

# Process Evaluation of Intensive Residential Treatment

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## FOREWARD

This study was conducted for the distinct purpose of describing treatment services and clientele of four high profile treatment programs. The programs welcomed the evaluators to their programs, in the hopes of learning their strengths and areas for improvement. Program staff and administrators allowed a deep scrutiny of their programs by opening themselves up to this process evaluation. Prior to the completion of this final report, research findings were presented to each site. The feedback was well received, and the programs were open to making changes as needed. Therefore, it needs to be understood that many of these findings may no longer be relevant, as the programs have already made changes. Any decisions regarding these programs need to consider post-evaluation status of the programs.

# EXECUTIVE SUMMARY

## Introduction

The present study includes a process evaluation of four intensive residential treatment (IRT) programs: (1) the CIRT program at the San Luis Valley Community Corrections center in Alamosa, (2) DART at Williams Street Center and Tooley Hall in Denver, (3) the Residential Treatment Center (RTC) in Greeley, and (4) the Short-Term Intensive Remedial Residential Treatment (STIRRT) program in Denver.

Participant characteristics and program descriptions are included for each of the four sites. Participant information, consisting of quantitative data, is presented for each site simultaneously. In the program profile section, each site is described individually. Descriptions of the programs include setting, program admissions and discharges, treatment emphasis or orientation, program activities, staff description, and file review.

## Method

**Participants.** Study participants included 558 felony offenders admitted to treatment at one of the IRT sites: 124 at CIRT, 168 at DART, 140 at RTC, and 126 at STIRRT. Participants were predominantly male ( $n = 456$ ). Ethnic backgrounds were primarily Anglo ( $n = 281$ ) with similar numbers across treatment sites of Hispanic ( $n = 141$ ) and African American ( $n = 121$ ). The remaining participants were either of another descent or missing ethnicity data.

**Procedure.** Researchers were on-site at each program on a weekly basis for more than a year. Client data were collected through file reviews, client surveys, and database searches. Program information was collected through file reviews, written curriculum and activities schedules, and onsite observation of treatment groups and staff meetings. During the weekly program visits, researchers conducted informal interviews with treatment staff, security, administrators, and clients.

## Participant Profile Findings

**Differences Across Sites.** This study reveals interesting differences among the clientele at the four IRT sites. Although there are numerous differences across sites, many of those are related to clients' gender or ethnicity. Client gender and ethnicity clearly vary by program, as do several other characteristics. Females are only treated at the DART and RTC programs. Ethnicity differences are likely a reflection of the demographics of the regions from which the clientele is drawn; there were more Latino clients at the rural CIRT and RTC sites and more African American clients at the Denver-based DART program. Other differences in clientele across sites, unrelated to gender or ethnicity, include LSI score, number of nonviolent felonies, and motivation scores. STIRRT's minimum required score of 29 easily explains their higher LSI scores. It is also evident that the criminal justice system uses the programs differently, as manifested by divergent referrals across programs.

**Differences Across Gender.** Gender accounts for many of the differences across sites. These factors include number of children, SSI scores, number of violent felonies, drug of abuse, and motivation. One factor that emerged in the gender comparisons, not found to vary across sites, was the ASUS Mood scale; women scored higher than men.

**Differences Across Ethnic Backgrounds.** Ethnic differences were also found to relate to the differences across sites. Marital status, number of children and dependents, drug of abuse, lifetime use of opiates and sedatives, and number of violent felonies and misdemeanors were more likely related to ethnic differences than actual site differences. On the other hand, several differences surfaced in the ethnicity comparisons that were not found to account for program variations. These factors included age at first drug use, exposure to various drugs, and ASUS Involvement and Disruption scores. Despite the number of findings between ethnic groups, it should be noted that the impact of other factors was not measured. Differences between ethnic

groups may instead be a product of environmental factors (e.g., urban vs. rural), socioeconomic status, cultural bias within the criminal justice system, or other unidentified factors.

## Program Profile Findings

**Target Population.** There are more commonalities across these level 5 programs than differences. Plenty of evidence was found to indicate that the IRTs are treating their target population: serious substance abusers posing a high risk within the community. Many struggles and challenges are linked to treating this population. The setting alone establishes an interesting dynamic whereby participants are housed in a correctional-type facility isolated from their own supervising agent.

**Information Sharing.** The programs encounter difficulties starting with the lack of information provided by the referral sources. Conspicuously void from client files are standardized substance abuse assessments. Even basic information, such as the reason for referral or criminal history data, often is not forwarded with the referral. Consequently, it is a challenging task for the treatment providers to individualize treatment services to fit the particular needs of a client. They become reliant upon the offender to gather relevant data.

**Program Authority to Enforce Consequences.** The programs have very few consequences or privileges at hand to enlist participants' cooperation. Available to counselors is therapeutic skill used to motivate clients, representing an important tactic for handling lesser disruptions. The authority to enforce more stringent consequences remains with the supervising agent, who is remarkably absent during a client's treatment episode. Even expelling clients from treatment may not be a viable option given the short waitlists and the difficulty associated with gathering information on new clients. Short waitlists may mean empty beds and, subsequently, an absence of funding.

**Standards of Care.** There is very little to guide best practices of treatment. As the regulatory agency with oversight responsibility for substance abuse treatment, the Alcohol and Drug Abuse Division (ADAD) prescribes standards for licensed programs. The existing standards were limited at best, and it was discovered that those standards were often violated. The programs may have held ADAD waivers allowing them to vary from accepted practices; however, it is noted that the intent of the standards was not upheld. There was a genuine lack of knowledge about recommended practices for level 5, as many guidelines are not specified in the ADAD regulations. For example, the standards do not clearly detail what should be included in an admission summary or how often progress notes should be written. Neither do the standards address topics such as the amount of direct contact between staff and clients, frequency of individual contacts, or standard caseload size. Prior to the 1998 revision of the ADAD standards, there were more specific, detailed standards in place for licensed programs.

**Linkages with Aftercare Services.** Level 5 treatment alone has a limited ability to impact outcomes. This treatment modality is best maximized when coupled with continuing outpatient therapy (level 3 or 4). However, linkages with aftercare services are generally not reinforced with clients. The available aftercare services offered by these programs are limited to clients staying on in community corrections or living in the Denver metro area. The expectations for these programs should not entail them to provide aftercare services themselves, but rather to link clients to appropriate services. The programs do not typically make contacts with treatment providers in the communities to which their clientele are returning, and they often do not even make a phone contact with their supervising agent to discuss the importance of continuing treatment.

**Staffing Patterns.** Staffing problems uncovered in this study are indicative of a trend in Colorado, regardless of setting or modality. Staff vacancies are frequent, and a high rate of uncredentialed staff is found. Typically, staff with the least credentials has the most contact with clients. Counselors in recovery are on the decline while individuals with college degrees are increasing. This is a change in the tradition of addictions treatment, one that requires some careful consideration. It is perhaps a good value to require higher educational qualifications, but many counselors hold degrees unrelated to human services. Others have bachelor-level

degrees, where clinical training is not provided. Only in rare instances are counselors trained at the master's level or higher, the juncture at which formal clinical training begins. Therefore, fewer counselors who have training and experience in treatment are being hired. At a minimum, recovery staff have a personal devotion to the field, as well as their own experiences in treatment to serve as a model. The difficulty of attracting culturally diverse, recovered, skilled, credentialed staff cannot be emphasized enough.

**Mental Health vs. Addictions Model.** The dichotomy between programs that have a mental health versus addictions focus is clearly evident. CIRT and RTC endorse the mental health model, while DART and STIRRT are firmly grounded in the addictions model. This difference manifests itself primarily in two noticeable ways. First, no recovering addicts are on treatment staff at CIRT and RTC. Secondly, the two programs with a mental health orientation tend to use individual sessions to address personal issues. Contrarily, DART and STIRRT rely on the group dynamics as the primary mode of therapy. Not only is the group setting more economical, it follows the tradition of public living and peer support that is inherent to addictions treatment.

**Clinical Supervision.** Clinical supervision occurs in all of the programs on an informal basis. Typically, supervision is available during staff meetings where clients' cases are discussed. The supervisor, or another qualified staff member, is usually available on a daily basis to address more pressing caseload issues. However, supervision that directly addresses counselors' clinical skills was not found to occur. Clinical supervision was not perceived as a mechanism for giving feedback and training to counselors, but rather as a problem-solving tool. In fact, supervisors rarely observed their staff during group sessions, limiting their ability to share meaningful insights with their staff.

**Treatment Documentation.** Paperwork in clinical files is clearly an area that needs improvement across all of the sites. For most sites, required documentation was frequently absent from the files. When required documentation was found, appropriate signatures were rarely found. Furthermore, progress notes were kept very brief and vague, making it difficult to distinguish one client from another. Also, notes and other documentation that require co-signing by credential counselors, were typically co-signed when the files were being closed out at the end of the clients' treatment stay. This entirely circumvents the supervisory aspect of the regulations.

**Treatment Intensity.** The IRT programs exhibit an overall lack of intensity. Many of the factors discussed above contribute to this temperance. Easily identifiable variables include untrained or uncertified staff, staff vacancies, large group sizes, limited expulsions for disruptive or uncooperative clients, and the relatively short duration of treatment for this high-risk population. These factors intertwine with each other to produce a moderated effect from treatment. Group sessions typically incorporate more lecturing than processing, meaning that the counselors are firmly directing the sessions. It is problematic when therapists are working harder than the clients in therapy. Most of these participants have been in numerous treatment settings; it seems imperative for them to begin practicing and engaging in the treatment process with guidance from the counselors rather than clients merely attending lectures.

**Individual Program Strengths and Challenges.** While programs may share many characteristics with each other, they are markedly different from each other. Each IRT program has its own strengths and challenges that they face in doing intensive residential treatment.

DART is set in a distinctly relaxed, therapeutic environment. They have a high rate of recovering staff that are impassioned about their work. DART staff, well matched to their environment, are approachable and informal individuals. Some of the challenges the program faces are the high number of unsupervised, uncredentialed staff directing group sessions, as well as groups operating without a therapist present. The research uncovered specific concerns over ethical, professional boundaries between staff and clients, such as inappropriate attire. While DART fulfills a needed niche by treating female offenders, they do not adequately address female-specific issues.

The RTC program is unique from the other sites for several reasons. It operates small groups for processing sensitive, personal issues. While there are lecture-style groups, RTC emphasizes group discussions as a complement to their lecture series. They also make a special effort to address gender-specific issues in treatment. On the other hand, RTC provides an extremely low number of therapeutic contact hours. Other challenges faced by this program include the excessively high rate of uncredentialed staff, a concern compounded by the high prevalence of mental health disorders among the female population. The lack of curriculum or training model suggests a disorderly approach to treatment that may be confusing to staff and clients alike. Finally, the program downsizing in December 2000 was clearly an administrative decision that did not take to heart the clients' best interests, causing concerns over ethical program practices.

The CIRT program has some notable strengths that set it apart from the other sites. There is a cohesive staff with diverse multi-cultural backgrounds. Several of the staff members are bilingual, enabling them to work with Spanish-speaking clients in need of treatment. This program draws clients from around the state, particularly from rural regions of southern and western Colorado. The challenge to the CIRT treatment program includes its particularly low-intensity of treatment. The program's implementation of the SSC model consists primarily of lecturing from the manual, which does little to engage participants in the therapeutic enterprise.

The STIRRT program offers several assets for treating criminal justice clients. It provides an extremely high number of contact hours over a rather short duration. Due to the short treatment stays, STIRRT has the luxury of closed groups that have a more cohesive approach. The Predator Model endorsed by this program sets it apart from the other sites, particularly in its quality implementation of it. There was an exceedingly stable, qualified staff until a large turnover near the close of the study. The primary challenge faced by STIRRT includes a staff composed of primarily new individuals, managed by an uncertified supervisor. Furthermore, more recent implementation of the Predator Model tends to occur in a lecture-style format that is less successful at breaking through the criminal façade at an emotional level as it did previously.

## Recommendations

**Collaboration between Criminal Justice System and Treatment System.** The key recommendation arising from this study is for the criminal justice system to work closely with these programs to refine the services provided to high-risk substance abusers. Just as the programs rely upon the criminal justice system for their clientele, so does the system rely on the treatment programs for important offender habilitation services. The consistent lack of communication between these two entities impedes the goals of level 5 treatment. Merely delineating each other's needs, sharing information, and developing standard operating procedures would vastly improve services.

**Staffing Patterns Across Substance Abuse Field.** There is a statewide need to examine the hiring practices with substance abuse counselors. The frequent turnover among program staff is a chief indication of a larger problem. The low salary ranges associated with the substance abuse field make it difficult to attract and keep qualified individuals. Consistent hiring of untrained, unskilled, and uncertified staff devalues the field and in essence dictates this as an unskilled job classification. A disservice is paid to clients when they are pressured into treatment staffed with unqualified personnel.

**Standards of Care for Substance Abuse Treatment Programs.** Another global recommendation is to revise or adopt standards of care for substance abuse treatment. While it may appear to some as though standards inhibit services, they influence the quality of treatment in fundamental ways. Clearly, without strong support and guidance, programs demonstrate that they do not implement the highest standards of care when left to their own devices. Along with latitude to create more complete regulations, ADAD needs to be given increased responsibility within the substance abuse field. ADAD's role need not be minimized, as it provides integral monitoring functions for vital statewide services.

**Additional Research to Examine Therapeutic Milieu of Programs.** Further research is needed to examine the therapeutic milieu of the settings. While positive peer cultures are usually associated with therapeutic communities, they are a key element to any residential program. Pervasive negative attitudes and influences are detrimental to the success of treatment. Evaluation of counselors' clinical skills and the programs' therapeutic milieu would be recommended subsequent to implementation of programmatic changes recommended herein.



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# INTRODUCTION

The incidence of substance abuse among criminals is extremely high. In a survey of 23 U.S. cities, a median 68% of arrestees tested positive for drug use at the time of arrest (National Institute of Justice, 1996). In Colorado, recent estimates of substance abuse among felons range from 45% to 78%. Fortunately, there is hope for combating this pervasive problem. The effectiveness of treatment in reducing criminal behavior and substance use has been well-documented (Field, 1984, 1989; Lipsey, 1989; Simpson & Sells, 1982; Wexler, Falkin, & Lipton, 1988). However, research has suggested that this efficacy necessarily varies as a function of: (1) treatment modality, specifically residential versus outpatient, (2) client characteristics, including static and dynamic factors, and (3) programmatic variables such as program duration, treatment intensity, theoretical orientation, and staff characteristics. The following discussion will explore these key concerns for effective treatment as they have been addressed in the literature and as they pertain to the present research.

## Residential Substance Abuse Treatment

Substance abuse treatment is commonly utilized with addicted criminal justice populations. As noted above, the incidence of substance abuse and addiction among offenders is significant. Additionally, the prevalence of substance use while committing a crime is widely accepted. It follows that substance abuse treatment may be key to reducing the dismal recidivism rates reported in the criminal justice system. Increasingly, however, researchers are noting that matching of clients to services is needed for effective outcomes (e.g., Hser, 1995; Hser, Anglin, & Fletcher, 1998; Hser, Polinsky, Maglione, & Anglin, 1999; Prendergast, Anglin, & Wellisch, 1995; Wellisch, Prendergast, & Anglin, 1995; Wickizer et al., 1994). In support of this value, measurement tools such as the Level of Supervision Index (LSI; Andrews & Bonta, 1995) have been developed; considerable research has highlighted the importance of assessment and corresponding treatment referral (Gendreau, Little, & Goggin, 1996; Hser et al., 1999). The criminal justice system in Colorado, consistent with these concepts, recognizes seven levels of treatment with client matching contingent upon a thorough assessment. These levels of treatment include: (1) no treatment, (2) education and increased urinalysis, (3) weekly outpatient therapy, (4) intensive outpatient therapy, (5) intensive residential treatment, (6) therapeutic community, and (7) no treatment: assess for psychopathy. The present research is interested in intensive residential treatment (IRT).

Existing research on residential programming has frequently focused on the therapeutic community (TC), a treatment approach that is typically more intensive than IRT and strives for extensive change in clients beyond substance use. It is important to note that the TCs tend to be substantially longer in duration (typically 2 or more years in TCs versus weeks or months in IRTs), target higher-risk clients, and endorse a different philosophy of treatment than most IRTs. Specifically, the TC's approach to treatment is based upon the premise that the client's criminal and substance use behaviors must be altered through fundamental change of the whole person. TC principles include the community as the mechanism of change and accountability of the group by the members. In contrast, the IRT programming explored here is targeted toward a slightly lower-risk population and has been developed to rapidly address criminal and substance abuse behaviors via psycho-education and therapy rather than complete restructuring. It is also important to recognize that while TC treatment programs generally endorse the same fundamental theoretical framework for treatment and thereby often have similar programming, IRT programming is far less homogenous.

IRT programming variability can be seen in even basic aspects of treatment. Inconsistencies lie within the mere definition of an IRT. Some authors refer to residential treatment as modified TC treatment while others refer to it as simply inpatient treatment. In another example, existing IRTs vary significantly in terms of length of treatment. While Colorado IRT programming ranges from 14 to 90 days in duration, IRTs in other areas of the nation may provide treatment for up to six months or longer (Knight & Hiller, 1997). In addition, there are no clear expectations regarding the intensity of treatment for IRT programs nor is there a consistently embraced theory of change and treatment. Therefore, for the purposes of the present review, an IRT will be defined as residential drug/alcohol treatment that is less than 9 months in duration.

Research has found residential treatment to be relatively effective. In a study that measured 1-year abstinence rates for both residential treatment and non-residential treatment programming, rigorous statistical

analysis identified a likely abstinence rate of 44% to 55% and 52% to 63%, respectively (Hoffmann & Miller, 1993). They found that most relapses occurred in the first 6-months following treatment. Another outcome study evaluated one 6-month IRT program in Texas and found that 1-year arrest rates for treatment completers amounted to a mere 11% recidivism rate (Knight & Hiller, 1997). Although recidivism rates, such as those reported in the Knight and Hiller study are informative, it is pertinent to point out that many researchers are beginning to conceptualize drug use and criminal behavior as a “career” and to cite rates of reductions in substance use or crime rather than the traditional approach of a dichotomous success rate (Hser, Anglin, Grella, Longshore, & Prendergast, 1997). With this career approach, Hser and colleagues found that patients in residential programs were likely to report reductions in substance use of approximately 70% as compared with their pre-treatment use levels.

As these studies and others have highlighted, research has also consistently found that successful completion of treatment is related to post-treatment abstinence and low crime (e.g., Hoffmann & Miller, 1993; Hser et al., 1998; Hubbard, Collins, Rachal, & Cavanaugh, 1988; Knight & Hiller, 1997; Simpson, 1981, 1984). However, the above studies have primarily looked at treatment impact on successful completers. Not all clients complete treatment and, as treatment completion is essential to reduced substance use and crime recidivism, it is important to consider the numbers of clients who do not complete programming successfully (Condelli, 1994). Comparison of completion rates for residential and outpatient treatment in Washington state identified a significantly greater likelihood for completion among residential treatment (75%) as compared with outpatient (18%; Wickizer et al., 1994).

