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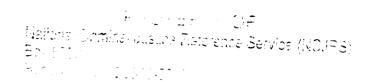
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# Summary Report



# **Process Assessment of Correctional Treatment (PACT)**

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FINAL REPORT

Approved By

Date:

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## **Executive Summary**

Baseline and prospective during-treatment data were collected from a serial cohort of 429 felony probationers remanded to a 6-month modified therapeutic community in Texas in 1998. Funded as part of the Residential Substance Abuse Treatment for State Prisoners (RSAT) program, the findings from this process evaluation (NIJ #98-RTVXK00496-IJ-CX-0024) revealed:

• Drug abuse was only one of many problems presented at treatment entry.

Analysis of social history and psychological status indicators showed that an extensive array of problems were evident among these probationers. Briefly, most were clinically dependent on alcohol (56%) or cocaine (70%), chronically unemployed (50%), and had a history of psychiatric problems, including serious depression (47%) and anxiety (42%), trouble controlling violent thoughts (26%), and suicide ideation (20%) or attempts (16%).

• Drug abuse treatment had a measurable impact on the psychosocial functioning of the probationers.

Significant improvements in measures of psychological well-being were observed across the treatment episode. Notable examples of this included increasingly positive feelings of self-esteem and self-confidence, as well as reduced symptoms of depression. Ratings of sensation seeking through taking risks also dropped across treatment, but indicators of hostility increased.

• Most of the offenders completed their treatment episode.

Sixty-nine percent of the probationers remained in the therapeutic community the entire 6-months and "successfully graduated." Dropping out early, however, was related to higher levels of pretreatment deficits, such as unemployment, mental health issues, hostility, and more extensive criminal histories. Because length-of-stay in treatment is consistently and reliably

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associated with posttreatment performance, additional efforts to address these problems might improve outcomes.

As increasing amounts of attention are turned to determining which correctional substance abuse treatment programs work with which offender subtypes, every effort should be made to ensure that resources are used efficiently appropriately. This includes determining if the offender really is a candidate for treatment (i.e., Do they have a drug problem?), assigning them to an appropriate level of services, and then monitoring their progress. Therapeutic plans should match expressed needs, and programmatic emphasis should be placed on treating the "whole" person, rather than just the substance abuse problem. Inclusion of specialized interventions to address engagement and induction strategies, anger management, victimization, and stress reduction are important, and more research is needed to determine the relative impact of each of these components on the treatment process and outcomes. Correctional treatment agencies, therefore, frequently are faced with the need to "habilitate" rather than to rehabilitate offenders on their caseload.

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## Summary Report: Process Assessment of Correctional Treatment (PACT)

Research has shown that intensive rehabilitation services provided to offenders in correctional settings can reduce criminality and drug use following incarceration (Andrews et al., 1990; Gendreau, 1996). Particularly within prisons, long-term residential treatment programs (such as therapeutic communities -- TCs) have been found to reduce post-incarceration involvement in illicit drugs and crime (Lipton, 1995). These findings are highlighted in numerous primary studies (Field, 1989; Inciardi, Martin, Butzin, Hooper, & Harrison, 1997; Knight, Simpson, Chatham, & Camacho, 1997; Wexler, De Leon, Thomas, Kressel, & Peters, 1999; Wexler, Falkin & Lipton 1990), in a congressionally-mandated review completed by the University of Maryland (Preventing Crime: What Works, What Doesn't, What's Promising, MacKenzie, 1997), in the NIDA-funded Correctional Drug Abuse Treatment Effectiveness meta-analysis (CDATE, Lipton, Pearson, Cleland, & Yee, 1998; Pearson & Lipton, 1999), and in a recent series of studies on 3-year posttreatment reincarceration rates presented in two special issues of The Prison Journal (Simpson, Wexler, & Inciardi, 1999a, 1999b).

However, comparatively little is known about the impact of therapeutic communities when used within the context of correctional supervision in the community. Examination of community-based treatment has shown that many enter these programs with a legal status; a trend that has been surprisingly consistent across the last several decades. For example, data from three major national multisite evaluations spanning from 1969 to 1993 showed that about two-thirds of treatment intakes were under probation or parole supervision, and one-third were directly referred by criminal justice authorities (Craddock, Rounds-Bryant, Flynn, & Hubbard, 1997). This pressure from legal authorities improves retention in community-based programs and increases the likelihood of favorable outcomes (Collins & Allison, 1983; Hiller, Knight, Broome, & Simpson, 1998). Nevertheless, probation and parole populations continue to expand, and most of these individuals have a drug or alcohol problem (Bureau of Justice Statistics, 1997, 1998). This has forced continued reliance on community resources, the development of

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additional facilities by correctional agencies, and the creation of new program models, like treatment drug courts.

