153-154). The Amity study analyzed both of these outcomes at 12 and 24 months after release whereas our study employed an 18 month follow-up. To provide a comparison, data from both Amity outcomes was averaged so that the follow-up period reflected 18 months. Although the Amity study examined several combinations of TC programming including post-release TC only, a combination of prison-based and post-release TC, as well as program dropouts within the various combinations, comparison of our finding with theirs examines the group that received and completed prison-based TC only and how they fared compared to a control group that did not participate in a TC program.

Excluding Relapse Prevention for Males, actual recidivism for the three remaining groups in our study, as noted previously, ranged from 8 to 17 percent lower than the Institutional Sample, or an average of 13 percent. In the Amity study it was 13 percent lower as well, 45 percent for Prison TC Completers compared to 58 percent for the control group. While the relative difference is quite comparable to ours, the absolute difference is notably lower in the Amity study. For example, 58 percent in their control group recidivated compared to 75 percent in our study and their TC participants recidivated at a rate of 45 percent compared to 58, 60, 64 and 79 percent in ours. A likely reason for the difference, at least among the



first three rates, is that recidivism in the Amity study was based on re-incarceration whereas in ours it is based on re-arrest and not all re-arrests result in re-incarceration.

With respect to the number of days between release and recidivism, TC participants in the Amity study averaged 222 days compared to 194 in the control, a difference of 29 days. This is somewhat less, both relatively and absolutely, than in our study where the relative difference between the TC and the Institutional Sample was 90, 89 and 35 days for the three male TC programs. The absolute difference between the Amity control group and our comparison group of males was 39 days and the 222 days for their TC group is notably less than the 323, 322 and 271 days in ours. Reasons for these differences are at best speculative and range from local law enforcement policy to idiosyncracies between the samples themselves. Conversely, it could be that the DCP programs do a better job at delaying whatever conditions and/or situations eventually lead to recidivism whereas the Amity program is more effective at curbing actual recidivism per se.

Although both the relative and absolute difference in actual recidivism and time to recidivism between ours and the Amity study are noteworthy, our results nonetheless replicate the Amity findings in terms of their directional effect. This enhances the validity that some aspects of some TC programs at

DCP are having a positive effect on one or more of the three dimensions of recidivism examined in the study.

The bivariate analysis **within** each of the four therapeutic communities uncovered few variables that were consistently associated with actual recidivism. Two that came closest were race and age. Black/African Americans were more likely to recidivate in three of the four programs, the exception being Relapse Prevention For Males where race showed no difference. So were younger inmates, the exception being Second Chance. Substance abuse treatment had a consistent effect in two programs, Second Chance and Relapse Prevention For Males, with those receiving more treatment being more likely to recidivate. And although education had an effect in two programs it was reversed, with the less educated more likely to recidivate in Relapse Prevention For Females but the more educated recidivating in Second Chance For Males. Although five of the remaining six variables had an effect on recidivism, none affected more than one program. These findings are summarized in Table 11.

Interestingly, the one variable that had no effect on recidivism in any of the four programs was the number of days of program participation. Prior research (Wexler 1988; Field 1992; Wexler et al. 1999), has consistently demonstrated that time in treatment is a key factor in reducing recidivism. However, these

same studies provide only limited evidence that prison-based TC programs have the same effect, unless they include aftercare as a program component (Inciardi et al. 1997).

Contrary to the Amity study which found that client characteristics had a limited effect on recidivism, ours revealed that several, most notably race and age, did. The difference may be due to our study examining these characteristics within each of the four TC programs, whereas the Amity study examined the TC group of Prison Completers as a whole. However, our findings regarding the link between race and recidivism as well as between age and recidivism are generally consistent with those that have examined non-treatment inmate populations (Gendreau et al. 1996:583).