While these statistics are informative and offer hope for substance abuse treatment with offenders, the programming offered by IRTs varies widely. It is impossible to interpret these findings without determining the contributing factors in effective treatment, both client-related and programming-related factors. Beyond the basic interpretive value, to best meet the above noted goals of client-treatment matching, increased understanding of the client factors as they relate to treatment level/modality is *sine qua non*. For example, research has identified the merits of matching client problems with treatment services (Hser et al., 1999; McLellan et al., 1996), client styles with therapeutic approaches (Nurco et al., 1988), and client dependence history and diagnosis with treatment model (Hser et al., 1998). Similar findings highlight the importance of client psychopathy such as antisocial disorder or psychoticism in consideration of appropriate treatment program (Abram, 1989; McLellan, Luborsky, Woody, O’Brien & Druley, 1983). Additionally, factors such as gender (Sansone, 1980), race (Sansone), and age significantly impact treatment retention rates. These factors will be explored in greater depth in later discussion.

**Client Characteristics.** As one would expect, clients in an IRT were likely to have preadmission drug-related arrests, including possession, selling, or distribution of drugs (Knight & Hiller, 1997). Beyond drug-related arrests, client criminal histories included, in decreasing frequency, forgery, driving while intoxicated, stolen vehicle, and burglary.

Hoffmann and Miller (1993) identified clear differences between clients referred to inpatient versus outpatient treatment programming. Specifically, clients referred to inpatient programming as compared with their outpatient counterparts tended to be older, less educated, unemployed, and African American. In addition, residential clients were less likely to be paying for their own treatment. Furthermore, drug use patterns were distinctive: residential clients were more likely to be daily drinkers, to use drugs regularly, to drink despite medical complications, to be preoccupied with substance use, and to use substances to prevent withdrawal symptoms. Clients in both residential and outpatient programs were predominantly male.

While there are clear differences between clients in IRTs and outpatient treatment, the distinction between clients in IRTs and TCs is not so apparent. A study conducted by Condelli and Hubbard (1994) found that IRT and TC clients were similar across demographic variables, patterns of substance use, prior admission to treatment, criminal behavior, and employment. Clients in TCs were more likely to be Caucasian and to report more drug-related problems.

**Program Characteristics in IRTs.** The current movement in the criminal justice system is toward a continuous system of treatment (e.g., Barthwell et al., 1995; Wellisch et al., 1995). This has become a recent value due to the rising awareness that clients typically cycle through various treatment programs, incarceration facilities, and supervision levels. Ideal case management would span all of these programs with awareness of

previous treatment experiences as well as responsiveness to changing client needs. Unfortunately, that goal is far from being realized. Criminal justice treatment continues to be rather disjointed. Clients may take the same classes, such as anger management or relapse prevention, in jail, in prison, in outpatient treatment and so on. While for some clients this becomes a way to “work the system” and avoid learning anything new, for others this is a source of continual frustration and unmet needs. Client referral to an IRT may be based on client request, client history, technical violations such as urinalyses that are positive for substance use, or client ratings on assessment measures such as the LSI. The majority of programs accepts referrals for any of these reasons and do not report any additional screening of candidates prior to treatment program entry. Thus, when clients enter treatment, they are coming from a variety of circumstances including transition from prison, residential supervision, and non-residential supervision. Some clients will have experienced treatment, potentially even at the same treatment program, while others will be new to substance abuse treatment. Accordingly, IRT programming must be flexible and universal enough to meet a variety of client needs.

The majority of IRT programs appear to endorse cognitive and behavioral treatments, while some may also use pharmacotherapy, neurobehavioral approaches, and 12-step approaches (e.g., Andrews & Bonta, 1994; Ball, Corty, Bond, & Tomasello, 1988; Brennan, 1998; Fiorentine & Anglin, 1996; Gendreau & Andrews, 1990; Higgins et al., 1991; Husband & Platt, 1993; Izzo & Ross, 1990; Maddux & Desmond, 1979). A review of these approaches will be presented below.

IRTs typically integrate a variety of programming modules, including life-skills training, drug education, and group counseling (Knight & Hiller, 1997). In addition, clients are frequently required to participate in aftercare (e.g., Khalsa, Anglin, & Parades, 1992; Knight & Hiller; Polinsky, Hser, Anglin, & Maglione, 1998).

## Client Factors Related To Progress

Research has identified criminal history and substance abuse as strong predictors for recidivism. In addition to these significant factors, others are identified in the literature as relating to program outcomes.

**Gender.** The female substance-abusing offender may be more difficult to treat than men. For example, women in treatment reported greater difficulties in overall social functioning, which has been shown to be a predictor of post-treatment success (Griffin, Weiss, Mirin, & Lange, 1989; Kosten, Rounsaville, & Kleber, 1985). In addition, substance abusing women frequently have a history of childhood sexual abuse (Wilsnack, Vogeltanz, Klassen, & Harris, 1996), as well as an extensive history of abuse and trauma as adults (Wasnick, Schaffer, & Bencivengo, 1980). In fact, 70% of women reported having been raped prior to development of chemical dependency (Wasnick et al., 1980). Clearly, trauma plays a central role in substance use for women, yet few treatment programs address rape or even sexuality. Even worse, 39% of female clients reported sexual harassment by the male staff members (Wasnick et al., 1980).

Considering these conspicuous inadequacies in treatment of women, and other factors such as childcare, it is not surprising to find that retention rates in TCs are significantly lower for women than men (Sansone, 1980). Similarly, according to Knight and Hiller (1997), women were significantly less likely to successfully complete treatment. Notably, among successful completers, women and men were equally likely to recidivate (11%). This suggests that if treatment were able to retain female clients, the clients would be apt to succeed.

**Ethnicity.** Hispanic and other non-African-American minority clients are less likely to complete treatment than their counterparts (Sansone, 1980). The reason for this difference is unclear, although it has been suggested that the group approach espoused in most residential treatment programs may be counter-cultural for Hispanic clients. Alternately, the numbers of Hispanic and other minorities may be small enough that these clients feel alienated and alone.

**Motivation.** Client motivation for treatment has been the focus of considerable research and case conceptualization. Sterne and Pittman (1965) found that 75% of alcohol abuse treatment staff believed motivation to be important to client recovery and 50% indicated that it was essential. In fact, most clients themselves will report that they believe they need to be motivated for treatment to affect them. Beyond this agreement about the import of motivation, the conceptualization of motivation itself, however, is far more complicated. Various researchers have addressed motivation in terms of external versus internal motivation, static profiles, or dynamic stages.

For the purposes of the present discussion, we will look at two approaches to motivation, stages of change and the profiles of motivation as described across circumstances, motivation, readiness, and suitability. The stages of change, as developed by McConaughy, Prochaska, and Velicer (1983) have become widely accepted in the field of substance use treatment. McConaughy and colleagues (1983; 1989) identify five stages of change. These stages represent the client's motivation for recovery at the moment of their assessment, as a dynamic variable, clients may cycle through the stages repeatedly. The initial stage of motivation toward recovery is Precontemplation, during which clients desire to change others or the environment and are not interested in changing themselves. Often these clients have been required to attend treatment by the courts or pressured by significant others. Clients in the Contemplation stage are distressed adequately to want change and are interested in considering the possibilities in therapy. The Decision-making stage is characterized by clients' attempts to make a clear resolution and have committed to changing their behaviors. In the Action stage, clients are actively working on their substance abuse and seek assistance with their commitment to change. Finally, the Maintenance stage is for clients who have already changed and who are continuing to seek treatment toward continued stability of recovery. Knowledge of a client's placement among these categories can assist in treatment goals and can inform counselors where they will need to meet clients to accomplish realistic improvements. In fact, as Miller and Rollnick (1991) explore in-depth effective approaches with clients that are tailored to clients' respective stages of change in Motivational Interviewing.

An alternate approach to motivation for treatment is provided by DeLeon and Jainchill (1986) in which motivation is measured across client circumstances, motivation, readiness, and suitability. The scale was actually developed for the purposes of predicting retention in TCs but may provide valuable information regarding key influences on clients' receptiveness to treatment. The Circumstances scale measures external influences upon the client, such as pressure from the criminal justice system or family members. As the name suggests, the Motivation scale assesses the client's motivation for treatment. The Readiness scale evaluates the client's perceived need for treatment specifically through the program in which they were admitted. Finally, the Suitability scale measures how consistent the program's approach appears to be with the client's own style.

**Mental Health.** Emotional distress, relationship difficulties and family problems, financial difficulties, cravings and being around users were all found to be detrimental to client success (Hoffmann & Miller, 1993). Even relatively stable and mentally healthy clients are sensitive to stressors and, in their early stages recovery may find themselves drawn to substance use to cope with these stressors. However, a majority of clients who are substance abusers have mental illness in the form of personality disorders and sometimes Axis I disorders as well. This makes consideration of mental health concerns an important component of effective treatment programming.

As Carroll (1990) points out "[mentally ill chemical abusers] are already in our TCs, regardless of whether or not our admission policies say they should be there." Although effective treatment is possible with mentally ill clients, programs should not admit clients whose impaired sense of reality, or significant active hallucinations, interferes with their ability to benefit from treatment. Some research also may suggest that drug abusers with acute psychosis, as contrasted with chronic psychosis, may be more appropriate for IRT programming (Perkins, Simpson, & Tsuang, 1986).

Most research on mental illness among substance abusers has addressed clients with Axis I mental illness, especial psychotic disorders (e.g., Perkins et al., 1986). Abram (1989), however, looked at the effects of comorbid personality disorders, particularly antisocial personality disorder, on substance abusers' commission of crime. It was discovered that the comorbid presence of antisocial personality disorder, and not the mere presence of a substance use problem, resulted in crimes. This is consistent with findings that identify history of antisocial behavior as a major predictor for recidivism (Gendreau, Little, & Goggin, 1996). Thus, as Abram (1989) states, "criminal recidivism is associated with the least treatable detainees" (p. 144). This is alarming in light of findings that outpatient substance abuse treatments have poor success with antisocial clients (Woody, McLellan, Luborsky, & O'Brien, 1985). The efficacy of IRTs with antisocial clients is unknown.

**Other Factors.** Other relevant factors to retention and recidivism include age, education, and marital status. Specifically, Knight and Hiller (1997) found that older clients and more educated clients were more likely to complete treatment successfully. In addition, clients who were unmarried were four times more likely to be re-arrested at 1-year follow-up than married clients (Knight & Hiller).

## Program Factors Related to Quality

**Setting.** Researchers at Colorado State and Brown Universities have pointed out the significance of treatment center environment as a factor impacting treatment (see Younge, Oetting, Banning, & Younge, 1991). As they point out, clients are receiving messages about the program through everything from the architecture to the room décor. The researchers explore a variety of approaches to program setting and discuss how they affect client perceptions of treatment. They emphasize the importance of providing an environment that is consistent with the programming. For example, a program that emphasizes a process-oriented, client-centered approach to treatment would want a comfortable, pleasant, and warm environment where clients could feel valued and safe. Programs might even utilize posters or paintings that convey their orientation.

**Theoretical Orientation.** Research has explored the relative and independent merits of cognitive and behavioral treatments, pharmacotherapy, and 12-step approaches. Presently, across treatment modality, the literature highlights some generally accepted and research-supported tenets for treatment: (1) supervision alone is not enough, (2) treatment goals should be clearly established, (3) treatment goals should be realistic, (4) creative and flexible policies are key, and (5) interagency cooperation is essential (Prendergast et al., 1995).

Cognitive- and behavioral-based treatment are the most common approaches to substance abuse treatment with the criminal justice population and are consistently supported by research (e.g., Andrews & Bonta, 1994; Higgins et al., 1991). Major components of these treatments which have been found to be essential include cognitive skill development, relapse prevention training, and contingency contracting. Cognitive skills development, which includes problem solving, social skills training, and relapse prevention training, has been found to be effective by numerous experts and research studies (Gendreau & Andrews, 1990; Husband & Platt, 1993; Izzo & Ross, 1990). Cognitive skill development may also be complemented with social skill training, including modeling of appropriate behavior, role playing, rehearsal, and feedback. Training in relapse prevention has similarly been endorsed in the frequent use in programs and positive results in efficacy literature, perhaps even more popularly in criminal justice than other modalities (Gorski, Kelley, Havens, & Peters, 1993; Marlatt & Gordon, 1985; Rawson, Olbert, McCann, & Marinelli-Casey, 1993). Contingency contracting refers to the development of clear contracts that delineate for clients the consequences for specific behaviors (Anker & Crowley, 1982).

Pharmacotherapy has been primarily used in treatment for opiate dependence. Methadone, perhaps the most well-known pharmacotherapy, has shown some efficacy (Maddux & Desmond, 1979; Ball et al., 1988). Other less-common pharmacotherapies include LAAM and Naltrexone treatments. Additionally, alcohol dependent clients may take medication that will cause them to become violently ill if they consume alcohol.

Some research has explored the relative efficacy of 12-step approaches to IRT programming. In outpatient treatment-comparative research, Higgins and colleagues (1991; 1993) compared an outpatient behavioral treatment (sp. "community reinforcement approach") with standard outpatient 12-step and found that while nearly all behavioral clients remained in treatment at 3 months, only a third of 12-step clients were retained. In addition, they found that nearly a fourth of the behavioral clients remained abstinent as compared with no 12-step clients. In contrast, other research has found few significant differences between cognitive-behavioral treatments and 12-step programming (Brennan, 1998). One study found that the frequency of attending 12-step meetings post-treatment was associated with reporting having found a sponsor (Fiorentine & Anglin; 1996). In turn, having a sponsor significantly reduced relapse rates among interviewed clients.

Some research suggests that treatment modality is unimportant and that it is the counselor's consistent use of the skills and theories of their chosen treatment approach that is related to client successes (Luborsky, McLellan, Woody, O'Brien, & Auerbach, 1985). Specifically, their research found that "purity" of treatment, or extent to which counselors utilized the skills endorsed by their chosen treatment approach, was correlated with client successes.

Another consideration of counseling modality is group versus individual treatment approaches. Research has found few differences in the relative efficacy of these approaches (Graham, Annis, Brett, & Venesoen, 1996). Both individual and group approaches resulted in similar client reports of substance use at 12-month

follow-up. Group clients, however, did report higher levels of social support from friends than did individual clients.

**Program Duration.** Length of time in treatment has been widely accepted in the literature as one of the more significant predictors of successful offender treatment (e.g., Anglin & Hser, 1990; Condelli & Hubbard, 1994; DeLeon, 1991; Hubbard et al., 1988; Simpson, Joe, Lehman, & Sells, 1986; Khalsa & Anglin, 1991; Simpson, 1981).

While decreases in substance use after programming as brief as 50 days have been identified (Bale et al., 1980), other research purports that longer treatment is necessary. Simpson (1979) found that opiate-addicted clients needed a minimum of 90 days in treatment for reductions in opiate use. In a later study, Simpson (1981) found that follow-up outcomes for clients in treatment for less than 3 months was not significantly different than the effects of outpatient detoxification programs. An even longer duration of 4 to 6 months of treatment for opiate use was estimated by De Leon, Wexler, and Jainchill (1982) to effectively reduce substance use and criminal behaviors.

Research by Fiorentine and Anglin (1996) found that counseling frequency predicted treatment success beyond length of stay, suggesting that length of stay findings may in fact be an artifact of number of counseling opportunities. Specifically, these researchers found that numbers of group and individual counseling sessions impacted client successes. As the researchers state, "treatment providers and funding agencies may want to rethink what constitutes an appropriate level of client contact" (p. 346).

**Program Activities.** One study found that a greater variety and frequency of services were more likely to produce longer treatment stays and better post-treatment outcomes (McLellan et al., 1996). A study of programming available in California found that substance user individual counseling/education were provided by nearly all programs, although a few residential programs only provided group counseling and no individual (Polinsky et al., 1998). Just over 60% of residential programs provided physical exams, HIV/AIDS testing, and TB testing. Substance misuse counseling was present in 90% of the programs and one-fourth of residential programs provided group therapy. Most residential programs (85%) reported having 12-step groups. Informational groups were available at 80% of programs. Also, life skills, such as anger management, social skills, and practical skills, were a focus in nearly all programs (over 80% of programs reported providing the aforementioned skill-development approaches). Parenting skill development was available in only half of the programs.

**Aftercare.** The literature has consistently highlighted the import of aftercare (Brown, 1979; Prendergast et al., 1995; McKay et al., 1997). This value has been increasingly accepted in many programs and, in California, one study found that 80% of residential programs included aftercare and 85% provided discharged clients with opportunities to participate in social outings/gatherings (Polinsky et al., 1998). In one study of cocaine abusers, Khalsa and colleagues (1993) found that clients who participated in aftercare programming, including individual and group counseling and self-help groups, were twice as likely to report abstinence at 1-year follow-up as clients who had only participated in the primary treatment episode. In fact, one study found that 21-day inpatient treatment for cocaine abuse was less effective than outpatient or self-help groups, unless the IRT treatment was followed by aftercare (Khalsa et al., 1992). Nearly half of IRT-only clients relapsed within a year whereas only 12% of IRT-plus-aftercare clients reported relapse at the year follow-up.

**Staff.** Some experts have recommended that staffing patterns mirror the demographics of the clients (Nurco et al., 1988). Researchers have pointed out the benefits of this for women (Beckman & Bardsley, 1986) and minorities (Finn, 1994). As one study found that female clients actually reported substantial sexual harassment by male staff, it is clear that gender concerns may be of considerable concern (Wasnick et al., 1980). However, some research that has explored the effects of gender on female client retention and relapse found that there was no significant effect of counselor gender on clients' reported emotional attachment, length of stay, or relapse rates (Machell, 1991). Client reports of counselor credibility are similarly unaffected by counselor gender (Dell & Schmidt, 1976; Heppner & Pew, 1977).

Empathy has received considerable attention as a factor in the counselor-client relationship (Kirk, Best, & Irwin, 1985; Luborsky, Singer, & Luborsky, 1975; Luborsky et al., 1985). Whereas some researchers have



found empathy to positively impact client success (Luborsky et al.), others have found no relationship (Kirk et al., 1985).

Stylistic factors have been found to be important. One study found that a directive or confrontational style of counseling evoked more resistance from clients and resulted in poorer outcomes at follow-up (Miller, Benefield, & Tonigan, 1993). In fact, the frequency of therapist confrontation directly predicted the amount that the client reported having used alcohol at follow-up. This may be due to the fact that a fundamental factor in treatment success may be the cooperative alliance developed between the counselor and client. Research has shown that client reports of their perceived helpfulness, as measured by the Helping Alliance Questionnaire, of the counselor served as the greatest predictor of outcome (Luborsky et al., 1985).