With these issues, comes the need to assess and appropriately classify the individuals' problems and to monitor service delivery as well as therapeutic progress to help ensure effective treatment. Figure 1 describes a conceptual and empirically-validated model of the treatment process (further elaborated in Simpson, Joe, Greener, & Rowan-Szal, in press; Simpson, Joe, Rowan-Szal, & Greener, 1995; 1997). It provides the theoretical foundation for an evaluation system we use for assessing, classifying, and tracking individuals as they receive TC-based treatment as a condition of their probation. This model represents the treatment episode as a series of interrelated events, each presenting an opportunity to collect data. For example, the therapeutic experience begins when the individual undergoes clinical records processing at admission to the program. At this point, a comprehensive baseline assessment of offender risk, needs, and problems is completed. This includes constructing detailed social histories, classifying drug problems, assessing mental health and abuse histories, determining the level of behavioral risks for contracting HIV/AIDS, and detailing criminality and criminal involvement. Collecting these types of data helps program administrators and staff to understand who is being placed in their facility and whether these placements are appropriate for the prescribed level of services provided (Knight & Hiller, 1997, Knight, Hiller, & Simpson, in progress).

The problems that offenders present at intake, in turn, can influence the therapeutic process as individualized treatment plans are developed to address the most serious and immediate needs. As shown in the "early engagement" phase of the central box of the model presented in Figure 1, these background characteristics also may influence how the probationer perceives their peers, program staff, and their own willingness to become involved in and commit to their recovery during the first few months of the treatment episode (Broome, Knight, Knight, Hiller, & Simpson, 1997; Hiller, Knight, & Simpson, 2000). Pretreatment levels of motivation, for example, have been shown to play an important role in the development of therapeutic relationships with counselors and to indirectly determine the likelihood of rearrest

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following treatment in a 4-month modified TC for probationers (Broome et al., 1997). Therapeutic activities and feelings of personal progress made during the early engagement phase also impact the "early recovery" stage of the treatment process when the probationers are making important behavioral and psychosocial changes that will facilitate long-term recovery upon return to the community. Prospective data collection (based on both probationer self-report and on formal documentation of treatment contact) is made throughout the treatment episode -- thus providing the opportunity to track changes over time and to determine who will be retained the expected length of time in the program. This evaluation system, therefore, promotes quick feedback to treatment delivery staff and administrators who then develop targeted therapeutic interventions intended to improve short-term outcomes (Blankenship, Dansereau, & Simpson, 1999; Farabee, Simpson, Dansereau, & Knight, 1995). Also, monitoring offender self-perceptions and their appraisals of the therapeutic intervention is essential to this process because remaining in correctional substance abuse treatment been shown to be related both to offender motivation (De Leon, Melnick, Thomas, Kressel, & Wexler, 2000) and to their satisfaction with the programming they received (Hiller, Knight, & Simpson, 1999).

The goal of this report, therefore, will be to provide a broader description of the baseline and during treatment assessments that we use with probationers in a "real-world" treatment setting as part of our Process Assessment of Correctional Treatment project funded through the National Institute of Justice (NIJ Grant Number 98-RTVXK00496-IJ-CX-0024). Special emphasis will be placed on describing the data collection instruments as well as on their potential for narrowing the feedback loop between stakeholders, program staff, and probationers to help improve selection, classification, and the treatment process. A more in-depth discussion of our methodology can be found in the final report from this project (see Hiller, Knight, Rao, and Simpson, 2000). Because administrators often use correctional substance abuse programs as a stopgap measure to address a variety of issues only tangentially related to substance abuse (Farabee et al., 1999), we begin with a functional assessment of the risks and needs the offenders present at treatment intake (including classification of drug dependence problems). We next

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examine the short-term impact of the TC on improvements in psychosocial functioning and treatment motivation. Finally, a series of analyses will be conducted to determine if we can predict who will drop out of treatment prematurely.

#### Method

## **Program Description**

The Dallas County Judicial Treatment Center (DCJTC), located in Wilmer, Texas, was founded in 1991 by a council of 15 county and district judges as a response to Texas House Bill #2335, which authorized the development of residential correctional treatment centers for the diversion of drug-involved felony offenders from long-term incarceration. Essentially, this program represents the final and most restrictive sanction these judges use before imposing state jail or prison terms. Like many corrections-based treatment programs (see Wexler, 1995; Knight et al., 1997), the DCJTC is modeled after the traditional community-based TC, and it is provided in three major phases, including (a) orientation, (b) main treatment, and (c) re-entry. Treatment methods includes group and individual counseling, behavior modification, peer-to-peer therapy, life skills training, vocational and educational instruction, regular meetings with an on-site probation officer, and emphasizes 12-Step recovery, criminal thinking patterns, and relapse prevention. Other traditional TC therapeutic techniques also are used, including confrontation groups, "pull-ups," and morning and evening meetings (Barthwell et al., 1995), and offenders advance through a hierarchical recovery sequence whereby they receive progressively more responsibilities and privileges, as they become more senior members of their treatment "family."