Prior to providing some recommendations regarding the four TC programs, several limitations in the present study that bear on our interpretation of the findings need to be addressed. Foremost, the study design did not use random assignment to create either the TC or Institutional Sample. Instead, a limited form of matching was used to overcome the self-selection of inmates into the four TC programs. Our matching criteria did not take into account other potential differences such as antisocial personality, criminogenic needs and personal distress between the two groups that may have affected outcomes. Moreover, our control variables dealt

primarily with static factors such as age, race and criminal history and did not include dynamic factors such as antisocial personality, criminogenic needs and personal distress that have also been shown to also affect recidivism (Gendreau et al. 1996:583). Such data was simply unavailable and when it was, it was incomplete.

Less problematic, but nonetheless of concern, was the sample size for some of the TCs; for example, Relapse Prevention For Females and the even smaller samples among those who did recidivate. This created reliability problems with some of the findings, a problem exacerbated by having to eliminate cases for the first year and a half of the study's initial three year time frame in order to have a comparison group. In turn, this led to an insufficient number of cases within specific attributes of some variables; for example, type of offense and necessitated collapsing categories in order to ensure a sufficient number of cases for a reliable analysis.

Finally, Dauphin County Prison is not a prison per se; rather, it is a county jail and inmates sentenced to serve terms longer than two years do so at one of the Commonwealth's State prisons. Unlike state prisons, where the inmate population is more homogeneous in that all are serving longer terms for more serious offenses, persons housed at DCP, as noted previously, are there for a variety of reasons and with a few exceptions are

either serving shorter sentences or awaiting disposition of their case. As a result, inmate turnover is greater and this, among other things, probably contributes to a more dynamic and less predictable and stable environment than that found in most prison settings. These differences no doubt contribute to differences between the two settings in terms of the social structure and cultural milieu between inmates and staff. Although our findings indicate that programming for inmates can yield successful results under these conditions, few studies to date have evaluated Therapeutic Communities in jail settings and even fewer have focussed on female inmates. Until replicated in other jail settings our findings should be viewed as tentative and the interpretation of them as suggestive at best.

TABLE 11: Variables Increasing The Likelihood Of Actual Recidivism

Within Each Of The Four Therapeutic Community Programs Based On Findings From The Bivariate Correlations

| Variables and Prevention Coded Values (Female)                | Second Power & Chance (Male) | Relapse Control (Male) | Relapse Prevention (Male) |
|---|------------------------------|------------------------|---------------------------|
| Reason Last Incar DCP<br>(1)viol parole (2)new off            |                              |                        | parole violation          |
| Number Of Prior Arrests<br>number equals value                | having more                  |                        |                           |
| Num Days Last Incar DCP<br>number equals value                |                              | fewer days             |                           |
| How Recently Released DCP<br>(1)paroled (2)maxed-out          |                              |                        | having maxed-out          |
| Race/Ethnicity<br>black<br>(1)black/aa (2)hip/whi/oth<br>a/a  | black<br>a/a                 | black<br>a/a           |                           |
| Age<br>being<br>number equals value<br>younger                |                              | being<br>younger       | being<br>younger          |
| Formal Education<br>having<br>number equals value<br>less     | having more                  |                        |                           |
| Marital Status<br>being<br>(1)single (2)mar/sep/div<br>single |                              |                        |                           |
| Receive Drug-Alcohol Treat<br>(1)neither (2)lof2 (3)both      | received treatment           |                        | received treatment        |

Court Order Attend Program            not  
(1) no (2)yes                            ordered

Number Days In Program  
number equals value

## RECOMMENDATIONS

Based on findings from the evaluation and their subsequent interpretation, several suggestions regarding DCP's four Therapeutic Community Programs are offered. These suggestions focus on policy and program related aspects and highlight "what's working", "what's not" and "what can be done" to lower recidivism further.

Three of the four programs, Second Chance, Power & Control and Relapse Prevention For Females, are all effective at reducing actual recidivism and when it does occur, some are also effective at prolonging time to re-arrest and at reducing the reason for re-arrest to a less serious offense. As noted previously, prior research has shown that the effectiveness of Therapeutic Community programs is dramatically increased when post-release or parole aftercare is included as part of the program. DCP should consider adding this component to their Therapeutic programs and if funds are currently unavailable to do so, to seek additional funding for a demonstration project to develop and implement aftercare.