Recovery status of staff has been a source of some controversy within the field. Unfortunately, the majority of research on the issue was carried out nearly two decades ago and thus the presented findings should be considered with this major shortcoming in mind. Authors have suggested that recovery status may result in overidentification with the clients that may, in turn, impair counselor effectiveness (Valle, 1979). Hoffman and Minder (1975) also reported that recovering counselors reviewed in their research were dependent and conventional and appeared to lack autonomy. This is in striking contrast to findings reported by Stoffelmayr, Mavis, and Kasim (1998) where recovering counselors reportedly utilized a wider range of treatment goals and more varied techniques than their non-recovering colleagues. In support of this position, clients in one study assigned a higher quality rating of the therapeutic relationship to recovering counselors than non-recovering professionals (Lawson, 1982). This may, in part, be due to clients' perceptions that recovering counselors are a more credible source of information about street drugs (Lo Sciuto, Aiken, Ausetts, & Brown, 1984; Sinnett, Hagen, & Harvey, 1975). Other research found that recovery status did not seem to impact clients' reported belongingness, length of stay, or relapse rate (Machell, 1991) nor did recovery status seem to influence general level of counselor performance (Argeriou & Manohar, 1978). Recovery status had no impact on client perceptions of counselor trustworthiness, expertness, and attractiveness (Johnson & Prentice, 1990).

Professional training may be the key factor resolving these findings, as research has found that recovering staff may not possess or value the professional training typified among non-recovering staff (McGovern & Armstrong, 1987; Stoffelmayr et al., 1998). In one study, researchers found that clients believed counselors with professional training to be more trustworthy and expert, regardless of their recovery status (LoBello, 1984). Another possible cause for the confusion may be attributable to the assumption in the aforementioned research that non-recovering staff members do not have personal problems related to recovery. Specifically, Stoffelmayr and colleagues identified a third category of staff: non-recovering staff who are a part of families with recovering or addicted members. The oversight of previous research to include these staff members as a separate category is surprising in light of the wealth of literature available on adult children of alcoholics. The research completed by Stoffelmayr and colleagues found that non-recovering staff with recovering or addicted family members were similar to non-recovering staff in terms of treatment approach but fell between recovering and non-recovering staff in terms of their role within the program.

Other staff behaviors that have been associated with client success include the development of a detailed treatment plan, regular counseling sessions, and use of referral sources (McLellan, Woody, Luborsky, & Goehl, 1988).

As pointed out above, regardless of admission criteria, staff will work with mentally ill clients. Accepting this premise, it is imperative that programs provide staff development and training for work with this population. Carroll (1990) proposes three major foci for staff training: (1) the acknowledgement that clients with mental health challenges can achieve sobriety, (2) the proper use of prescribed medications, and (3) the need for flexible treatment strategies when working with clients with mental illness. Effective staff would need to implement non-judgemental interventions, provide support, and assist the client in reality-grounding.

Staff retention is of considerable concern. Counselors usually have heavy caseloads and burnout in 6 to 12 months. The implication of this is that staff are generally new to the programs and may thus have little training or knowledge of the respective programs. In addition, soon after they are comfortable in the programs, they approach burnout and again cannot be productive. This is a major concern for programs that have received insufficient attention.

**Targeting Diverse Populations.** Professionals in the field have begun to recognize that women have distinctive treatment needs that are consistent with their experiences and roles in society. These concerns include parenting, social relationships, and, as noted above, sexuality. In particular, women are likely to have a history of extensive trauma and yet few programs address sexuality concerns (Wasnick et al., 1980). One treatment program which encouraged discussion and processing of sexual abuse found that women's outcomes significantly improved (Stevens, Arbiter, & Glider, 1989). In fact, research found that when women were sharing their experiences openly, male clients were more likely to talk about their own childhood rapes and traumas.

One program targeted the needs of women and found that the addition of an assertiveness module to group significantly increased clients' knowledge about assertiveness, communication skills, and sexual health (Hiller, Rowan-Swa, Bartholomew, & Simpson, 1996). Furthermore, the assertiveness module was associated with more positive attitudes toward assertion and safe sex as well as overall improvements in reported psychological well-being. In accordance with identified social functioning difficulties among women, researchers have recommended that treatment for females should include vocational counseling and training, guidance in parenting, and counseling to enhance self-esteem (Griffin et al., 1989; Kosten, Rounsaville, & Kleber, 1985). Some residential treatment programs have even provided treatment for pregnant women and their children (e.g., Stevens & Arbiter, 1995). Additional research suggests that women are likely to benefit organized, gender-specific, alcohol support groups (Kaskutas, 1994).

Efficacious treatment of mentally ill clients, in particular, demands collaboration of the IRT staff with clinical support staff such as psychiatrists or psychologists (Carroll, 1990; Woody, McLellan, Luborsky, & O'Brien, 1990). Unfortunately, most programs do not consult mental health professionals regularly about their mentally ill clients.

**The Final Analysis.** In a review of published research, Losel (1995; p. 33) concluded that the most important variables in successful drug and alcohol treatment were:

- theoretically sound conceptualization of program and evaluation;
- dynamic assessment of the offender's risk;
- intensive service for high risks;
- appropriate targeting on the criminogenic offender's needs;
- differentiation of criminogenic from noncriminogenic needs;
- improving thinking, social skills, and self-control mechanisms;
- applying reinforcement contingencies;
- strengthening "natural" protective factors (e.g., in the family);
- neutralizing criminogenic social networks;
- matching offender characteristics with the program and staff;
- matching of staff with type of program;
- thorough selection, training, and supervision of staff;
- improving the quality of [staff-client] relationship;
- encouraging staff motivation and consistency;
- assessment of adequate program implementation;
- realizing high program integrity

## Purpose

The intent of this study was to examine participant characteristics, as well as program descriptions, for each of the four sites. Participant information, consisting of quantitative data, is presented for each site simultaneously. In the program profile section, each site is described individually. Program profiles include a description of the setting, program admissions and discharges, treatment emphasis or orientation, program activities, staff description, and file review. Each section within the program profiles details program procedures and expectations, followed by a research analysis of actual practices.

The research findings described herein include quantitative data as much as possible, but are supplemented with qualitative information. An evaluation of each program necessarily incorporates a comparison of actual practices to stated practices. This comparison is believed to be crucial to inform

program staff about practices that may differ from their perceptions. Another important component of program evaluation is to compare actual practices to established standards. The most widely accepted treatment standards for these sites are set by the Alcohol and Drug Abuse Division (ADAD). Licensed treatment programs are expected to adhere strictly to these standards, unless a waiver is given. The present study evaluated actual program practices against a number of ADAD standards; however, contracts between the IRTs and ADAD were not reviewed. The intent of this comparison was neither to evaluate whether ADAD was performing its functions nor determine whether programs were in violation of their licensure. The intent was to solely compare actual program practices to a widely acknowledged standard of care.

# METHOD

## Participants

Study participants included 558 felony offenders admitted to treatment at one of the IRT sites: 124 at CIRT, 168 at DART, 140 at RTC, and 126 at STIRRT. Participants were predominantly male ( $n = 456$ ). Ethnic backgrounds were primarily Anglo ( $n = 281$ ) with similar numbers across treatment sites of Hispanic ( $n = 141$ ) and African American ( $n = 121$ ). Ten participants were of another descent and five were missing ethnicity data.

## Programs

The four IRT centers evaluated in this study are located across the state of Colorado. The treatment centers selected are of varying lengths and bed space capacities. DART is located near downtown Denver. DART is a 42-day program with 34 beds for both male and female offenders (approximately 24 beds for males and 10 beds for females). Male offenders reside at the Williams Street community corrections center whereas female offenders are housed at Tooley Hall. Males and females attend DART together on the grounds of William Street Center. STIRRT is located in north Denver, and clients stay on-site at the same location where they participate in therapy. STIRRT is a 14-day program with 20 beds for male offenders. CIRT is located in Alamosa, a rural location in southern Colorado. CIRT is a 45-day program with a total of 26 beds allocated for male offenders. The RTC program, located in Greeley, accommodated 81 clients at the beginning of the study, with 60 designated for male offenders and 21 for females. At the close of this study, there were 30 beds for male offenders and 10 for females. The program lasts between 30 to 60 days, contingent upon funding resources.

## Materials

Several instruments were used to profile treatment participants. These instruments include the standardized offender assessment (SOA) battery. The SOA consist of four instruments, namely the Simple Screening Instrument (SSI; Center for Substance Abuse Treatment, 1994), the Adult Substance Use Survey (ASUS; Wanberg, 1997a), the Level of Supervision Inventory (LSI; Andrews & Bonta, 1995), and the Substance Use History Matrix (SUHM; Bogue & Timken, 1993). Two additional measures were included to measure motivation and readiness to change: the University of Rhode Island Change Assessment (URICA; McConaughy, Prochaska, & Velicer, 1983) and the Circumstances, Motivation, Readiness, and Suitability (CMRS; DeLeon, Melnick, Kressel, & Jainchill, 1994).

**Simple Screening Instrument (SSI).** The SSI was developed in 1994 by a group of experts through the Center for Substance Abuse Treatment. Eight existing instruments served as the foundation for the SSI items. The SSI screens for alcohol and other drug use over the previous 6-month period. This 16-item instrument is administered as a self-report questionnaire. Two studies examined the SSI with criminal populations (Peters & Greenbaum, 1996; O'Keefe, Klebe, & Timken, 1999). Both studies found high test-retest reliability, ranging from correlations of .83 to .97 (Peters & Greenbaum; O'Keefe, et al.). The SSI correctly classified 82% of Texas inmates as alcohol or drug dependent (Peters & Greenbaum). The SSI also displayed good convergent validity with other measures of substance abuse for Colorado offenders (O'Keefe et al.). Divergent validity estimates were sufficiently low to suggest that the SSI distinguishes substance abuse from other individual characteristics such as criminal risk or mood.

**Adult Substance Use Survey (ASUS).** The ASUS (ASUS; Wanberg, 1997a) is a self-report questionnaire that assesses substance abuse information. Items are rated using Likert-type items across five subscales: (1) lifetime involvement in drugs across ten categories, (2) disruptive consequences and problems related to drug use, (3) antisocial attitudes and behaviors, (4) mental health or emotional distress, and (5) defensive test-taking attitude. Internal consistency correlation coefficients of the subscale scores ranged from .80 to .95 (Wanberg, 1997b). The subscale scores had low to moderate correlations with prior inpatient and outpatient treatment attendance.

**Level of Supervision Inventory (LSI).** The LSI is a measure of recidivism risk (Andrews & Bonta, 1995). The LSI consists of 54 items and is administered as a semi-structured interview. Possible scores range from 0 to 54, such that higher scores characterize offenders with more serious re-offending risk. The LSI exhibited moderately high internal consistency estimates in studies with Canadian (Andrews, 1982; Loza & Simourd, 1994) and Colorado offenders (Arens, Durham, O'Keefe, Klebe, & Olene, 1996). Validity studies found that the LSI performs as well or better than similar instruments in predicting re-offense with Canadian (Andrews, 1982; Bonta & Motiuk, 1985, 1987, 1990; Gendreau, Little & Goggin, 1996) and Colorado felons (O'Keefe, Klebe, & Hromas, 1998).

**Substance Use History Matrix (SUHM).** The SUHM was designed for use with Colorado felons as a means to assess substance use patterns over a lifetime (Bogue & Timken, 1993). Information obtained for the SUHM is not quantified. However, data from the SSI, ASUS, and LSI is summarized on the form. Additionally, the assessor derives a treatment level from the ASUS disruption subscale and the LSI total risk score. Offenders are categorized into one of the following levels: (1) no treatment, (2) drug and alcohol education, (3) weekly outpatient treatment, (4) intensive outpatient treatment, (5) intensive residential treatment, (6) therapeutic community, and (7) no treatment: assess for psychopathy. Assessors can recommend offenders to a different level using their clinical judgment.

**Circumstances, Motivation, Readiness, and Suitability Scale (CMRS).** The CMRS inventory assesses external pressures (Circumstances), intrinsic pressures (Motivation), Readiness, and Suitability for residential TC treatment (DeLeon, Melnick, Kressel, & Jainchill, 1994). The 52 items on the CMRS are answered on 5-point Likert-type scales ranging from 1 (strongly disagree) to 5 (strongly agree) or 9 (not applicable). The four subscales are: circumstances (C; 11 items), motivation (M; 17 items), readiness (R; 8 items), and suitability (S; 16 items). Internal consistency of the M, R, and S scales is adequate, with Cronbach's alphas between .70 and .86; the reliability of the C scale was lower (approximately .34) most likely due to it being a measure of unrelated items. For the total scale, internal consistency reliability is .91 (material provided by Jean Peters, March, 2000). Based on correlations of the CMRS and retention in treatment, a linear relationship from .19 to .31 was found for 30-day retention across all scales for 3 cohort groups of TC participants. Longer-term predictive validity of .16 and .21 across all scales was found for TC cohort groups in the 10-month and 12-month retention in treatment groups, respectively (DeLeon, Melnick, Kressel, & Jainchill, 1994).

**University of Rhode Island Change Assessment (URICA).** The URICA (McConaughy, Prochaska, & Velicer, 1983) is a 32-item inventory designed to assess an individual's placement along a theorized continuum of behavioral change. Items describe how a person might think or feel when starting therapy and elicit the level of agreement with the statements. Participants answer on 5-item Likert scales that range from 1 (strongly disagree) to 5 (strongly agree), and they obtain a score on each of four subscales. Each stage of change, Precontemplation, Contemplation, Action, and Maintenance, is measured using an 8-item subscale. For each of the four subscales, Cronbach's alpha was .69, .75, .82, and .80, respectively (DiClemente & Hughes, 1990).

## Procedures

Treatment participation information was collected in a variety of ways. Researchers were on-site at each program on a weekly basis for more than a year. During these visits, researchers conducted file reviews, client surveys, and database searches. Researchers also reviewed treatment files to collect participant demographics, referral information, social history information, substance use and treatment history, risk assessments (i.e., LSI), and substance abuse assessments (i.e., SSI, ASUS, SUHM). Researchers collected a clinician rating of participants' stage of change from staff. Program staff classified participants at admission and discharge into one of the following stages: Precontemplation, Contemplation, Determination, Action, Maintenance, or Relapse.

Several government databases were used to supplement the treatment files. Information that was missing in the client files was collected from DOC and Probation databases, whenever possible. Criminal history information, including current sentencing and offense information, was obtained through a search of the National Crime Information Center (NCIC) and the Colorado Crime Information Center (CCIC) databases.

The CMRS and URICA were administered to treatment participants as part of the research study at CIRT and RTC. As requested by the STIRRT and DART programs, these instruments were used by the program, and therefore, were included in the participants' admission packet along with the informed consent form. All study participants signed a consent form that detailed the purpose of the study, the voluntary nature of participation, and the confidentiality of the data. They were also informed that there was neither compensation for participation nor negative consequences for nonparticipation, and they could discontinue at any time. Only individuals who signed the informed consent completed the CMRS and URICA.

Researchers approached treatment participants within two weeks of admission to CIRT and RTC. They explained the study purpose, intent, consent form and administered the CMRS and URICA in person during weekly visits to the sites. Assessments conducted at CIRT and RTC were not viewed by treatment staff while assessments completed by DART and STIRRT clients were available to treatment staff.

Researchers made weekly visits to the programs for more than a year to observe program operations. During these on-site visits, program information was collected through file reviews, written curricula and activities schedules, and attendance of treatment groups and staff meetings. Multiple researchers observed multiple treatment groups per site. During regular site visitations, researchers conducted informal interviews with treatment staff, security, administrative personnel, and clients.

# PARTICIPANT PROFILE

## Demographic Characteristics

A breakdown of sample size by site included 124 at CIRT, 168 participants at DART, 140 at RTC, and 126 at STIRRT. Demographic information was collected from treatment files whenever available. However, some data elements were not collected routinely as part of intake into the program. As a result, data were incomplete or missing. Table A presents the demographic data for study participants at each site. Ethnic data was missing for 5 cases, marital status for 4 cases, highest achieved education for 85 cases, number of children for 81 cases, and number of dependents for 99 cases.

Statistical analyses were conducted to determine where differences existed between the four groups on demographic characteristics, other than gender. An alpha level of .01 was used for all statistical tests. To meet the chi-square test assumptions, individuals classified as 'other' on ethnic background were excluded from that analysis and individuals who attended some college were excluded from that comparison. Furthermore, marital status was recoded as single (included single, divorced, separated, and widowed) and non-single (included married and common-law). The results of the statistical tests are listed in Appendix A.

**Table A. Demographic Characteristics by Program Site**

	CIRT		DART		RTC		STIRRT	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Gender								
Male	124	100%	121	72%	85	61%	126	100%
Female	0	0%	47	28%	55	39%	0	0%
Ethnicity								
Anglo	67	54%	66	40%	75	54%	73	58%
African American	8	6%	71	44%	15	11%	27	21%
Hispanic	47	38%	25	15%	47	34%	22	18%
Other	2	2%	2	1%	2	1%	4	3%
Marital Status								
Single	53	43%	93	56%	45	32%	63	50%
Married	18	14%	19	12%	39	28%	30	24%
Common-law	10	8%	13	8%	14	10%	3	2%
Divorced	36	29%	28	17%	30	22%	22	18%
Separated	7	6%	10	6%	6	4%	8	6%
Widowed	0	0%	2	1%	5	4%	0	0%
Education								
1 – 8	4	4%	7	5%	9	7%	4	4%
9 – 11	27	25%	57	38%	29	24%	38	39%
12	28	26%	38	26%	42	35%	19	19%
GED	41	38%	38	26%	39	32%	35	36%
Some college	7	7%	7	5%	2	2%	2	2%
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Age	33.3	9.2	33.5	8.6	33.6	7.1	31.8	8.2
# of Children	1.5	1.6	1.7	1.8	1.9	1.7	1.1	1.6
# of Dependents	1.2	1.5	1.2	1.6	1.8	1.5	1.1	1.7

Treatment participants at the four sites did not differ on age or education level. However, groups were different on ethnicity, marital status, number of children, and number of dependents. Specifically, DART clientele had a higher rate of African American admissions than the other three sites, whereas CIRT and RTC tended to have more Hispanic participants. The RTC clientele was less likely to be single, also reporting more children and dependents, than individuals at the other sites.