#### Sample

Data were collected from 429 felony probationers admitted to the DCJTC between January and December 1998, but data analyses are limited to 417 cases (97% of the total sample) who completed all of the baseline assessments. The sample was predominantly male (70%), African American (48%) or Caucasian (39%), and had never been married (43%). Most (60%) were between the ages of 17 and 34 (average age was 32).

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#### **Data System Overview**

Many of the data collection forms used in this study originated in the Drug Abuse Reporting Program (DARP), the first multisite evaluation of community-based treatment funded by the National Institute on Drug Abuse (NIDA, Sells & Simpson, 1976; Simpson & Sells, 1982, 1990). These instruments were modified more recently for use in a project entitled Improving Drug Abuse Treatment, Assessment, and Research (DATAR, Simpson, Chatham, & Joe, 1993; Simpson, Dansereau, & Joe, 1997), and they were adapted further for use in residential correctional settings (also see Knight et al., 1997 for a version used in an in-prison therapeutic community). Revisions to these forms (referred to below as the TCU DCJTC data collection instruments) included rewording items to reference the 6 months prior to the commitment arrest as the timeframe for the collection of baseline information.

Written, informed consent was obtained from each resident prior to the collection of the TCU DCJTC assessments. During their first week of treatment, residents received a comprehensive intake battery that included, the (a) Initial Assessment, (b) Self-Rating Form, and (c) Intake Interview questionnaires (Simpson, Knight, & Hiller, 1997). The Initial Assessment, a brief, structured counselor-led interview, was done within 24 hours of treatment entry, and it recorded sociodemographic background information and drug use history. Immediately following this, residents also completed the Self-Rating Form (SRF), a 95-item self-report instrument designed to assess psychosocial functioning and treatment motivation at intake. Finally, a counselor administered the Intake Interview approximately 2 to 7 days after the Initial Assessment, after residents had time to become acquainted with the program and staff. It included detailed questions on the resident's social background, family and peer relations, health and psychological status, criminal involvement and history, and drug use problems. Indicators of the treatment process were based on the Resident Evaluation of Self and Treatment (REST). It was collected prospectively at the end of treatment months 1, 3, and 6, which linked it to major landmarks in the residents' therapeutic episode (end of orientation, 90-day treatment plan, and

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discharge plan, respectively). The REST contained a reassessment of the psychosocial and treatment motivation scales originally collected in the SRF.

## Measures

<u>Social history</u>. Sociodemographic information was collected during the Initial Assessment and Intake Interview. This included employment history, education level, insurance coverage, and sources of financial support.

<u>Classification of drug problems</u>. Four independent sections in the Initial Assessment were used to assess Diagnostic and Statistical Manual IV (DSM-IV; APA, 1994) criteria for dependence and abuse for *Alcohol, Cannabis, Cocaine, and Opioids*. Wording of these items closely followed those found in the DSM-IV, and scoring was identical (i.e., 3 or more criteria met for classification of dependence, 1 or more for corresponding abuse items).

Psychological problems. Similar to Joe, Brown, and Simpson (1995), two brief measures were created from responses to items on the Intake Interview that elicited indicators of psychological dysfunction (e.g., "Not counting the effects from alcohol or drug use, have you ever experienced serious depression?"). The pathology index (coefficient alpha = .65; range 0-5) was comprised of a set of symptoms that included depression, serious anxiety or tension, hallucinations, trouble understanding, concentrating, or remembering, and trouble controlling violent behavior. The majority of the probationers (73%) scored a 1 or more on this measure; and the average numbers of symptoms reported was 1.7 (standard deviation = 1.45). The suicidal ideation composite (coefficient alpha = .81) focused on two questions that asked probationers if they had ever had "serious thoughts of suicide" or "attempts at suicide."

Abuse history. Reports of previous physical, emotional, and sexual abuse were recorded during the Intake Interview with questions like "Have you ever been physically abused (hit, slapped, beaten)." A composite abuse index (coefficient alpha = .75) was created to summarize the total number of types of abuse (range 0-3) the probationer had experienced during their lifetime.

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Behavioral risks for HIV/AIDS. Based on work by Simpson et al. (1994), two measures were constructed from information in the Intake Interview to quantify behaviors shown to be associated with an increased probability of contracting the virus that causes HIV/AIDS. The risky needle exposure index (coefficient alpha = .67) was formed by adding two separate items reflecting the number of times non-sterilized drug injection equipment had been shared. We attempted to replicate a risky sex exposure index to describe the number of times an individual had had sex without using a condom with someone who was not their spouse or primary sexual partner, with someone who was an injection drug user, or in exchange for drugs, money, or gifts in the preceding 6 months (see Simpson et al., 1994). Internal consistency reliability, however, was relatively low (coefficient alpha = .54), so we analyzed the individual items separately.