Findings involving Relapse Prevention For Males should be of concern since they show minimal difference from the Institutional Sample on all three outcomes and on one, actual recidivism, are slightly greater. Neither the multivariate comparison involving the Institutional Sample nor the analysis



within Relapse Prevention For Males yielded notable clues regarding their sub-par performance. Speculation suggested that dynamic factors, not examined in this study but found to be significant in others, might be responsible. Determining this, however, would involve the development and/or purchase of additional measuring instruments as well as their administration and the subsequent analysis of the data they generate. Meanwhile, current therapeutic efforts should be intensified as they, along with post-release services, may prove useful in reducing recidivism among males in Relapse Prevention.

Analysis within each of the four programs did not yield any universal predictors of recidivism. However, it did provide information on the characteristics of those who do recidivate. These characteristics and the profiles developed from them can be used to target those at risk of recidivating. In the process of doing so, the profiles may also lead to the identification of programs and services that may lessen the likelihood of recidivism.

Although not without limitations, the current study finds much to be positive regarding DCP's Therapeutic Community efforts. Implementation of one or more of the above suggestions can only enhance what appears to be a generally successful, jail-based, Therapeutic Community program.

# APPENDIX

## CALCULATING MONTHLY RECIDIVISM AT DCP

### STEP ONE: Printing

1. Enter the inmate information database. Choose the daily activity (2005), then enter the date wanted and then C for the commitments.
2. When that day is up, there should be, at most, six names. Move the mouse to file, then print screen.
3. If the bottom of the screen says XMT for more, then tab over two spaces, type in C then press F8, this will continue to the next page. When the second page comes up, go to file and print screen, then go to close printer. The two screens will then print on the same page.
4. When the day is complete, change the day of the month at the bottom of the screen. Continue until the month is complete.

### STEP TWO: Coding

1. Coded 1: Parole Violation/Capias. This is used for offenders who have violated parole and are required to return to DCP.
2. Coded 2: New Offense. This is used for offenders previously

housed at DCP, but are remitted for a new offense. Generally, the DCP Number is a lower number, than the new numbers issued for that day. There will be a bail amount listed.

3. Coded 3: Bail/Original Charge. This is used for those offenders that were previously housed at DCP and were released on bail. They returned to DCP after sentencing to serve their sentence. There will be no bail amount listed.
4. Coded 4: First Time Offender. This is used for the offender that has never served any time previously at DCP. This does not include inmates in transit, which is discussed in code five. These inmates can be identified by the DCP number issued to them, which is the highest series given to inmates for that day.
5. Coded 5: Other Institution. This is used for those inmates that are not actual DCP inmates, but are being held over for another institution. These inmates may have a new DCP number issued to them, but they are to be coded as 5, rather than 4.
6. Coded 6: Court Order. This code is used by those inmates that are remanded by the court to serve time at DCP. It is listed specifically as court order.

STEP THREE: Problem Areas

1. Incomplete/multiple labeling of inmates who entered DCP.

The Codes should then be used as the most important, such as a new inmate that is also a federal prisoner. This inmate should be coded as a five, rather than a four. An inmate that has a parole violation, and a new charge should be listed as just a parole violator.

2. Inconsistent labeling of inmates who entered DCP. Can be corrected by looking up that specific inmates commitments file.

#### STEP FOUR: Example Results

1. January 1999. Parole violators represented 23.6% (111), repeat offenders with new offenses represented 27.2% (128), bail/original charge represented 15.3% (72), first time offenders represented 27.0% (127), other institutions represented 3.2% (15), and court orders represented 3.61% (17) for a total of 99.9% (470).
2. February 1999. Parole violators represented 31.3% (136), repeat offenders with new offenses represented 19.1% (83), bail/original charge represented 11.9% (52), first time offenders represented 26.7% (116), other institutions represented 3.68% (16), and court orders represented 7.14% (31) for a total of 99.82% (434).
3. March 1999. Parole violators represented 27.9% (112), repeat offenders with new offenses represented 21.6% (87), bail/original charge represented 13.2% (53), first time

offenders represented 25.1% (101), other institutions represented 6.9% (28), and court orders represented 4.9% (20) for a total of 99.6% (401).

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