## Substance Use

Information about participants' drug use was collected from treatment files when available. Rarely were assessments of any kind sent by the referral agency. Each program assesses client drug use in a different manner. DART administers the ASUS and LSI, although the ASUS was frequently found in the files unscored. Recently, RTC began administering the SOA battery at intake but did not incorporate the battery during the majority of this study. Each program administers self-report questionnaires or conducts intake interviews with program admissions. Due to the inconsistent assessment methods, as well as late or incomplete assessments, it was difficult to obtain basic substance use information for participants. Especially difficult was establishing whether or not participants ever used various drugs. If the drugs were not listed in their files, it was often not possible to determine whether they never used those drugs or whether they merely were not asked about their use of those drugs.

Table B presents treatment participant's age at first use, drug of abuse, and reported lifetime use of all drug categories. Some data were missing on age at first use ( $n = 54$ ); drug of abuse ( $n = 27$ ); and lifetime use of alcohol ( $n = 17$ ), marijuana ( $n = 31$ ), cocaine ( $n = 35$ ), amphetamines ( $n = 62$ ), hallucinogens ( $n = 78$ ), inhalants ( $n = 93$ ), opiates ( $n = 85$ ), sedatives ( $n = 91$ ), and tranquilizers ( $n = 86$ ).

**Table B. Drug Use Patterns**

	CIRT		DART		RTC		STIRRT	
	M	SD	M	SD	M	SD	M	SD
Age of first drug use	14.2	3.6	14.6	4.5	14.4	3.4	14.3	3.8
	n	%	n	%	n	%	n	%
Drug of abuse								
Alcohol	49	45%	20	12%	26	18%	34	28%
Marijuana	19	17%	22	14%	25	18%	35	29%
Cocaine	21	19%	75	47%	46	33%	31	26%
Amphetamines	14	13%	22	14%	35	25%	17	14%
Opiates	4	4%	18	11%	5	4%	4	3%
Other	2	2%	4	2%	3	2%	0	0%
Reported lifetime use								
Alcohol	114	97%	153	93%	136	97%	115	96%
Marijuana	105	94%	149	92%	125	91%	113	97%
Cocaine	83	77%	145	88%	120	90%	95	81%
Amphetamines	46	52%	71	45%	79	60%	68	58%
Opiates	25	29%	67	44%	23	18%	15	14%
Hallucinogens	34	40%	67	43%	56	44%	45	41%
Sedatives	7	9%	32	21%	14	11%	6	6%
Tranquilizers	6	8%	30	19%	15	12%	8	7%
Inhalants	8	10%	13	9%	15	12%	8	7%

There was no difference found between groups on age at first use, but there was a difference between participants at the four sites on drug of abuse. The comparison between groups on drug of abuse excluded



opiates and 'other' drugs from the chi-square analysis to meet test assumptions. DART and RTC participants were more likely to abuse cocaine while CIRT participants were more likely to abuse alcohol. STIRRT clients had no distinct drug of abuse. Groups differed on lifetime use of opiates and sedatives. No significant differences were found between groups on lifetime use of all other drug categories. Appendix A lists the results from these statistical analyses.

Available data from the SOA, including SSI, ASUS, and LSI scores, were gathered from treatment files. Although the SOA is supposed to serve as the basis for treatment placements, assessments were rarely sent to the programs. In fact, almost never was there a complete SOA sent to the program with the referral. Even STIRRT, which requires a completed assessment as part of their admission criteria, was missing assessment information for 37% of offenders. Overall, 56% of IRT participants were without SOA assessments (ASUS and LSI scores). To better profile study participants, missing SOA data was augmented by DOC and Probation database searches. Nonetheless, results should be interpreted cautiously due to substantial amounts of missing data even after additional database searches were conducted. Specifically, data were missing on the SSI ( $n = 266$ ), Involvement ( $n = 144$ ), Disruption ( $n = 136$ ), Social ( $n = 147$ ), Mood ( $n = 148$ ), Defensive ( $n = 144$ ), Global ( $n = 136$ ), and LSI ( $n = 55$ ). On average, assessments were conducted 9½ months prior to their program admission, suggesting outdated assessments at best. Table C presents SOA data for each program.

Differences between agencies on SOA scores were analyzed using one-way ANOVAs (see Appendix A for statistical results). There were no differences between groups on any of the ASUS subscales, but differences were found on the SSI and LSI scores. Specifically, STIRRT participants scored lower on the SSI and higher on the LSI than the other groups. The SSI is a screening instrument rather than a severity instrument; even though STIRRT clients scored lower, all groups scored above the established cut-off score of 4. Scores above 4 indicate the presence of a substance abuse problem. The higher LSI score is likely a function of STIRRT's admission criterion, which requires a LSI score of 29 or higher.

Treatment levels derived from LSI and ASUS scores, as well as recommended treatment levels, were analyzed. There were no derived levels for 67% of cases ( $n = 372$ ) and no recommended levels for 61% of cases ( $n = 341$ ). For research purposes, treatment levels were calculated from assessment scores whenever possible. Likewise, if a recommended treatment level was absent, the derived level was substituted for the missing recommendation level. Despite these calculations, there remained 147 cases with missing derived and recommended levels. Figures 1 and 2 depict derived and recommended treatment levels for each program. Remarkably, most clients were recommended for level 4 treatment, intensive outpatient services, rather than the IRT modality.

**Table C. Standardized Offender Assessment (SOA)**

	CIRT		DART		RTC		STIRRT	
	M	SD	M	SD	M	SD	M	SD
SSI	7.6	3.3	7.3	4.1	6.9	3.9	5.5	4.3
ASUS								
Involvement	11.1	7.3	10.4	6.5	9.8	5.7	9.3	6.6
Disruption	20.8	18.0	18.5	17.6	20.4	18.6	15.7	16.1
Social	11.2	4.4	9.5	5.1	11.2	5.1	11.0	5.3
Mood	7.7	5.4	7.6	6.0	6.9	5.4	5.7	4.0
Defensive	7.9	3.1	7.8	4.2	8.4	3.9	9.2	4.2
Global	50.4	27.7	45.7	28.0	46.8	28.4	41.2	26.6
LSI	27.1	6.8	29.8	6.4	29.1	8.1	32.2	4.0

Figure 1. Derived Treatment Levels

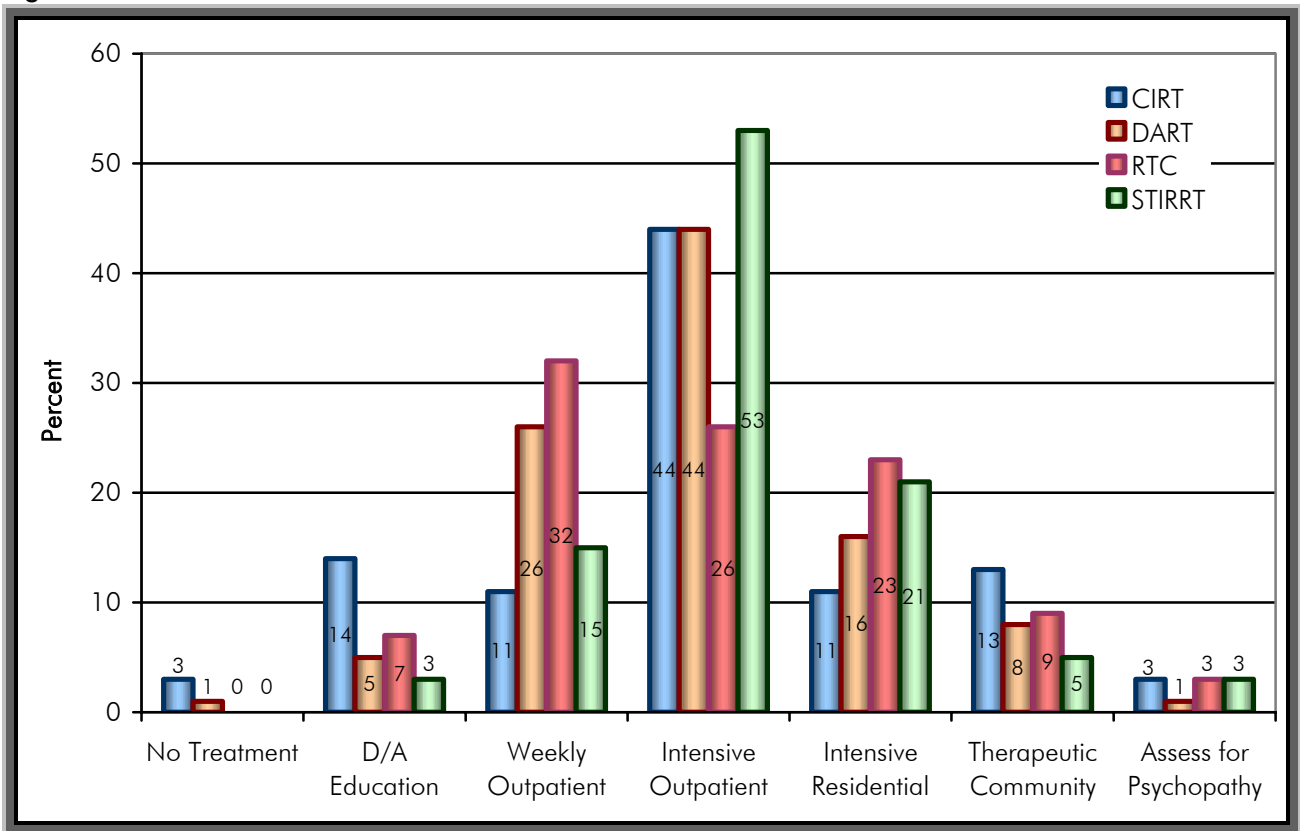
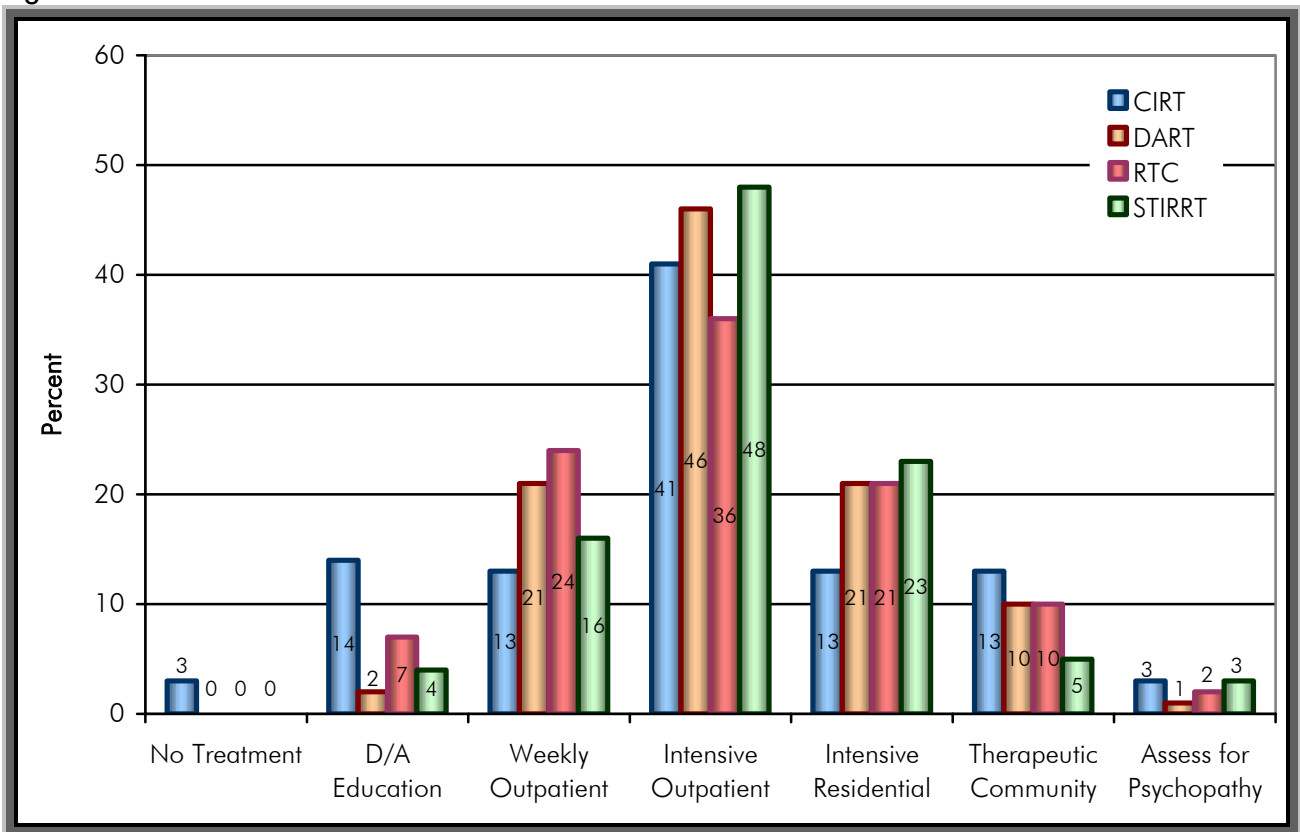


Figure 2. Recommended Treatment Levels



## Criminal History

Baseline criminal history data were obtained on research participants from NCIC/CCIC searches. The number of prior arrests, by degree of seriousness, was analyzed (see Table D). A series of one-way ANOVAs were conducted to compare differences across sites. No differences were found for the number of arrests for failure to appear or technical violations. RTC had significantly more misdemeanor arrests; RTC and DART had significantly more nonviolent arrests; and DART and STIRRT had significantly more violent arrests. The percentage of clients who had prior arrests for various crime types is listed in Table E. The most common crimes included sale, possession, or distribution of drugs; third degree assault; forgery; theft or larceny; trespassing; and driving under the influence.

**Table D. Number of Prior Arrests by Category**

	CIRT	DART	RTC	STIRRT
	M (SD)	M (SD)	M (SD)	M (SD)
Failure to Appear (FTA)	1.6 (2.2)	2.0 (2.3)	2.0 (2.7)	1.8 (2.2)
Misdemeanor	4.6 (2.9)	5.2 (2.9)	7.0 (6.9)	4.4 (3.0)
Nonviolent Felony	3.3 (2.4)	4.6 (5.4)	5.4 (4.8)	3.5 (2.5)
Violent Felony	0.5 (1.1)	0.8 (1.6)	.3 (0.9)	0.8 (1.3)
Technical Violation	1.4 (1.7)	1.0 (1.6)	1.4 (1.6)	1.4 (1.8)

**Table E. Percentage of Prior Arrests by Crime Offenses**

	CIRT	DART	RTC	STIRRT
Murder	3%	2%	0%	3%
Vehicular homicide	3%	0%	1%	0%
Kidnapping	0%	3%	2%	4%
Sexual assault (1 <sup>st</sup> /2 <sup>nd</sup> degree)	1%	4%	1%	10%
Sexual assault (3 <sup>rd</sup> degree)	0%	1%	1%	2%
Aggravated robbery	3%	10%	0%	6%
Robbery	5%	8%	8%	11%
Drug sale, distribution, possession	65%	92%	71%	74%
1 <sup>st</sup> Degree burglary	7%	5%	6%	3%
2 <sup>nd</sup> Degree burglary	22%	20%	32%	23%
Theft/Larceny	49%	56%	59%	52%
1 <sup>st</sup> Degree Assault	3%	5%	3%	6%
2 <sup>nd</sup> Degree Assault	8%	11%	14%	15%
3 <sup>rd</sup> Degree Assault	23%	17%	39%	22%
Weapons offense	19%	19%	14%	21%
Auto theft	17%	24%	13%	23%
Forgery	22%	25%	39%	18%
Trespass	24%	45%	30%	36%
Escape/ Abscond	7%	7%	46%	10%
Driving under the influence (DUI)	61%	25%	45%	36%

## Motivation and Readiness to Change

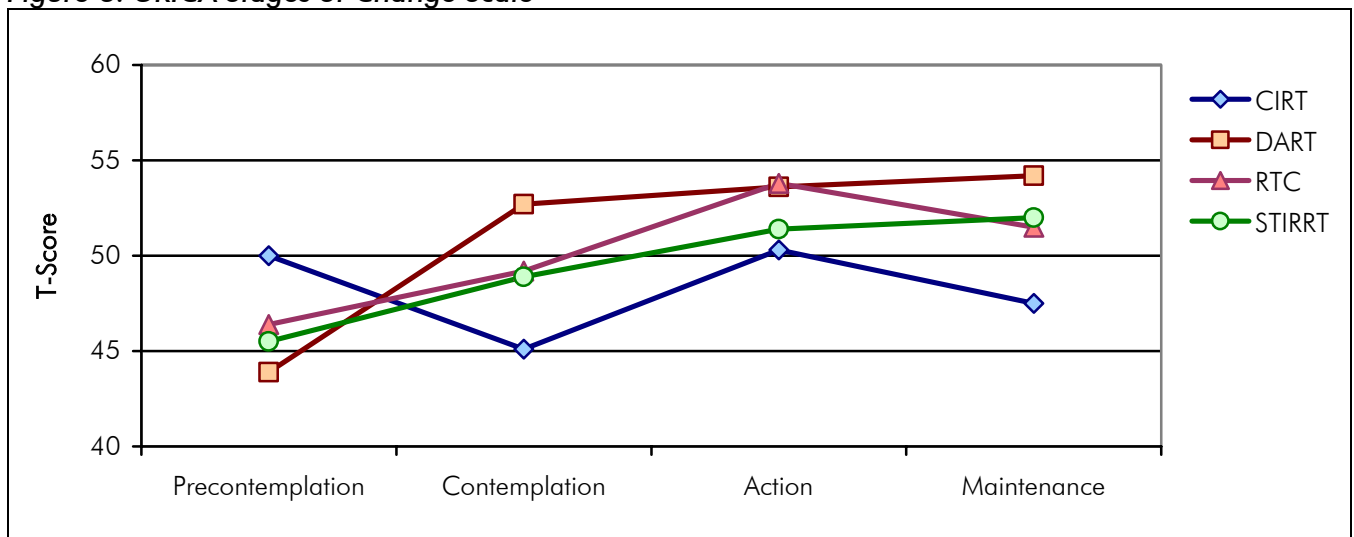
Motivation and readiness for treatment, as measured by the URICA and CMRS, are presented in Figures 3 and 4. URICA scales were converted to T-scores based on established norms. All groups scored within normal ranges on each URICA subscale. CMRS scales were also converted to T-scores, based on the IRT sample distributions, because each subscale was scored on a different scale. Thus, T-scores made comparisons possible across scales. No data was available for the Suitability scale. All groups scored in the high range for the Circumstances and Motivation scales, but scored in the normal range on the Readiness scale.