Criminality and criminal history. Criminal involvement was gauged through self-reports made during the Intake Interview about previous arrests and incarcerations. Also, a composite measure for classifying risk for recidivism among the probationers, modeled after the Lifestyle Criminality Screening Form (LCSF; Walters, White, & Denny, 1991), was constructed from information collected in the Initial Assessment, Intake Interview, and the SRF.

Conceptually, the criminality classification index emphasized four behavioral dimensions related to having a criminal lifestyle, including irresponsibility, self-indulgence, interpersonal intrusiveness, and social rule breaking (Walters, 1990), and Walters (1998) recommends clinical interpretations based on a total composite score to define "high" (values of 10 and above), "moderate" (7 to 9), and "low" (6 and below) risk categories (also see Hiller et al., 1999 for a complete description of the development of this measure).

<u>Psychological functioning</u>. Current levels of psychological functioning were assessed at intake, months 1, 3, and 6 through the SRF and REST and included scales for depression and anxiety (coefficient alphas of .67 and .74, respectively) and ratings of self-esteem and decision-making confidence (coefficient alphas of .66 and .71). Sample items for the anxiety scale included "You feel anxious or nervous," "You have trouble sleeping," and "You have trouble

sitting still for long." The SRF and REST both also included the <u>Pearlin Mastery Scale</u> (Pearlin & Schooler, 1978) to assess general feelings of self-efficacy (coefficient alpha = .72). For this, residents indicated their agreement with statements such as "You have little control over the things that happen to you" and "There is little you can do to change many of the important things in your life."

Social functioning. Social functioning indicators also were measured four times during treatment using the SRF and REST. This included scales for hostility and risk-taking (coefficient alphas were .79 and .77, respectively). Ratings for hostility, for example, were made on items like "You have urges to fight or hurt other," "You get mad at other people easily," and "You like others to feel afraid of you."

<u>Treatment motivation</u>. Finally, motivation for treatment was based on the problem recognition, desire for help, and treatment readiness scales (coefficient alphas = .82, .67, and .72, respectively; see also Joe, Knezek, Watson, & Simpson, 1991; and Simpson & Joe, 1993), collected at intake by the SRF and during treatment by the REST. As discussed by Simpson and Joe (1993), these scales represent conceptually distinct "stages" of treatment motivation beginning with problem recognition and culminating with treatment readiness.

Treatment dropout. The outcome criterion used for the third set of analyses was a dichotomously-scored measure (0 = "completer;" 1 = "dropout"), based on the treatment discharge information that was abstracted from facility records. Like community-based TCs (see De Leon, 1984, 1991; De Leon & Schwartz, 1984), many residents left the program before they had completed the expected treatment duration of 6 months. About 5% of the total sample dropped out each month, and examination of the reasons for treatment discharge showed that 69% of offenders completed treatment, 15% quit against staff advice (ASA), 13% were discharged for rules violations, and 3% left for other reasons (e.g., medical problems, incarcerated in another county for an outstanding arrest warrant). However, because the "other" discharge group was small (n = 16) and represented a set of offenders "not appropriate" for treatment at the DCJTC, it was excluded from analyses. Comparisons, therefore, were made

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between those who had the opportunity to and completed treatment ( $\underline{n} = 287$ ) and those who dropped out early (ASA) or were removed for programs rules violations ( $\underline{n} = 114$ ).

# **Analytic Strategy**

A series of descriptive statistics were calculated first for the major assessment domains, including social history, drug dependence, psychological problems, abuse history, behavioral risks for HIV/AIDS, and criminality and criminal history to identify the probationers' needs upon treatment entry. Next, individual response to treatment was tested through a series of growth curve models, which examined changes in psychosocial functioning and treatment motivation. This analytic method was used because it represents "change" in terms of individual trajectories over time. In contrast, traditional methods (e.g., analysis of variance) test differences between group means and treat individual variation as error. The strength of growth curve analysis, therefore, is its ability to summarize the overall pattern of change while accommodating individual differences.

Preliminary analysis showed the greatest gains in psychosocial functioning scores occurred early in treatment, suggesting the need to use a non-linear model. Instead, a simpler linear pattern was tested which represented the rate of change as a constant over time using a square root transformation for treatment month. This transformation has the effect of assuming equal improvement between admission and month 1, month 1 to month 4, and month 5 to month 9 (even though treatment did not last this long). Each growth curve, therefore, can be summarized by two values: (a) initial status (a probationer's score at baseline) and (b) the rate of change, and each of these can vary from probationer to probationer [see Broome, Joe, and Simpson (1999) for a similar application of this methodology].

Finally, based in part on findings presented in Hiller et al. (1999), a series of Pearson correlations (r) were performed to explore the simple relationships between treatment discharge status (i.e., dropout or completer), and the variables used during the needs assessment analyses. After this, factors found to be significantly related to treatment dropout during the bivariate analyses were loaded into a into a stepwise logistic regression model [Hosmer & Lemeshow

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(1989) present a detailed description of a similar model building strategy]. This analysis allowed us to determine which baseline characteristics represented the "best" set of predictors for residents dropping out of treatment early.

#### Results

# **Needs Assessment**

Social history. Serious social history deficits were evident among this sample at program entry (see Table 1). Many of the probationers presented to treatment with problems in their employment history (50% were unemployed, an additional 11% had less than a full time job) and education level (36% did not have the equivalent of a high school diploma).

Classification of drug problems. As Table 1 shows, 56% of the probationers were clinically dependent on alcohol (15% met criteria for abuse), 70% were dependent on cocaine (3% more for abuse), 36% on marijuana (14% for abuse), and 16% on opiates (an additional 1% for abuse). Additional analysis of drug patterns indicated the most common profiles were concurrent alcohol and cocaine ( $\underline{n} = 91, 22\%$ ), and alcohol, cocaine, and marijuana problems ( $\underline{n} = 79, 19\%$ ). Interestingly, 10 (2%) of the probationers reported no clinically problematic drug use, and 21 (5%) had problems only with marijuana.

Psychological problems. Symptoms indicative of a history of psychiatric problems were commonly reported, including serious depression (47%), anxiety (42%), hallucinations (9%), attention and memory deficits (49%), violent impulses (26%), and suicide ideation (20%) and attempts (16%). Examination of the pathology index showed the majority of the probationers (51%) had multiple problems, and 28% indicated that they had received formal treatment for psychiatric problems during their lifetime.

Abuse history. Like psychological problems, most probationers (59%) indicated they had been abused during their lifetime either physically (43%), emotionally (54%), or sexually (21%). Many (42%) were victims of multiple types of abuse. A strong correlation ( $\underline{r} = .35$ ,  $\underline{p} < .001$ ) between psychological problems and abuse history also was evident.

Behavioral risks for HIV/AIDS. Overall, injection drug use was uncommon, but 14% of the sample did exhibit behavior that could result in exposure to the virus that causes HIV/AIDS (i.e., shared non-sterilized needles or equipment). Risks associated with sexual behavior were more common. Forty percent indicated that they had recently had unprotected (i.e., no latex condom was used) sex with someone who was not their spouse or primary partner, 11% with an injection drug user, and 18% had traded unprotected sex for either money or drugs.

<u>Criminality and criminal history</u>. Criminal careers for this sample were serious and extensive. The majority had been arrested and incarcerated at least 6 times (54% and 52%, respectively), and many (42%) had been arrested as juveniles. Seventy percent scored a 7 or higher on the criminality classification index, which indicated they were a moderate-to-high risk for recidivism.

## Response to Treatment

The probationers generally showed significant improvements during treatment in both their psychological and social functioning, but not in their motivation for treatment (see Table 2). For example, the probationers entered the program with an average score of 4.01 (SD = 0.92, which varied significantly across individuals) on the self-esteem scale, and this improved significantly over the course of time ( $\underline{b} = .37$ ,  $\underline{t} = 13.39$ ,  $\underline{p} < .0001$ ). Decision making confidence levels also increased ( $\underline{b} = .19$ ,  $\underline{t} = 8.40$ ,  $\underline{p} < .0001$ ), and depression scores decreased ( $\underline{b} = .18$ ,  $\underline{t} = -6.68$ ,  $\underline{p} < .0001$ ) significantly over time. Examination of the two social functioning scales revealed that risk taking decreased ( $\underline{b} = .13$ ,  $\underline{t} = -4.17$ ,  $\underline{p} < .0001$ ) while hostility increased ( $\underline{b} = .11$ ,  $\underline{t} = 4.19$ ,  $\underline{p} < .0001$ ) during treatment. Finally, although there was substantial variation in baseline scores, readiness for treatment decreased significantly over time ( $\underline{b} = -.10$ ,  $\underline{t} = -3.98$ ,  $\underline{p} < .0001$ ), which probably should be expected because they were near the end of their treatment episode when the final assessment of motivation was collected.