URICA and CMRS data were analyzed using two-way repeated measures ANOVAs. The findings are presented in Table F. Results show that both main effects were significant, as well as the interaction between

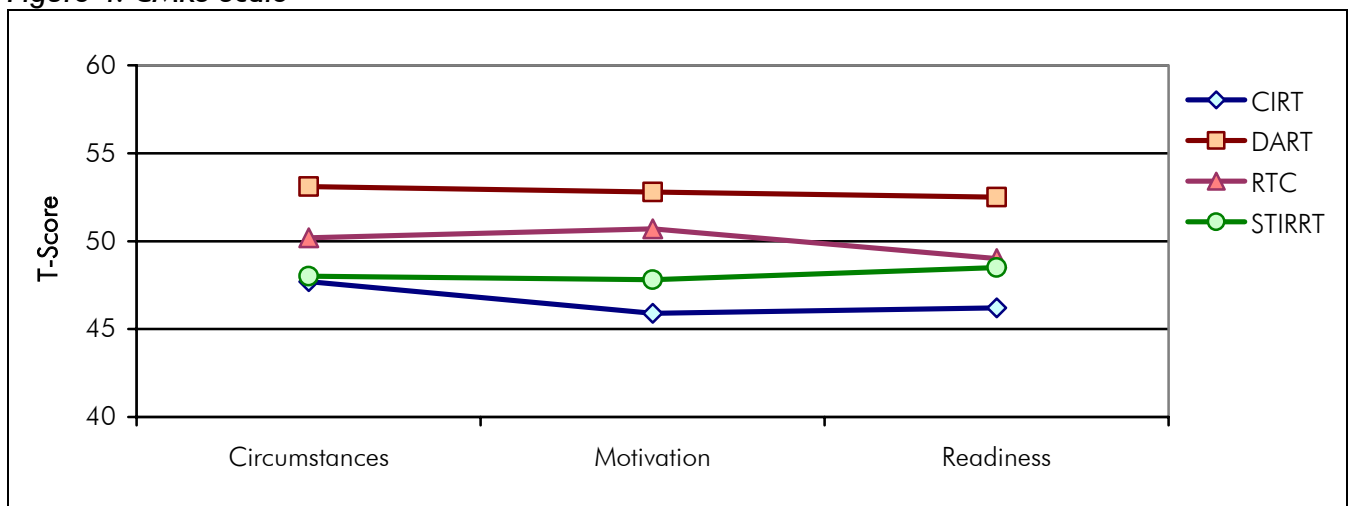
program and URICA scales. It should be noted that effect sizes were extremely small, suggesting that statistical differences were not very meaningful. CIRT scored higher on Precontemplation than the other sites, but scored lower on the other three scales than the other groups. Prochaska, DiClemente, and Norcross (1992) developed profiles from the URICA scales using cluster analysis. Interestingly, CIRT participants modeled a precontemplation profile whereas participants at the other three sites exhibited participation profiles. Individuals with precontemplation clusters believe they do not have a problem, which is inconsistent with their placement in treatment. Participation profiles describe individuals who are committed to the process of change, but have probably been through treatment previously and continue to be at high risk of relapse.

There was a main effect for program on CMRS scores. DART participants had higher scores than all of the others. Also, CIRT clients, while not different from STIRRRT clients, scored lower than RTC clients. Although statistical analyses revealed differences between groups on the CMRS, differences were slight as evidenced by the small effect sizes. IRT participants scored in the normal range on the Circumstances scale, but they scored in the high range on the Motivation scale and in the low range on the Readiness scale. These findings are somewhat contradictory, suggesting that clients are motivated to change but are not ready for treatment to instigate that change.

**Figure 3. URICA Stages of Change Scale**



**Figure 4. CMRS Scale**



**Table F. Repeated Measures Analysis of Variance**

Source	df	SS	MS	F	$\eta^2$
URICA					
(P) Program	3.00	2004.25	668.08	4.53*	.03
(U) URICA	1.63	8544.71	5255.06	33.74*	.07
P x U	4.88	6229.58	1277.08	8.20*	.05
Within subjects error	695.93	108397.62	155.76		
Between subjects error	428.00	63125.38	147.49		
CMRS					
(P) Program	3.00	6996.30	2332.10	11.84*	.09
(C) CMRS	1.68	33.92	20.24	.43	.00
P x C	5.03	246.22	48.97	1.04	.01
Within subjects error	628.45	29519.30	46.97		
Between subjects error	375.00	73885.46	197.03		

\*  $p < .01$

## Referrals

IRT participants are referred by various agents through the criminal justice system. Referrals are from the Judicial Branch, including probation, diversion community correction, and drug court, or they are from Corrections, including parole or TASC and transitional community corrections. Participants are primarily referred either as a condition of their placement or as a result of a technical violation while serving an existing sentence. Examples of referrals as condition of placement included inmates on step-down from prison to the community or a sentence by a drug court judge to treatment. Figure 5 displays the referral sources for each site and Figure 6 gives the reasons for referrals. It should be noted that there was often conflicting information in the files or absent data making it difficult to determine referral sources or reasons. These data problems suggest that the results should be interpreted cautiously.

These findings indicate that the programs served different populations, both in terms of referral source and referral reasons. STIRRT clearly focused on offenders with technical violations, primarily under parole or probation supervision. In contrast, CIRT targeted offenders placed in treatment as a condition of their placement. The single largest referral pool was for clients on DOC transition supervision. DART had high number of drug court referrals, especially in comparison to the other programs. DART also has strong representation from transition and probation clients. Finally, RTC was nearly equally divided among four referral sources (excluding drug court) and was similarly divided across referrals reasons.

Figure 7 displays the referral locations for the program admissions each site. Referral locations indicate participants' last address prior to treatment admission.

Figure 5. Referral Sources

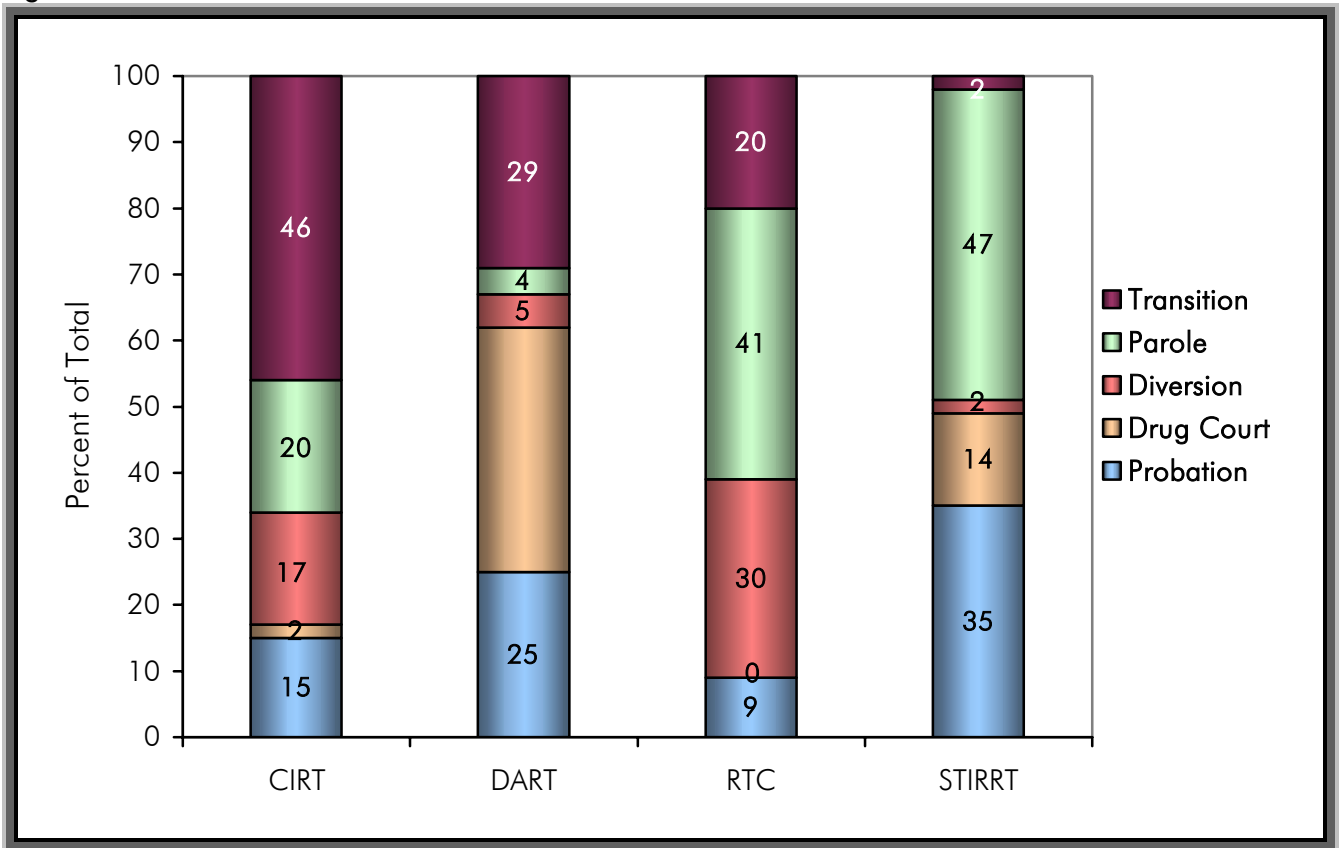
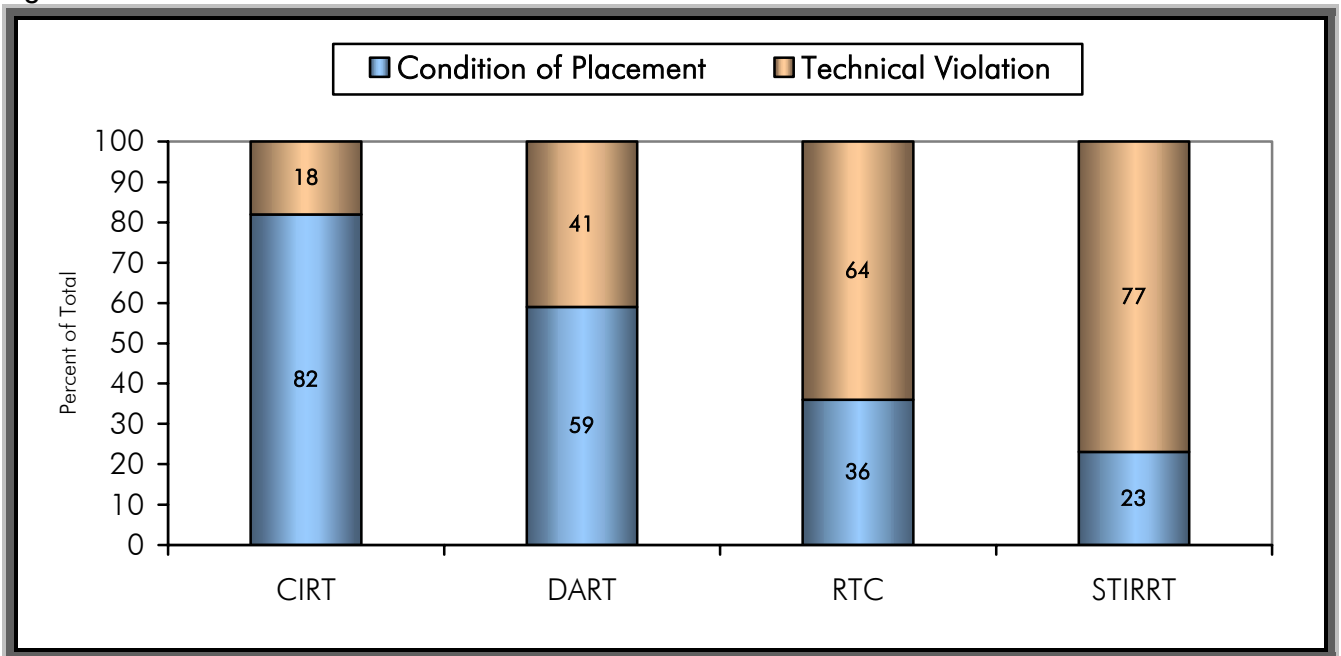
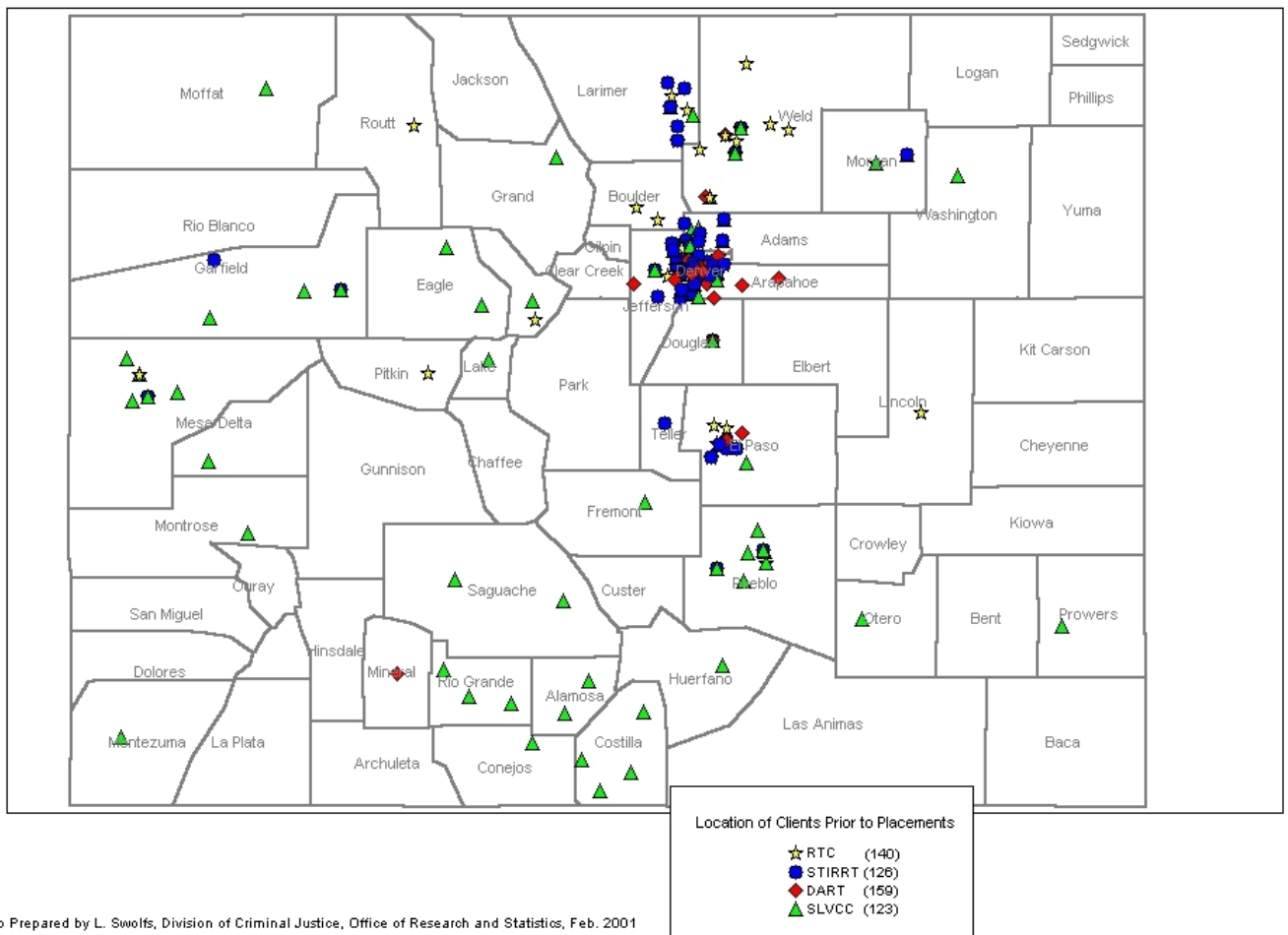


Figure 6. Referral Reasons



**Figure 7. Referral Locations**



Map Prepared by L. Swolfs, Division of Criminal Justice, Office of Research and Statistics, Feb. 2001

## Gender and Ethnic Comparisons

The pattern of differences (e.g., DART and RTC differing from CIRT and STIRRT) indicated that the findings might be related to the gender of the clientele. Comparisons were made between males and females across all variables. Results of the statistical analyses are presented in Appendix A.

Findings indicated that women had significantly more children, higher SSI and ASUS Mood scores, and fewer violent felonies than men. In addition, females were more likely to abuse cocaine or amphetamines as their primary drug than males, whereas males were more likely than females to abuse alcohol or marijuana. Moreover, men were less likely than women to report ever having used cocaine. Notably, females appeared to be more motivated than male participants; they scored lower than males on the Precontemplative Scale and higher on the Contemplative, Action, Circumstances, Motivation, Readiness Scales. No other gender comparisons were significant.

Differences across Anglo, African American, and Hispanic participants were also found. However, it could not be determined how these differences were correspondingly related to environmental factors (e.g., urban vs. rural), socioeconomic status, cultural bias within the criminal justice system, or other unidentified factors. Consequently, interpretation of racial differences is limited. Several analyses revealed significant differences between groups on other demographics characteristics. Hispanic clients tended to be involved in a marital relationship. Anglo clients had fewer children and dependents than African American and Hispanic clients. African American participants tended to be older.

There were several differences on substance use patterns. Anglo participants started using drugs at an earlier age and had higher reported use of amphetamines, hallucinogens, opiates, and sedatives than the other two groups. Anglo clients also had higher involvement, disruption, and global scores on the ASUS than

African American or Hispanic clients. African Americans were more likely to abuse cocaine as their primary drug; Anglos were more likely to abuse amphetamines; and Hispanics tended to abuse either alcohol or cocaine.

Criminal history data was compared across the three ethnic categories. African American clients had a higher number of violent felonies, and Anglo clients had fewer misdemeanors than Hispanic participants. No other comparisons were significant.



# C I R T P R O G R A M P R O F I L E

## Setting

**Program Model.** CIRT is a 45-day program located in Alamosa. The treatment provider is the San Luis Valley Mental Health Center, a local agency serving Alamosa and the larger San Luis Valley area. There were a total of 26 beds allocated for male offenders at the time of this study. A community corrections center and a work release center are also housed in the same facility, which has been in operation since 1989.

The IRT program operates from one wing of the building. The counselor offices, group rooms, sleeping rooms, and day room are located in this wing. Groups are held in a large classroom environment and in the living area designated for the IRT clients. The classroom is set up with tables, chairs, motivational posters, and a whiteboard. The day room is furnished with a white board, sofas, chairs, a television, vending machines, and motivational posters.

IRT clients reside in their own wing, and they are generally segregated from other community corrections clients. Although IRT clients share the dining area with non-IRT clients, they have separate mealtimes. The entire complex spend outdoor recreation times together.

Clients have access to various services that are not directly provided by the IRT program, which include mental health services within the facility, San Luis Valley Medical Center, the Valley Wide Clinic (medical treatment including dental work), and Rainbow's End (a source for inexpensive clothing). The facility also has a fund to refer clients out for some services that are not provided by the IRT program, such as mental health services, domestic violence classes, and sexual assault classes.

**Research Findings.** *The CIRT program was situated in an institutional-type setting, where clients resided and attended groups in the same area. Clients only left this area for dining, outdoor recreation, or outside activities such as doctor appointments or court appearances. The setting was secluded from outside distractions; contacts outside the IRT were kept to a minimum.*

*Despite the rural location, CIRT accepted referrals from around the state. The program fulfilled a gap in substance abuse services in rural Colorado. The program even provided transportation for clients who had no means of getting to the program from their homes. In addition to transporting clients to and from the program, they often assisted them in meeting outside appointments during the course of treatment.*

*The primary group space was a traditional classroom environment, which was adequate for either large or small groups. The second group room was actually the day room, designed for relaxing and watching TV rather than conducting therapeutic groups. Although more comfortable for process-type groups, the day room was prone to frequent distractions because of its central location in the IRT unit. Having space to conduct only two groups simultaneously did not allow for the program to meet the ADAD standards of 12 participants per group, given the size of the program.*

## Admissions

**Program Model.** DOC, Probation services, community corrections centers, and the Department of Youth Corrections refer convicted felons over the age of 18 to CIRT. A community board ultimately determines admission to the program with input from the program director and the IRT coordinator. The program director and the IRT coordinator assess several factors of the potential clients before accepting clients, such as prior placements, criminal history, weapons charges, parole or probation violations, employment, education, and restitution. Excluded from the program are sex offenders, violent offenders, persons with medical conditions, individuals with a history of suicide attempts, management problems, or high escape risks.

There is a waitlist for clients to enter the program. The available bed space is broken down by referral type. At the time of this study, there were 18 beds allocated for DOC clients, 5 for diversion community corrections, and 3 for Probation. Clients accepted by the program are admitted as beds designated for their referral source became available.

**Research Findings.** *The IRT program at CIRT averaged 19 admissions per month, over the 7 months that data was collected at this site. The median waitlist length was 8 days, extending as long as 10 months. Referral dates were missing for 11 participants.*

*There were no requirements for drug and alcohol assessment information, such as an SOA, to be forwarded by the referral agency for a client to be considered for admission to the program. Assessment of substance abuse problems conducted prior to admission was relatively informal. Consequently, an occasional client was admitted with mild or no substance abuse problems. Following admission, staff did a biopsychosocial assessment that was very thorough. Unfortunately, it may have occurred up to three weeks after admission or merely been completed by clients as a self-report instrument rather than interview.*

## Discharges

**Program Model.** Progress in the program is determined by a level system. The basic structure has four levels of privileges. While in the program clients work their way from level 1 to level 4 based on personal performance. With each level, the clients earn more privileges. The staff determine in weekly staffings an individual client's level based on his behavior and progress in treatment. Clients who successfully discharge must complete a 45-day stay and attain a level 4 status. A rating of level 4 could be achieved by attending groups every day, evidence of leadership within the group, absence of write ups, completion of written assignments and development of an aftercare plan. The treatment staff also decides when a client should be regressed and loses privileges.

Failure to follow facility rules may result in disciplinary actions that could be imposed by either treatment or security staff. These include verbal or written warnings or reprimands, restitution, assignment of extra duties, loss of an earned level status, loss of earned time, loss of visitation privileges and/or phone privileges, probation/parole officer notified, or expulsion.

Unsuccessful completion from the program includes expulsion, administrative termination, quitting, or escape. There are written rules provided to the clients detailing the consequences of breaking program rules and lack of participation. Expulsion may be the result of more serious infractions, such as involvement in facility disruptions or the use of chemicals. Administrative terminations result from medical problems or outstanding warrants for the client.

Clients who remain the duration of treatment but do not make satisfactory progress can be discharged unsuccessfully. The consequences for unsuccessful completion or discharge are determined by the referral agency and may involve the client's return to custody. The program itself cannot enforce any consequences other than to refuse to provide the client with a certificate of completion and to inform the referral agency of his lack of progress in treatment. The treatment staff can make recommendations as to further treatment needs in their discharge summary. While in the program, clients are encouraged to participate and follow rules to advance through the program's level system. The program staff relies primarily on the privilege system to provide external motivators to clients.

**Research Findings.** *The data revealed that 96% of clients successfully completed treatment. Of the remaining 4%, five were administratively terminated, one escaped and one transferred to another facility. Seventy-five percent stayed in treatment for 45 days and 7% stayed longer (up to 55 days). Eighteen percent of clients stayed in treatment less than 45 days. These cases typically included early release for clients whose discharge date fell on a weekend.*

*The high percentage of discharges was a better indicator of the number of clients who remained in treatment for the duration than of those who made sufficient progress in treatment. It was found that the discharge criteria were not always enforced. For example, clients might be regressed in the level system to a level 3 just prior to discharge. Although they might not receive a certificate of completion, the discharge summary would note a successful treatment completion. In another example, clients might have a poorly planned aftercare plan and still successfully discharge from CIRT.*

*The staff members were consistent in their approach to noncompliant clients. Primarily, they relied upon the level system as a reward for good progress or as a consequence for poor progress. The program capitalized on an excellent system of privileges to motivate their clients in treatment. Other approaches included warning clients about potential consequences for noncompliant behavior. Also, staff addressed clients' progress, or lack thereof, in discharge summaries that were sent to the referring agent. These discharge summaries made further recommendations for treatment.*

## Treatment Emphasis

**Program Model.** The treatment emphasis at CIRT underwent major changes during the course of this study. In July 2000, the program based its approach upon the Strategies for Self-improvement and Change (SSC). Kenneth Wanberg and Harvey Milkman (1998) developed this curriculum as a cognitive behavioral approach to substance abuse in the criminal justice system. The goal of their approach is to prevent criminal recidivism and substance abuse relapse within community-based and correctional settings. The curriculum contains three phases of treatment: (1) challenge to change, (2) commitment to change, and (3) ownership of change. The guidelines for the curriculum call for a 9- to 12-month treatment length for the entire program. The CIRT program focuses on the first two phases of the curriculum and covers the material in 45-day cycles.

The SSC curriculum provides clients an opportunity to examine their drug and alcohol use and criminal conduct. Clients are provided with knowledge about addictive substances and abuse through journaling and writing assignments. Clients are taught techniques to change their irrational beliefs and criminal thinking patterns. This cognitive behavioral component of the program includes topics such as motivation for treatment where clients appraise their level of desire to change. Through building coping skills and relapse prevention education, clients examine the basic skills to remain clean and sober. Clients are urged to survey and develop the skills needed to change their criminal and addictive thinking patterns through groups focused on irrational thinking, rational self-analysis, commitment to change, and criminal thinking errors.

The CIRT program had an eclectic treatment approach prior to July 2000. Individual counselors each had an area of specialty. Each counselor was responsible for preparing and delivering their own material to treatment participants. The specific areas of focus include drug and alcohol addictions education, interpersonal relationships, 12-step program, life skills and leisure activities. These elements of the program were entirely abandoned since the onset of the SSC curriculum, although the counselors are still given the opportunity to draw on what they believe is important to supplant the SSC curriculum.

An important component of the CIRT program is an autobiography and aftercare plan. By the end of the program, clients are required to present an autobiography to the entire group in client feedback groups. Clients are given the assignment to outline their criminal history and drug use, as well as discuss their aftercare plans. Group members are expected to ask questions, give feedback, and provide encouragement for one another.

**Research Findings.** *There are several strengths to the use of the SSC curriculum for this clientele. This curriculum was developed specifically for this population, and the lessons and written assignments were based on the best-known practices in the field of offender substance abuse treatment. It provided clients a framework to understand their criminal and addictive behavior. With this curriculum, the different staff members were able to present a uniform view of recovery to clients. Use of a written curriculum meant that all clients received the same material, and there no longer was the threat of losing group material with the loss of a staff member.*

*The counselors vocalized their approval over the use of the SSC curriculum, and they immediately learned and implemented the model as directed. They felt that the curriculum was more beneficial and effective than the previous approach. Also, they expressed that all counselors used the same material and framework, thereby providing consistency for the clients across sessions. The new schedule allowed therapists to continue with groups in their specialty area; however, the researchers found that those groups lost priority and were often replaced by films and other groups.*

*The SSC model has some limitations to be considered for treatment delivery. At CIRT, the curriculum was rigidly followed and counselors tended to lecture from the manual. In part, this was to be expected as the staff became familiar with the material. Yet, the lecture format continued for the remainder of the study. As a result, clients' attention was lost and there was little participation among the group members. This structured format did not encourage processing of material, which is where clients ideally would discuss how the lesson could be applied to their own lives.*

*The SSC curriculum is best utilized with closed groups rather than the open-enrollment format at CIRT. CIRT staff compensated for this limitation with "feeder groups" for new admits in their first week. The feeder groups covered lessons 1 to 3 in the SSC manual. The first three lessons cover the foundation of the SSC model. After completion of the feeder group, clients entered the ongoing Phase I group. Even with the feeder groups, there were lessons that referred back to earlier assignments, which may not have been completed by some group*

members. Also, it appeared disjointed to the researchers when a lesson referred back to an earlier one that had been taught by a different staff member.

The final limitation of the SSC at CIRT was the vast amount of material covered in the 45-day treatment cycle. The entire SSC curriculum was designed for delivery over a 9- to 12-month period. While it is commendable that CIRT made the effort to provide two phases of the curriculum, researchers did not find this structure to be optimal. Each lesson was covered in a superficial manner. The quantity of material covered likely relates back to the lecture-format undertaken by the staff. With fewer lessons, the staff would probably have more opportunity to engage participants in discussions.

Continuity of care is an important component for this treatment modality. The development of individualized treatment plans was stressed throughout clients' treatment stays. Every week, clients who were pending discharge presented their aftercare plan to the rest of the group. The group members challenged and supported clients in these groups. However, there were some clients who managed to successfully discharge from the program with weak or vague aftercare plans. In the construction of aftercare plans, linkages to the communities where clients were returning were not made.

## Program Activities

**Program Model.** The therapeutic schedule underwent changes concurrently with the implementation of the SSC curriculum. Staff coverage increased from 8 hours to 12 hours each weekday. Weekend hours increased from no coverage to 4 hours total. This expansion created four additional groups.

Structured program activities with staff present are held Monday through Saturday. At the close of the study, structured group activities were scheduled for approximately 22 hours per week. Each week consists of six SSC groups, six groups of the therapists' choice, a client feedback group, and a therapeutic movie. Clients also attend daily AA meeting for an additional 2½ hours per week, without a therapist in attendance.

Clients are divided into two cohorts depending upon their time of admission. At admission, clients are oriented to the treatment facility by the clinical supervisor. The supervisors cover the first three sessions of the SSC program during the "feeder group." Clients advance to Phase 1 after their first week in the program. After they cycle through all of the lessons in the first phase, participants progress to Phase 2. Thus, approximately half the clients are in Phase 1 while the other half are in Phase 2.

Groups of the therapist's choosing may focus on interpersonal relationships, men's issues, the 12 steps, life skills and leisure, and HIV/AIDS education. Interpersonal relationships groups cover the effects of drug use on relationships, communication, and self-esteem. These groups also offer insight into chemical dependency and enabling practices of family members. Clients begin relapse prevention treatment by identifying the role of relationships in relapse and other high risk factors in their lives.

Men's issues groups cover a variety of topics such as myths to manhood, sensitivity, denial, and parenting issues. In life skills and leisure activities, clients define stress, identify sources of stress, and learn techniques to reduce stress. Clients explore their feelings on drug use, current social networks, and the impact of social networks on drug use. Goal building, positive lifestyle changes, and drug-free leisure activities for recovery addicts are also discussed and practiced.

The 12-step approach is also an important aspect to this treatment program. CIRT clients are invited to begin the path to recovery using the 12 step approach. AA groups are highly structured. Clients are introduced to the steps through handouts and are encouraged to discuss them in the group setting. Clients also hold AA meetings in the mornings without the presence of a therapist.

**Research Findings.** The program scheduled was generally followed, although groups often began late and ended early. On occasion, counselors showed a film in lieu of the scheduled activity. Usually, these were the groups of the therapists' choice rather than the SSC groups.

The increase in staff coverage and treatment groups provided a slight increase in the number of contact hours for clients. The overall number of direct contact hours between staff and clients was low. Researchers found that the low number of groups seemed related to the amount of time spent in individual consultations. Clients had an individual session every week with their primary therapist. Each session extended roughly 45 minutes to 1 hour.

There was limited processing of lecture material in the group setting. It appeared that most of the therapy was believed to take place in individual sessions. This philosophy runs counter to addictions treatment. Much of addict behavior is rooted in privacy and a poor social network. Group therapy strives to break down the barriers of secrecy at the same time that positive peer support is stressed. This treatment philosophy was not observed at CIRT, which may relate to the lack of recovering individuals on staff.

CIRT clients were not observed to be actively involved in the recovery process. Frequently, they did not engage in treatment discussions and appeared bored. Occasionally, clients remained sleeping in their rooms instead of attending group. In addition to their apparent lack of participation in treatment, clients were generally negative about the services provided at CIRT. They expressed that it was not in-depth and that they "have heard it all before."

The scheduled Friday films, as well as those substituted for groups, were not always therapeutic. Even when the movie appeared to address treatment issues, there was no discussion of the movie. It was left up to the clients to draw their own meanings from the films.

The treatment participants were split into two groups, depending on which SSC phase they were in. At times there was an imbalance between the numbers of clients in each group. Usually, one of the groups exceeded ADAD standards of 12 clients per therapist. Large groups were also observed to impede group discussion and participation. Additionally, all 26 clients were brought together to attend the feedback group, the Friday movie, and Saturday groups. Usually two counselors were present for the feedback groups. On Saturdays, however, only one counselor was scheduled to be present.

## Staff

**Program Model.** CIRT treatment staff consisted of four counselors and an IRT supervisor at the beginning of the study. The counselors are responsible for assessments, facilitating treatment groups, weekly individual consultations, and paperwork. The IRT supervisor's responsibilities include managing the program, screening potential clients through paperwork sent by the referral source, orientation of the newly admitted clients, individual and group supervision of the treatment staff, and limited facilitation of individual and group sessions. By the close of the study, an additional case manager position was added to the treatment staff. The case manager is responsible for assisting counselors in facilitating groups, individual assessments, paperwork, and other case management functions.

**Research Findings.** Staff changes at CIRT were minimal during the course of this evaluation. Vacant positions were quickly filled when a suitable applicant was found.

The IRT staff included four out of five staff who were fully certified by ADAD at the beginning of the study. At that time, IRT staff met ADAD's standards for certified staff, having more than 50% of the staff fully credentialed and less than 25% uncredentialed. By the close of the study, however, half of the staff were credentialed and half were uncredentialed. Therefore, the proportion of uncredentialed staff did not meet ADAD's standards.

Education levels and counseling experience of the staff were found to vary. One staff held a Master's degree, four held bachelor's degrees, and one had some college education. The staff's counseling tenure with this program ranged from no time for the newest member to over 7 years for the IRT supervisor. Most of the staff had been providing treatment at this center for more than two years. None of the staff had a recovery background. Clients reported that it was difficult to view the staff as role models because they never experienced the lifestyle that they did.

The gender and ethnicity of the treatment staff was extremely diverse. At the close of the study, there were three men and three women on staff. Three were Hispanic, two were Anglo, and one was African American, an ethnic composition comparable to that of the clients. Three of the counselors were bilingual, speaking both English and Spanish. The bilingual staff proved to be useful as some clients were admitted who only spoke Spanish.

Supervision of the treatment staff was conducted on a regular basis. There were weekly staffings where group supervision with the IRT supervisor was available. These meetings typically lasted an hour. Once a month, each counselor was required to present a current case at the weekly staff meeting. The counselors

received feedback from the IRT supervisor and the other treatment staff in regards to the client's treatment plan.

The staff seemed to be cohesive to the researchers. They worked well with each other despite their different approaches to treatment. The various specialty domains contributed by each counselor balanced the program well. The mood in the facility was usually light but contemplative, giving the clients appropriate models for interpersonal relationships.

## File Review

**Program Model.** ADAD requires treatment documentation for three general areas: client consent forms, client acknowledgments, and treatment documents. Client consent forms include consent to treat, consent to follow-up, and release of information. Client acknowledgments include descriptions of federal confidentiality regulations, client rights, and client responsibilities. Clients must also receive information regarding HIV, TB, other infectious diseases, and the relationship to alcohol and other drug abuse. A final area details client advisement of counselor credentials, appropriate therapeutic practices and boundaries, and agencies governing counselor conduct. Treatment documents include a client assessment, treatment plan, continuing care plan, discharge summary, progress notes, and treatment plan updates. Required items are to be discussed with the clients, signed by both clinician and participant, and placed in client charts.

**Research Findings.** Client charts were examined with respect to ADAD standards. A random sample of 24 clients was generated from participants admitted October 1999 through September 2000. This sample included 12 active and 12 discharged clients.

The client files were found in counselors' offices and also scattered throughout the IRT supervisor's office in various disorganized stacks. Documents within the files were orderly and neat. The documents in the files were found in the same area of each file. This consistency affords individuals using the files to find information quickly and with little effort. Table G shows percentages of documents found in client charts and documents with appropriate signatures. Low percentages for documents present with appropriate signatures may reflect the fact that documents in the files were either not signed by credentialed counselors, counselors did not include their credentials after signatures, or signatures were photocopied. There were no signed forms in the files that evidenced risk factors were presented to clients. Notably, there was a group note in 54% of client files that showed HIV/AIDS information had been covered in the group setting.

Two types of documents, progress notes and treatment plan reviews, are contingent on the length of stay in treatment. ADAD requires treatment plan reviews be conducted at regular intervals; however, there are no minimal requirements specified in the regulations. Progress notes for the clients at CIRT are completed for each group, individual session, and recreational activity. CIRT counselors do not conduct plan reviews.

The number of treatment notes was computed for the sample. On average, charts for discharged clients had 116 progress notes, averaging over 3 notes per treatment day. Current client charts had an average of 27 notes. The average number of days in treatment for current clients was 31 days. Timeliness of treatment note completion varied by counselor. The low number of progress notes in current charts was primarily attributable to computerized notes not placed in the client files in a timely manner.

Progress notes detailed the groups, individual sessions, and recreation activities the clients attended in chronological order. However, the majority of notes were not individualized. They described the material presented with little information about the individual client's progress. Individual sessions were charted, and these notes were found to have substantially more detail than the group notes.

**Table G. ADAD Required Documents (n=24)**

<b>Documents</b>	<b>Present in Chart</b>	<b>Present with Appropriate Signatures</b>
Client Consent Forms		
Consent to Treat	0 %	0 %
Consent to Follow Up	0 %	0 %
Consent to Release Information	17 %	8 %
Client Acknowledgments		
Client Rights	79 %	71 %
Client Responsibilities	100 %	0 %
Counselor Credentials, Treatment Practices, Boundaries, and Governing Agencies	79 %	71 %
Risk factors	0 %	0 %
Information on Chargeable Fees	96 %	0 %
Treatment Documents		
Screening/Evaluations	75 %	71 %
Admission Summary	54 %	46 %
Treatment Plan	67 %	46 %
Continuing Care Plan <sup>a</sup>	96 %	96 %
Discharge Summary <sup>a</sup>	92 %	92 %

<sup>a</sup>n = 12.