#### **Treatment Dropout**

Several factors identified as "needs" at admission to treatment were related significantly to early attrition from the program. For example, women were more likely than men to drop out

early (r = .12, p < .05), as were those who were unemployed in the 30 days prior to admission (r = .17, p < .001) and those who received financial support from illegal activities (r = .16, p < .001)p < .001). Older probationers and those who reported income from a job were less likely to leave prematurely ( $\underline{r} = -.15$  and -.17,  $\underline{p} < .01$ , respectively). Mental health problems also were associated with drop out, including reports of serious depression (r = .16, p < .001), problems controlling violent impulses (r = .11, p < .05), and a previous psychiatric treatment episode (r = .05) .10, p < .05). Higher scores on the pathology ( $\underline{r} = .14$ , p < .01), suicide ( $\underline{r} = .15$ , p < .01), and abuse ( $\underline{r} = .18$ ,  $\underline{p} < .001$ ) indices were associated with higher drop out rates. When criminal background was considered, we found that more extensive arrest (r = .12, p < .05) and incarceration histories (r = .12, p < .05) were related to a greater probability of attrition, and those who scored "low" on the criminality index were less likely to dropout ( $\underline{r} = -.17$ ,  $\underline{p} < .001$ ). Finally, higher self-ratings on the risk taking ( $\underline{r} = .13$ ,  $\underline{p} < .01$ ) and hostility ( $\underline{r} = .17$ ,  $\underline{p} < .001$ ) scales taken at intake were related to not remaining for the expected 6-month treatment duration, but higher self-efficacy acted as a protective factor (r = -.11, p < .05). As shown in Table 3, when all of the "needs" that were significantly related to dropout were simultaneously considered in a stepwise logistic regression model, the most efficient set of predictors that emerged were unemployment (b = .69, p < .01), younger age (b = .62, p < .01), abuse history (b = .34, p < .01), lifetime incarcerations (b = .62, p < .05), and not being classified as a low risk on the criminality index (b = .60, p < .05).

#### Discussion

As probation populations continue to expand, community corrections agencies need to develop and implement good assessment procedures designed to make appropriate referrals to limited program slots, to track the offenders' therapeutic progress, and to determine whom remains in treatment long enough to benefit from the services provided (Petersilia, 1995, 1997). The current study presents a theory-driven evaluation system designed to do this for correctional substance abuse programs. It includes a comprehensive battery of intake measures as well as

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prospective during treatment assessments. The information taken during admission processing using these intake questionnaires can help to determine if an offender was referred to the right treatment type and intensity level. For example, 10 probationers in our sample did not meet clinical criteria for drug dependence or abuse, and another 21 had problems only with marijuana (7% of the total). Recent research from community-based programs (see Simpson, Joe, Fletcher, Hubbard, & Anglin, 1999) indicates that intensive services are best saved for the cases with the most severe problems. Likewise, inmates with the most serious profiles of problems showed the most improvements after in-prison TC treatment that was followed by community-based transitional services (Knight, Simpson, & Hiller, 1999). The 31 probationers in our sample who had no or only minor drug problems, therefore, probably should have been sent to outpatient services instead of residential treatment so that the more intensive slots could have been reserved

for referrals with more problematic profiles. This finding underscores the importance of using

early screening for substance abuse problems when making treatment decisions for correctional

settings (Knight, Hiller, & Simpson, in progress; Peters, Greenbaum, Edens, Carter, & Ortiz,

The intake battery also was designed to help practitioners to know what types of issues the offenders bring to treatment with them -- thus focusing attention during individual diagnostic plans and guiding program development. Our sample reported extensive problems in their social background, drug use, mental health, abuse history, and criminality. For example, most (88%) of the probationers did not have either private or public medical insurance, so corrections-based or publicly-funded treatment appeared to represent the best and perhaps only opportunities for them to get formal interventions targeted at their addiction. Moreover, most had serious problems with their drug use, 70% were dependent on cocaine, 56% on alcohol, and 16% on opioids, and many used multiple drugs -- a factor which usually indicates a poor prognosis for an individual's treatment episode, especially when alcohol is used in combination with cocaine or alcohol (see Rowan-Szal, Chatham, & Simpson, 2000). An alarming number also reported extensive histories of being victims of physical, emotional and sexual abuse, and this was associated with

DCJTC (7/20/00)

1998).

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early dropout from treatment. Increasing recognition is being placed on the interaction between addiction and prior abuse (e.g., Langeland & Hartgers, 1998), and as an emerging issue, the interplay between abuse history and retention and outcomes deserves serious attention in future evaluations of correctional substance abuse treatment.

In spite of the many problems they presented at admission to the program, most of the probationers did show improvement in psychosocial functioning across the course of their treatment. This included enhanced feelings of psychological well-being (self-esteem, decision-making confidence) as well as reduced ratings of depression. Surprisingly, hostility scores increased significantly over time, suggesting that additional therapeutic focus should be placed on anger and stress management to overcome this. Hostility has been shown to be related to early treatment dropout from both community-based (Broome, Flynn, & Simpson, 1999) and correctional TCs (Broome, Hiller, & Simpson, 2000), and modifying program content to more fully address issues including engagement, anger management, and stress reduction techniques likely will improve treatment retention rates.

When we examined the relationship between other probationer background characteristics and whether or not they left treatment early (i.e., either ASA or because they were expelled for breaking cardinal rules), several attributes were found to be associated with higher attrition rates. For example, being unemployed and reporting income from illegal sources both were predictive of leaving treatment prematurely. These individuals appear to need vocational training earlier rather than later in their treatment episode to help them to become more fully involved in the treatment process, and to learn how to support themselves through legitimate means once they leave the program (Platt, 1995).