# DART PROGRAM PROFILE

## Setting

**Program Model.** The DART program has been in existence since 1996. The treatment provider of DART is the Community Education Center, a provider of rehabilitative services to the criminal justice population that has a variety of services at 22 locations across the United States. The DART program capacity is 34 clients, which usually consists of 24 males and 10 females. Male clients stay at William Street Center, Inc., a community corrections facility, which has been in operation since 1978. Female clients are housed at Tooley Hall, a community correction facility across town in operation since 1994. The female clients are bussed to and from the DART program daily.

The DART program operates from the second and third floors of two remodeled Victorian houses near downtown Denver. Treatment groups are held in three group rooms. Two of the group rooms are large. Chairs line the walls of these rooms, with white boards and motivational posters hanging from the walls and ceilings. The third group room is smaller than the other two and is used for groups of 12 clients or fewer. This room is furnished with a white board, chairs along the wall, and art hanging around the room that was created by a staff member. Staff offices are attached to the two larger group rooms. To enter an office one must walk through the group rooms. Groups involving physical activities are typically held behind the men's residence.

During treatment hours DART clients are segregated from other community corrections clients at Williams Street. Outside of treatment time, they are reasonably segregated while at Williams Street and Tooley Hall. DART clients who reside at Williams Street are housed in a separate building. The dining area for both treatment and non-treatment participants is located in the DART residence building. Dining and recreation times are separate for DART clients and non-treatment participants. Clients who reside at Tooley Hall are housed in the same building as non-DART participants; however, rooms are located in a separate hallway. The dining and recreations areas are separate as well. However, in both residences clients might come into contact with non-treatment participants as they walked to and from buildings, in hallways, and in smoking areas. Notably, were they to pass one another, clients and residents are not permitted to interact in any way, even if the residents were previously in treatment with the current DART clients.

**Research Findings.** *The researchers found the DART program was set in a relaxed, therapeutic environment. The old-style buildings coupled with staff's personal touches (artwork and posters) produced an atmosphere conducive to therapy. Separate areas for treatment and housing reduced the institutional feel.*

*DART was conveniently located in downtown Denver, a central location for clients from the metro area. One setback to its location was its close proximity to high crime neighborhoods, where drug sales and prostitution are common. The temptation for their substance abusing clientele was much more prominent than other settings that were more remote.*

*The DART program had sufficient space to comfortably facilitate three simultaneous groups. The larger rooms were used for groups with the entire clientele, but space and acoustics were not optimal for 34 participants. For example, one group room was L-shaped, and group members in one area could not see or hear others from the other area. Another drawback to the layout was the access to the counselors' offices through the group rooms. There were regular disruptions to treatment as people passed through the group rooms to the offices.*

*The distance between Tooley Hall and Williams Street produced a good separation between male and female clients, but sometimes resulted in groups running behind schedule. Any delays at Tooley Hall meant a late arrival for all female clients, and subsequent groups were late.*

## Admissions

**Program Model.** All clients are convicted felons who have Community Corrections Board approval and are referred by various criminal justice agencies throughout the state. Clients are excluded from DART for the following reasons: sex offender status, extremely violent crimes, medical conditions that would prevent



program completion, more than one previous admission to the program, presence of an unstable mental health condition, or pregnancy beyond the third trimester.

The intake counselor interviews prospective clients when DART receives a new referral. The intake counselor then determines whether the offenders are minimally in the contemplative stage of motivation for treatment, meaning they recognize their addiction problem and are considering a change in their lifestyle. Ultimately, the intake counselor and program director make the decision to accept or reject potential clients. Offenders accepted to the program are placed on a waitlist and admitted as beds become available. Once admitted to the program, the counseling staff conducts a SOA assessment.

**Research Findings.** *DART averaged 23 admissions per month, based on a 7½-month study period. Offenders had a median wait of one day before being admitted to the program, extending up to six months between the referral and admission dates. Referral dates were not available for 19 participants.*

*This study did not collect data on the number of offenders who were denied admission. The program director reported that very few potential clients, roughly 2%, were refused after the initial interview. Neither was data collected to specifically examine whether the program adhered to its own admission criteria. However, according to staff ratings of clients' motivation levels, 28% were evaluated as being in the precontemplative stage of change at time of admission. It appears that a high number of clients potentially violated the program's admission criteria.*

*It should be noted that the SOA was not included in DART's admission criteria; rather it was administered after participants were admitted to treatment. Thus, the SOA was used as an assessment tool for programmatic use rather than matching clients to a treatment modality. More often than not, however, the instruments were scored incorrectly or not scored at all.*

## Discharges

**Program Model.** The program duration is 42 days, with an additional 3 days of transition into community corrections for those staying on at Williams Street or Tooley Hall. In order for clients to complete the program successfully, they are required to finish 42 days and all assignments given by the treatment providers. It is also necessary for clients to demonstrate knowledge of the 12 steps to recovery, as evidenced by their homework.

Unsuccessful completion from the DART program results when a client quits the program, is expelled, terminates for administrative reasons, or escapes. Clients who choose to quit have to put their request to leave the program in writing and then are generally returned to custody. A client may be expelled for refusal to participate in treatment, violation of the DART rules or community correction center rules, violence, alcohol or drug use, or sexual activity. Administrative termination may occur as a result of medical problems that prevent completion or lack of funding from the referral source.

The consequences for unsuccessful completions are determined solely by the referral agency. The program itself cannot enforce any consequences other than to inform the referral agency of the client's poor progress in treatment and make recommendations as to further treatment needs. Based on the program's recommendations the referral source can return the client to custody, send them to further treatment, or disregard the program's recommendations entirely. It is within the staff's power to encourage participation while the clients are in the program. The staff encourages the clients to participate and follow rules to avoid the consequence of write-ups, being assigned extra treatment papers, or being singled out within the group setting.

**Research Findings.** *The majority of clients, 86%, successfully completed treatment during the study period (n = 145). Fourteen percent terminated without completing treatment: ten were terminated for administrative reasons, seven were expelled, and seven escaped from the halfway house. One participant had two admissions during this period; he terminated the first time due to lack of funding and then returned a month later to complete the program. Most participants stayed in treatment for 42 days, although 20% of admissions terminated in less time and 8% stayed longer. The longest stay in treatment was 49 days.*

*The percentage of successful discharges was high, which may be somewhat misleading. A successful discharge did not imply that the client made significant progress while in treatment. The primary criterion for successful discharges was that offenders simply stay for the duration of treatment. As a result, treatment*

participants sometimes did not complete their assignments as directed. For example, they would use every other line or excessively large print for a 2-page assignment.

Staff took different approaches to noncompliant clients, depending on their own styles and clients' pattern of behaviors. Staff might reassign the homework or give additional assignments. Sometimes, staff would motivate clients in individual sessions or call on them more frequently during groups to ensure their participation. One staff would embarrass or humiliate individuals for poor work. Disruptive clients were expelled if it was determined they were having a negative impact on the other clients.

The staff did not have authority to enforce consequences on clients other than programmatic ones. Some staff reported that the program's lack of authority to enforce consequences allowed the clients to disclose more in treatment because they did not have the fear of being sent to prison for what they divulged. Thus, the clients may have felt safer and were more honest about their recovery process. These staff also reiterated that they did have an opportunity to impact the referral source's decisions through the discharge summary where they give individualized recommendations for each client.

## Treatment Emphasis

**Program Model.** The DART program is based on the 12-step model to addiction recovery. Even though the 12-step model is the primary focus of treatment, the staff subscribed to multiple approaches. Other approaches include cognitive behavioral, humanistic or client-centered, and rational emotive therapy. Eastern modes of treatment such as Tai Chi and acupuncture are also available. Individual sessions are available to clients per request or as the therapist determines that a need is present.

The DART program is a hybrid cross between the AA model and the Minnesota model. The primary text for the program is the Alcoholics Anonymous (AA) book, or "the Big Book". The Big Book is used in both group settings and individual consultations as a guide to recovery. The treatment philosophy of DART is consistent with the Minnesota Model of Chemical Dependency Treatment which was founded on the beliefs that:

1. Primary treatment is not an end in itself, but rather one element in the continuum of care.
2. Primary treatment is a phase of learning of the discipline of recovery.
3. Self-actualized recovery is built upon primary treatment.
4. Various individuals have different treatment needs.
5. Counselors who are recovering alcoholics and addicts are essential to the effectiveness of treatment.

The 12-step approach is described by AA as a recovery program for men and women who possess a desire to stop drinking. Described as a fellowship, a major focus of the 12-step approach is the support, understanding, and encouragement offered by other recovering men and women. Members are encouraged to work with a sponsor, who should be a fellow member with longer sobriety, preferably of the same sex. The sponsor guides the member through his/her recovery and is available to the member at any time.

The DART program is structured to review the initial three steps. Psychoeducational and therapy groups include direct instruction from the Big Book; therapists consistently and clearly incorporate the major premises of the 12 steps in their interventions. In addition to this use of the 12 steps as a therapeutic didactic tool for the program, treatment staff encourage clients to attend 12-step meetings above and beyond the program requirements. Clients are encouraged to make contacts and to find a sponsor before they leave the program, and the importance of attending 12-step meetings after leaving DART is highlighted frequently. Staff endorses Narcotics Anonymous (NA) and Cocaine Anonymous (CA) as alternative 12-step programs.

The treatment staff integrates other approaches into the 12-step modality. For example, they incorporated a cognitive behavioral emphasis into their psychoeducational material. Clients learn about the effects of chemical dependency on themselves and their families, the process of recovery, and the value of family involvement and a social support system in recovery. They begin to develop their own personal plan for recovery.

Offenders are admitted to the program on an open-enrollment basis. Therefore, clients may begin treatment at a point when some members are close to completion. Because of the open enrollment a client may begin treatment at any point in this process, not necessarily beginning with the first step.

**Research Findings.** *The AA model has a long-standing, widespread tradition in the field of substance abuse treatment. DART clients received instruction in a program of ongoing recovery that could be continued after they left treatment. The concept and wide availability of peer support were strengths of AA. In treatment, clients were given the opportunity to develop peer supports among each other. Contacts with outside peers were naturally limited, but community members with long-term sobriety were included in treatment whenever possible.*

*The DART staff was composed of recovering people, in accordance with AA tradition. The staff was very knowledgeable about the Big Book and the recovery process. They appeared to be viewed by clients as role models of clean, sober living. They were more credible to clients because of their own recovering background. It seemed to the researchers that the clients' and staffs' shared addiction experience was a good motivator for clients.*

*The program emphasized a group approach to recovery, as opposed to individual treatment. Individual sessions were infrequent and often held during group time. All clients were assigned to a primary counselor and spent the majority of group therapy with their primary counselor. The AA model perpetuates the concept of peer support and sober, public living, which is often opposed to the secretive addict lifestyle. These values of openness and sobriety were reflected in the manner that DART prioritized group treatment over individual therapy.*

*There are distinct drawbacks to the AA model. First, the spiritual aspect of AA may be objectionable to some clients. Secondly, the focus is limited to alcohol recovery. It does not directly address substance abuse other than alcohol, nor does it address criminal behavior and attitudes. The Big Book does not address the physical dependency of addiction. The researchers found that staff supplemented the Big Book with other material to cover these other topics. For example, the counselor assistants delivered psycho-educational classes that had a cognitive-behavioral orientation. Additional groups, not based on the Big Book, provided excellent opportunities for self-exploration about criminal behavior and addiction. The lack of curriculum with the AA approach was another limitation. Group sessions were unstructured, resulting in inconsistencies across sessions or clients not all receiving the same material.*

*AA provided a framework for clients, with a clear delineation of steps for recovery, even though they might not complete the steps in order. However, a closer inspection of the 12 steps revealed that they are not predicated upon concrete, observable changes. Thus, it is difficult to distinguish between clients who are really making changes and those who are just going through the motions. This lack of a behavioral component also made it difficult to hold clients accountable for their progress in treatment.*

## Program Activities

**Program Model.** Structured program activities are held seven days a week. Weekday groups total 32½ hours per week, an average of 6½ hours daily, of treatment activity led by counselors or counselor assistants. Treatment groups on weekends total 5½ hours of activities over the two days, which are led by counselor assistants. In addition to structured activities with a therapist present, there is an additional 7 hours of activities scheduled weekly that may or may not have involved staff's presence.

The treatment staff is responsible for leading the group therapy sessions. In group therapy, the clients are normally split into smaller groups of 12 to 15 clients. Whenever possible the clients are placed into small groups according to the treatment approach or therapist that may suit them best. Frequently, the smaller groups are combined into one large group so that all clients can benefit from the topic.

The focus of group therapy is on the first 3 steps of recovery, as well as some cognitive behavioral strategies for recovery. Therapists present the steps and invite the group to discuss the material they read in the Big Book. The therapists assign treatment papers designed for clients to explore the steps and to begin working their way through them. The clients are encouraged to discuss the difficulties they experience related to the steps. Family sculpture is also introduced during these groups. Clients act out the roles within an alcoholic family, including the alcoholic father, the co-dependent mother, the lost child, the hero, the scapegoat, and the mascot. Clients are encouraged to provide insights into family dynamics and to discuss their own roles and tendencies. The cognitive behavioral strategies covered in these groups involve triggers to drug use, self-talk, defense styles, and expectations the clients commonly placed on themselves.

Clients run the community meetings, the purpose of which is for clients to problem solve with one another. In these meetings the clients review DART group rules for new admits and present announcements.

The AA meetings are set up to be a support group, led by 12-step members from the community. One night a week, clients who completed the program are invited back to share their experiences with the current group. Current clients are able to witness the application of AA skills in the real world through their peers who are in the process of transitioning back into a drug-free community.

Community speakers in recovery are invited to share personal stories of recovery with the clients and answer questions about the challenges of recovery. These groups take place approximately three times a week. The purpose of the guest lectures is to present the difficulty of recovery to the clients and to provide inspiration from their personal stories. The staff may attend the speakers' presentation but do not participate.

Gender-specific groups are held weekly. The male counselors lead the men's group. In these groups, clients explore social pressures that are placed on men about dealing with feelings and expressing emotions. In an environment separate from the women, they may express things they would not have otherwise. Group members also talk about how sexual behavior is tied to drug use, the pros and cons of drug use, and daily rituals of their own use. They discuss and participate in leisure activities that can be enjoyed without chemicals. The goal of these groups is to give the group members the opportunity to create relationships with others outside of drug and alcohol use.

The women's group discusses drug and alcohol issues that are common among females. The Hope Ladies, volunteers from a local church in the community, lead the women's group three out of four weeks. When the Hope Ladies are not available, a female counselor leads the group. The Hope Ladies bring refreshments for the group members and discuss topics such as skills they had attained in their own lives, sources of strength they had found when they encountered difficulties, recreational activities available without drug or alcohol use, interview skills, and social etiquette. The intent of this group is self-esteem building and enabling members to connect with people outside of corrections. Group members are also taken shopping at Dress for Success where they are given a business outfit to wear on future interviews. Additionally, clients are occasionally taken on outings to the local park for recreation activities where they re-experienced play without drugs and alcohol, with the hope that clients would then be able to offer this back to their children.

The treatment staff leads psycho-educational classes on drug and alcohol addictions. Clients are exposed to relapse prevention education, and they are taught coping skills to remain clean and sober. Cognitive behavioral strategies are introduced to clients, such as irrational thinking and common thinking errors that lead to criminal activities and substance abuse. These classes may involve watching films pertaining to drug and alcohol use. After the films the clients are encouraged to discuss the relevant issues.

Tai Chi and acupuncture are led by contractors from the community. Staff is present during the activity to ensure client cooperation. These alternative forms of treatment are used to promote relaxation and stress relief. Attendance is not required; clients can instead opt to spend their time in the group rooms studying the Big Book and writing therapeutic papers (previously assigned in other contexts).

**Research Findings.** *The treatment schedule was generally maintained, although groups tended to run a little late and end early. Groups were rarely cancelled altogether. The schedule was usually only interrupted when disciplinary events caused significant distraction among the clients and staff. In those cases, clients were required to attend all-day groups to help them calm down where movies were the focus.*

*Researchers found that the men's group was a program strength. Men intensely explored issues related to drug use, relationships, and recreation. The women's group, on the other hand, was much weaker. The focus was not on issues such as parenting, domestic violence, and sexual abuse that are common among female offenders.*

*The Family Sculpture group was another asset to DART programming. Clients were able to explore their own roles and the roles of their families in their drug addiction. Through this activity and the processing that followed, clients were first-hand acquainted with what they were likely to experience after treatment, as well as the factors that led to their current addiction. Thus, clients who were more concrete or who were inclined to disengage from treatment were provided with a clear and engaging experience that exemplified the psycho-educational material.*

Guest lectures offered clients examples of other recovering addicts and alcoholics, beyond the DART treatment staff. This may have been especially important to minority clients who may have greater difficulty identifying with the predominantly Anglo staff at DART. Guest lectures provided clients with further support to the 12-steps and with a new perspective on recovery. In addition, clients were encouraged to ask presenters to consider being their sponsor. For the most part, guest lectures were interesting and reinforced ongoing treatment goals and programming. On occasion, the guest lectures came across as “war stories” and focused more on what the guest had survived during their involvement with drugs or alcohol than on their life of recovery.

Most treatment groups combined males and females with the exception of a weekly gender-specific group. The staff had differing opinions as to the effectiveness of treatment with gender-mixed groups. Some believed that mixed groups created an atmosphere that was not ideal for therapeutic gains, where clients were trying to impress each other rather than focusing on treatment. Other staff believed that mixed-gender groups more closely modeled the real world environment.

The researchers did not find the mixed-gender groups to be optimal as the primary mode of therapy. Males and females tended to segregate from each other naturally. For instance, they would only give feedback to same sex clients or would spend time outside of group with same sex clients. Furthermore, therapy sessions veered away from discussion about sensitive issues such as rape, where men seemed uncomfortable and women only explored these issues superficially.

Clients seemed to be actively engaged in the therapy process both inside and outside of groups. During groups, clients exhibited a high level of participation in the discussions. Between groups or on breaks, the clients would discuss personal recovery issues with each other, staff, and researchers.

Group sizes frequently exceeded the ADAD standards of 12 clients to each therapist. Smaller groups usually consisted of 12 or fewer clients. However, the entire clientele was frequently brought together into one large group. Although there were usually two therapists present in the large groups, on occasion only one therapist was present. Even with two therapists present, large groups did not meet ADAD's recommended 12:1 client to staff ratio. From a clinical viewpoint, large groups prevented meaningful group discussions, as well as the therapists' ability to interrupt counter-productive behavior.