Dropouts also showed higher levels of mental health problems, including serious depression, problems controlling violent impulses, and more reported a prior psychiatric treatment episode. Scores on the pathology and suicide indices also were elevated for this group, and research with community-based TCs has shown that mental health problems are related to early attrition and to poor posttreatment outcomes (Broome, Flynn, et al., 1999; Jainchill,

De Leon, & Pinkham, 1986; Ravndal & Vaglum, 1991). Furthermore, psychiatric problems are more highly prevalent in correctional settings than in community samples (Abram & Teplin, 1991; Teplin, 1994), and this increases their risks for recidivism following correctional treatment (Hiller, Knight, Broome, et al., 1996). Addressing the needs of probationers with comorbid mental health and substance abuse problems obviously requires greater resource expenditures to treat both issues, and this might strain already tight budgets. Therefore, better linkages between corrections and community mental health treatment systems could be developed to provide additional services to dually diagnosed probationers, and this might prove to have economic benefits as well. Alternatively, model TC programs for individuals with concurrent mental health and substance abuse disorders have been developed and evaluated (French, Sacks, De Leon, Staines, & McKendrick, 1999; Sacks, Sacks, & De Leon, 1999). Like traditional TCs, these might be adapted to operate in correctional settings to provide specialized treatment to this "high risk" group.

When we examined the probationer needs concurrently in a multivariate model, we found that criminal classification level (i.e., not scoring in the "low risk" range) was a strong predictor of early treatment attrition -- and this measure probably represents an efficient means for integrating several relevant dimensions into a single factor to be used in treatment referrals and planning. This finding complements previous work showing these types of risk indices to be robust correlates of recidivism, poor in-prison behavioral adjustment, and early treatment dropout (see Gendreau, Goggin, & Law, 1996; Gendreau, Little, & Goggin, 1996; Hiller, Knight, & Simpson, 1999). While this correctional treatment program addresses criminal attitudes and thinking patterns during the standard treatment regimen (e.g., through behavioral modification and confrontation of antisocial behavior), it appears that even more directed attention should be focused on these factors to help improve retention and subsequent outcomes.

In conclusion, implications from these findings may be of interest to several types of professionals who work in corrections-based substance abuse treatment. Correctional managers should be aware of the need to do up-front screening and assessment of substance abuse and

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criminality problems to make better use of limited intensive resources for "high-needs" druginvolved probationers (see also Knight et al., 1999). These findings also provide program administrators with empirically-derived information for making practical decisions about what types of services they may need to add or augment. It appears that program modifications should include a greater emphasis on anxiety and anger management, trauma and victimization, and mental health issues. For those not yet "ready" for treatment, an "induction" intervention also could be used to increase early engagement and involvement (see Blankenship et al., 1999; Dees, Dansereau, & Simpson, 1999; Farabee et al., 1995). Finally, practitioners should note that their work has both short-term (i.e., improved psychosocial functioning) and long-term effects (reduced recidivism), but knowing which offender attributes need to be assessed and therapeutically addressed to reduce dropout is only a prelude to more detailed research on what occurs during the metaphorical "black box" of the treatment process. Promising areas of study include (1) treatment satisfaction (Hiller et al., 1999), (2) treatment expectations (McCorkel, Harrison, & Inciardi, 1998), (3) the peer environment within the TC (Broome, Knight, Hiller, & Simpson, 1996; Hiller et al., 1999), (4) the offender-counselor relationships (Broome et al., 1996, 1997), and (5) procriminal thinking and attitudes (Walters, 1996; Walters & Elliott, 1999). Improved posttreatment outcomes likely will be realized only through serious efforts to understand and to improve the processes underlying therapeutic progress in correctional treatment settings.

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# Note

<sup>1</sup> These include the Drug Abuse Reporting Program (DARP, Simpson & Sells, 1982, 1990), the Treatment Outcome Prospective Study (TOPS, Hubbard et al., 1989), and the Drug Abuse Treatment Outcome Studies (DATOS; Simpson & Brown, 1999; Simpson & Curry, 1997).

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Table 1
Needs Assessment for Probationers Remanded to Treatment at the DCJTC

	Total ( <u>N</u> = 417)
Social History	
Employment (30 days prior to last arrest)	
% None	50
% Part-time	11
% Full-time	39
Education	
% High School Graduate	40
% GED	24
% Vocational Certification	27
Average Highest Grade Completed (SD)	11 (1.97)
Living Arrangement (30 days prior to last arrest)	
% Family	47
% Friends	14
% Jail or Prison	20
% Alone	9
% Homeless	6
% Other	4
% No Medical Insurance	88
Financial Support (30 days prior to last arrest)	
% Job	41
% Family or Friends	27
% Illegal Activity	17
% Public Assistance	4
% Other	6
% None	5
Classification of Drug Problems Alcohol	
	56
% Dependence	
% Abuse Cocaine	15
	70
% Dependence	70
% Abuse	3
Marijuana	27
% Dependence	36
% Abuse	14
Opiates	1.0
% Dependence	16
% Abuse	1

Table 1 (Continued)

· · · · · · · · · · · · · · · · · · ·	Total (N = 417)		
	(14 - 417)		
Lifetime Psychological Problems			
% Serious Depression	47		
% Serious Anxiety	42		
% Hallucinations	9		
% Attention Problems	49		
% Violent Impulses	26		
% Suicidal Thoughts	20		
% Suicide Attempts	16		
% Pathology Index			
None	27		
1-2 Problems	43		
3-4 Problems	27		
5 Problems	3		
% Suicide Index			
None	77		
1 Problem	10		
2 Problems	13		
Abuse History			
% Physical	43		
% Emotional	54		
% Sexual	21		
HIV/AIDS-Risky Behavior			
% Used Dirty Injection Equipment	14		
% Unprotected Sex w/Non-Primary Partner	40		
% Unprotected Sex w/Injection Drug User	11		
% Unprotected Sex as a Sex Trader	18		
Criminality and Criminal History			
Average Lifetime Arrests (SD)	9 (8.3)		
% 6 or More Arrests	54		
% Arrested Before Age 18	42		
Average Lifetime Incarcerations (SD)	8 (8.2)		
% 6 or More Incarcerations	52		
Average Criminality Classification Score (SD)	8 (2.7)		
% Low Risk	30		
% Medium Risk	36		
% High Risk	34		

Table 2
Summary of Growth Curve Models for Changes in Psychosocial Functioning and Treatment Motivation

	Rate of Change	
4.01 (0.92)*	0.37 (0.29)*	
3.46 (0.97)*	-0.18 (0.32)*	
3.69 (1.09)*	-0.03 (0.33)	
4.76 (0.79)*	0.19 (0.31)*	
5.25 (0.91)*	0.02 (0.25)	
4.14 (1.10)*	-0.13 (0.41)*	
3.06 (1.09)*	0.11 (0.33)*	
5.61 (0.77)*	-0.10 (0.26)*	
	3.46 (0.97)* 3.69 (1.09)* 4.76 (0.79)* 5.25 (0.91)*  4.14 (1.10)* 3.06 (1.09)*	

Note. Standard Deviations appear in parentheses.

<sup>\*</sup> p <.05

Table 3
Summary of Stepwise Logistic Regression Model Predicting Treatment Dropout

Predictor	В	SE	$\chi^2$	Odds Ratio
Intercept	-1.63	0.30		
Unemployed Prior 30 days**	0.69	0.24	8.21	2.0
Less than 32 Years Old**	0.62	0.24	6.65	1.6
Abuse History**	0.34	0.10	10.59	1.4
6+ Lifetime Incarcerations*	0.62	0.25	6.19	1.9
Not a Low Recidivism Risk*	0.60	0.30	4.15	1.7

<sup>\*</sup>p < .05; \*\*p < .01

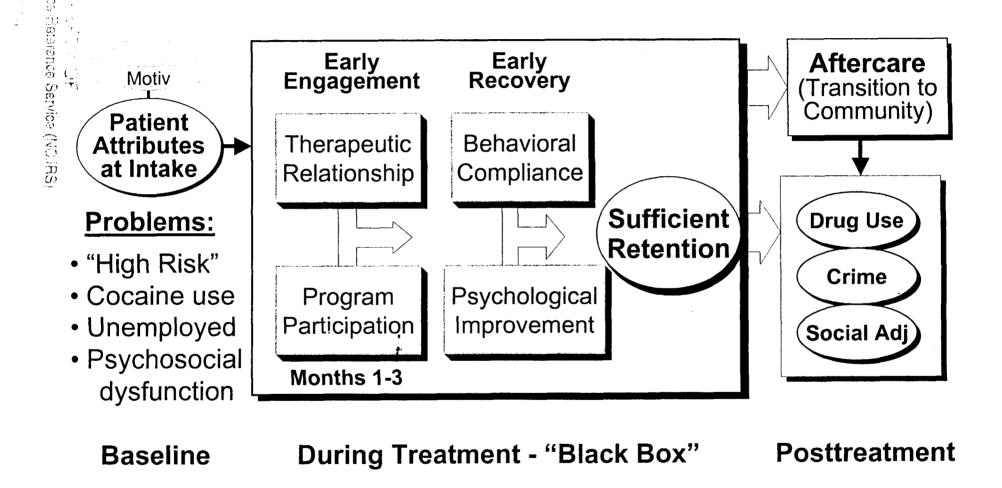


Figure 1. TCU Treatment Process Model