Uncertified counselors were observed to run therapeutic groups alone, which runs counter to ADAD standards. There were also times when a therapist would leave group during the middle of a session. In these instances, researchers found that clients continued with the group discussion on their own.

## Staff

**Program Model.** The DART staff is made up of counselors, counselor assistants, a clinical supervisor, and an intake counselor. The counselors are responsible for conducting assessments facilitating treatment groups, individual case management, individual therapy sessions, and paperwork such as progress notes or discharge summaries. Counselor assistants help the counselors with their duties, such as paperwork, client assessment, and facilitating treatment groups. The clinical supervisor manages the program and provides individual and group supervision to the program staff. The intake counselor interviews potential clients to determine admission eligibility, delivers clients to the program, conducts treatment groups, and acts as a liaison between the referral source, community, clinical staff, and the director of the program.

**Research Findings.** There were several changes in staff over the course of the study. When the study began there were two counselors, two counselor assistants, an intake counselor, and a clinical supervisor on full-time staff for the DART program. The number of counselor assistant positions increased to three and one of the counselor assistants was promoted to a counselor-in-training. During the course of the study, there was some staff turnover among the counselors and counselor assistants. At the close of this study, there was a total of eight treatment staff.

The counselors, intake counselor, and clinical supervisor were Certified Addictions Counselors III (CAC III) through ADAD. The counselor assistants did not have any credentials but were in the process of attaining certification. Educational levels ranged from a GED to a Master's degree, although degrees were not necessarily in a human services field. The DART program requires all staff to have a recovery background. The

counseling experience of the staff ranged from no experience for the newly hired counselor assistants to over 20 years.

The percent of CAC II or III certified counselors at the DART program exceeded ADAD standards of 50%. However, counselor assistants, who have no CAC certification, clinical master's degrees, or Colorado licenses, comprised more than 25% of the staff. This high number of uncredentialed staff was in opposition to ADAD standards. Furthermore, the non-credentialed staff was permitted to run groups without a credentialed co-facilitator present.

There were an equal number of males and females on staff, but limited ethnic diversity. In particular, there were no African American staff members while a substantial percentage of the clientele was composed of African Americans. Five of the eight staff members were Anglo, two were Hispanic, and one was Native American.

Counselors and counselor assistants had daily interactions with the clinical supervisor about current issues with their caseload. Additionally, supervision was available at weekly treatment team meetings or staffings that typically last two or more hours. During the meetings, the staff discussed the treatment plan for all of the new and completing clients. Supervision of staff who were not certified included separate meetings that occurred regularly yet informally (e.g., conversations at the beginning of the day, hallway chats) with the supervisor. The counselor assistants' psycho-educational lesson plans were also reviewed by the clinical supervisor.

Staff members were informal and easily approachable. The researchers observed a strong rapport between the clients and staff. Their shared addictions experiences appeared to be an influential factor in building rapport, as well as the interpersonal styles of the staff. On the contrary side, lack of a clear delineation between counselors and staff could potentially undermine the therapeutic process at DART. The researchers observed several instances where staff's professional boundaries were problematic. These concerns were more common among the newer, uncertified staff. Some individuals' attire was viewed as seductive, with clothing being particularly tight and revealing. Also, there was some inappropriate behavior and physical contact observed. For example, during one Tai Chi class, a female staff member was observed to lead a group of male clients in dance moves that were unrelated to the class.

The various treatment styles of the staff seemed to complement each other. The treatment staff embraced a variety of treatment approaches and interpersonal styles. While differing opinions caused heated debates or even conflict at times, staff was able to benefit from diverse points of view.

## File Review

**Program Model.** ADAD requires treatment documentation for three general areas: client consent forms, client acknowledgments, and treatment documents. Client consent forms include a consent to treat, consent to follow-up, and a release of information. Client acknowledgments include descriptions of federal confidentiality regulations, client rights, and client responsibilities. Clients must also receive information regarding HIV, TB, other infectious diseases, and the relationship to alcohol and other drug abuse. A final area details client advisement of counselor credentials, appropriate therapeutic practices and boundaries, and agencies governing counselor conduct. Treatment documents include a client assessment, treatment plan, continuing care plan, discharge summary, progress notes, and treatment plan updates. Required items are to be discussed with the clients, signed by both clinician and participant, and placed in client charts.

**Research Findings.** Client charts were examined with respect to ADAD standards. Client files were kept in their primary therapist's office, and while they may have been out in the open when the therapist was in the office, they were generally locked in the office when the therapist was not present. A random sample 24 clients was generated from participants admitted October 1999 through September 2000. This sample included 12 active and 12 discharged clients.

The results of the file review are shown in Table H. Percentages are shown for documents found in client charts as well as documents with appropriate signatures. The low percentages for documents present with staff or counselor signatures plus credentials reflect the fact that many documents in the files were either not signed by credentialed counselors, counselors did not include their credentials after signatures, or signatures were photocopied.

Information given to clients pertaining to risk factors was incomplete. There was a form included in the intake packet that was signed by clients offering information on HIV and AIDS and their relationship to alcohol and drug use. However, the form did not include information pertaining to TB, hepatitis-C, other infectious diseases, or pregnancy. Reported percentages are for HIV/AIDS information only.

Two types of documents, progress notes and treatment plan reviews, are contingent on the length of stay in treatment. ADAD requires that treatment plan reviews and progress notes be conducted at regular intervals, although there are no specific minimal requirements. The staff reported that the DART policy is to complete one note per day. However, it appeared by the content of the notes in the files that the treatment staff complete notes for each treatment group. DART counselors do not conduct plan reviews.

The number of treatment notes was counted for the sample. On average, charts for discharged clients had 35 progress notes, averaging less than one note per day while in treatment. Current client charts averaged 29 notes, with the number of days in treatment averaging 23 days. Treatment notes were not in chronological order. Timely completion of treatment notes appeared to vary according to the therapist. Whereas some therapists consistently complete treatment notes on each client within a day of the group, other therapists may not document treatment notes until weeks after the group.

Treatment notes detailed the groups the clients attended and treatment activities over the course of a day. However, the majority of notes were not individualized. Group notes were vague and very similar for each group member. Occasionally, an exceptional note was found that did contain detailed information about the clients' progress in treatment. As a norm, however, notes were not individualized or detailed about progress in treatment.

**Table H. ADAD Required Documents (n = 24)**

<b>Documents</b>	<b>Present in Chart</b>	<b>Present with Appropriate Signatures</b>
Client Consent Forms		
Consent to Treat	79 %	17 %
Consent to Follow Up	92 %	25 %
Consent to Release Information	79 %	8 %
Client Acknowledgments		
Client Rights	79 %	17 %
Client Responsibilities	92 %	29%
Counselor Credentials, Treatment Practices, Boundaries, and Governing Agencies	79 %	17 %
Risk Factors	71 %	4 %
Information on Chargeable Fees	21 %	0 %
Treatment Documents		
Screening/Evaluations	83 %	41 %
Admission Summary	0 %	0 %
Treatment Plan	71 %	58 %
Continuing Care Plan <sup>a</sup>	92 %	75 %
Discharge Summary <sup>a</sup>	92 %	75 %

<sup>a</sup> n = 12.

# RTC PROGRAM PROFILE

## Setting

**Program Model.** RTC was established in 1989 as a combined treatment program for men and women. Originally, the program was run under the leadership of a locally operated, treatment-oriented agency. In subsequent years the program capacity increased significantly and was divided into separate men and women's programs. This again changed in December 2000, when the size was reduced and the program returned to the original co-ed status. During this study, RTC was operated by Avalon Correctional Services, an agency based in Oklahoma City. Avalon Corrections primarily operates correctional facilities; RTC is their only treatment center. RTC had a capacity for 60 male clients and 20 female clients at the beginning of the study, but decreased to 30 male and 10 female clients by the end.

RTC is located in Greeley, in a complex originally constructed as college dormitories for students at the local university. There are several other programs on the same grounds, including a long-term female offender treatment program, a community corrections halfway house, and a nursing home for the elderly. The area occupied by RTC clients is called "the Villa." When the male and female programs operated separately, they were segregated from each other. Male and female RTC clients resided in different wings of the same building, with locked doors and clearly established consequences enforced to restrict access.

Male and female clients are housed in the same wing together as of December 2000. Women are assigned to rooms on a different floor than the men, but no structural barriers (e.g., locked doors) prevent clients from going to other floors. The men and women's areas each have a lounge. Male and female clients dine together and attend approximately half of their group sessions together.

There are several locations for holding groups within the Villa. There is a large group room with a chapel-like appearance, complete with stained glass windows and seating in rows facing the front. The room is ideal for lecture-style groups as it seats over 60 clients comfortably, with high ceilings and architecture that draws attention to the lectern at the front. Counselors' offices are large enough to hold small groups of approximately a dozen clients.

**Research Findings.** *The setting of the RTC program was ideal for several reasons. The facility was not so remote as to make it difficult to access. Yet, the grounds were isolated enough that there were no immediately visible distractions presented to the clients. The facility was large enough to adequately house and treat clients with the program at its full capacity, and there were deserted wings after the program downsized. The counselors' offices were optimal, providing each with their own space to work independently and conduct either individual or group sessions. Their offices were situated in such a way that counselors had frequent interactions with one another. Other spaces required for groups, such as the women's lounge, also provided a good space for groups.*

*Groups held in the large group room were prone to interruptions. The room was open; there were no doors to cut off outside distractions. In fact, the intake desk was located at the rear of the room. While the counselor aides manning the desk were available to aid with the group as needed, they were also responsible for processing new admissions. These sometimes occurred in an adjacent office as group was in process. Not only did this impinge on confidentiality, it also made it difficult for clients to focus on the task at hand.*

*Previous to December 2000, male and female clients were strictly separated. The programs were operated independently and clients were not permitted to co-mingle. For the most part, clients followed the rules, but they sometimes attempted to circumvent these rules by passing notes into windows or sneaking into forbidden areas of the complex. With the programs combined, male and female clients interacted with each other regularly. To the researchers, there was a noticeable impact on the clients. They became openly flirtatious with one another and appeared to be preoccupied with the opposite sex rather than treatment.*

*Even though the boundaries between male and female living quarters were clearly outlined, as well as rules around male-female interactions, the security did not appear to enforce these rules consistently. For example, on one occasion, a female client of the ground floor was observed to wander past a treatment group of men and women in her bathrobe. Clearly, events such as these were distracting to men and women alike.*



## Admissions

**Program Model.** Eligible program candidates include male or female offenders who have committed drug- or alcohol-related offenses or technical violations. Potential clients are reviewed by the local community corrections board and admitted with a pre-arranged length of stay. The duration of treatment is generally determined by the referral source, often based on the amount of funding available. Acceptable treatment durations range from 30 to 60 days, with 45 days being the average. The programming rotates in 6-week cycles, allowing 60-day clients the opportunity to review the first 2 weeks of material but the 30-day clients only attend two-thirds of the planned treatment activities. Clients may be ineligible for treatment for the following reasons: mental illness, sex offender status, escape risk, or violent crimes.

**Research Findings.** *Male and female client data were collected at two different periods for this study, but all data was collected prior to the program's downsizing in December 2000. There were 55 female admissions during the 7½ -month period during which data was collected. Over the 3-month period that data was collected for the men, there were 85 program admissions. Thus, program admissions averaged 7.3 per month for the females and 28.3 per month for the males. Waitlist lengths were explored by comparing the number of days between the date of referral and the date of admission. The median waitlist time was 20 days, extending upwards to 6 months.*

*The researchers did not specifically collect data to ascertain whether the program adhered to its own admission criteria. However, in the course of collecting data, it was discovered that the program admitted mentally ill clients. This was evidenced through mental health diagnoses or psychotropic medications listed in the client files, as well as clearly psychotic thinking or behavior in treatment groups. Also, a full 45% of admissions had an escape or absconsion history per NCIC/CCIC criminal history check. Furthermore, Spanish-speaking clients were sometimes admitted to the program, despite the fact that only two counselors spoke the language with very basic skills. Thus, it appeared as though RTC frequently violated its own admission criteria.*

*The staff commenced client assessments using the SOA battery subsequent to the program changes in December. Because the SOA was administered after admission, it was not included in the admission criteria but rather was used for intake assessment and treatment planning.*

## Discharges

**Program Model.** Requirements for successful program discharge involves completion of the program components, including attendance in group, completion of assignments, and continued participation for the recommended course of treatment. Clients can unsuccessfully terminate due to escape, disruptive behavior, transfer determined by the referral source, or post-admit decision that the client is inappropriate for treatment. For example, a client with mental illness whose disorder could be interfering with his/her ability to benefit from the program might warrant transfer to another facility for treatment.

**Research Findings.** *Nearly all program admissions, 99%, successfully completed treatment at RTC. The remainder was terminated for administrative reasons, such as loss of funding. Lengths of stay in treatment averaged 44 days (SD = 7.5) and ranged from 27 to 60 days.*

*Half of the treatment participants were suddenly discharged in December when the program was downsized. Participant data was not collected during this time of the study. However, the researchers observed that half of the clients were terminated based solely on their length of stay. Those who had been at RTC the longest were released early. It was concerning that the discharges were based on an administrative decision rather than clinical judgment.*

## Treatment Emphasis

**Program Model.** No clear unifying theoretical orientation or curriculum is endorsed by RTC. Staff indicate that they utilized various sources in their treatment including the 12-step model, the Design for Living Hazelden curriculum, and cognitive-behavioral techniques. The implementation of techniques and information from these resources varied widely according to group type and staff member.

RTC incorporates some instruction from the 12-step model of treatment. Specifically, clients work toward completing the first 3 steps. The 12-step model is an approach to treatment that places value on internal commitment and development. For example, the first step is "We admitted we were powerless over alcohol –

that our lives had become unmanageable.” RTC clients are introduced to the steps through homework, periodic reference in groups, and AA meetings. RTC presents the 12-steps as one of several possible routes to recovery rather than an overarching framework for treatment and sober living.

The Design for Living curriculum is designed for offenders in correctional institutions, jails, community corrections, and probation or parole settings. This guide includes resources such as training videos, treatment approach guidance, and worksheets that clients complete as homework. Substance abuse education, treatment, and continuing care are addressed within the curriculum.

The Hazelden approach is complementary to the 12-step model; in fact, the model typically incorporates the first 5 steps of Alcoholics Anonymous (AA). Hazelden endorses the disease theory of addictions, and abstinence is considered the only way to recovery. Hazelden promotes a multi-disciplinary team of professionals to treat the physical, emotional, and spiritual aspects of addiction. Recommended daily activities include lectures, group therapy, individual counseling, recreation time, and free time.

Cognitive-behavioral techniques are the focus of one series of group lectures entitled “Errors in Thinking.” Relapse prevention and domestic violence groups are other examples of groups that put into practice the cognitive-behavioral approach. Behavioral skills are employed through lectures, as well as role-plays and discussion of small group dynamics. Aside from lectures, staff challenges clients in group therapy about thinking distortions and errors.

**Research Findings.** *The treatment approach at RTC, at best, was eclectic. Differing models were put into place during the course of treatment, providing clients the opportunity to discover a perspective with which they could identify. This flexible approach can capitalize on individual counselor’s strengths and meet varied client needs. It was also amenable to the open-enrollment format of the RTC program.*

*The lack of a unifying approach at the program was problematic for several reasons. First, the researchers discovered that some staff had never heard of the Hazelden curriculum or that others did not know the 12 steps. This resulted from an apparent lack of orientation or training among program staff. In some instances, staff did not even understand what a theoretical perspective meant or could not see the value of it. Secondly, lack of an underlying theoretical orientation makes it difficult for staff to conceptualize and subsequently address addiction and recovery. Clients may be confused by the inconsistencies across sessions and not understand what they need to do to sustain recovery. Although they were provided a variety of tools and information, they might not be able to discern piecing them together without staff’s guidance. Finally, without a written curriculum, material is lost when a staff member leaves the program.*

## Program Activities

**Program Model.** Counselor-facilitated program activities are initially held 5 days a week and averaged approximately 3 to 4 hours per day. Subsequent to the program reduction, counselor coverage was altered to four 10-hour shifts, with no counselors on site from Friday through Sunday. Counselor-facilitated activities, including a large group lecture and small therapy groups, were thus reduced to four days weekly with four hours of treatment daily. Clients attend two large groups and two small groups daily, each extending for one hour. Therefore, at the close of the study, there were 16 hours of weekly scheduled therapeutic activities in which a counselor was present.

Throughout the changes at RTC, community experts provide additional groups with mandatory participation, including a weekly 1½-hour group on nutrition, a biweekly 2-hour arts and crafts group for the women, and a weekly women’s issues group for clients planning a transfer to Avalon’s TRC program upon RTC program completion. Clients with children are also strongly encouraged to attend a weekly 2-hour parenting group. Clients can voluntarily attend a weekly in-house AA group, community-based AA meetings, a spirituality group, or church.

The large group lecture sessions combine males and females, except for the domestic violence group specific to the males. Large groups are composed of the entire clientele. The lecture series is designed to offer clients psycho-education about a variety of pertinent topics. Each lecture series extends for a week, with two series offered simultaneously each week. Large group presentations are developed by the respective counselors. Counselors draw from a variety of sources including their own prior training, relevant texts, popular psychology resources, and validated treatment resources. Topic areas include domestic violence,

anger management, HIV/AIDS/STDs, relationships, “Beat the Streets,” relapse prevention, errors in thinking, chemical dependency, and life skills.

The domestic violence group consists of a compilation of statistics and facts and myths about domestic violence. The staff member explores the anger cycle, ways to prevent domestic violence, and common thinking errors associated with domestic violence. In the anger management group, clients are confronted with their use of anger. The counselor facilitates the exploration of the origins of client anger and presented clients with tools for coping with their feelings. Another large group lecture series focuses on informing clients about HIV/AIDS/STDs. The counselor informs clients about the various diseases that are high risk for this population, symptoms of the diseases, ways to discern whether they may be infected, and ways to protect them from contracting a disease. The relationships group explores characteristics to seek in a partner and how to maximize an existing relationship. The “Beat the Streets” series, based on the video, addresses avoiding relapse, early recovery, dealing with family and old friends during recovery, coping with emotions, and setting and obtaining goals. Relapse prevention informs clients about post-acute withdrawal syndrome and helps them to identify appropriate plans to cope with cravings. Staff explores external pressures to use drugs or alcohol and presented clients with techniques to resist relapse. The errors in thinking group addresses criminal and addictive thinking errors and applying them to their behavior. Chemical dependency explores the effects of drugs on thoughts, emotions, physiological feelings, and behavior. Clients are also educated about drug interactions and the effects of various substances on neurotransmitters. Life skills groups covers finances, career development, grief and loss, and self-esteem.

Small groups remains gender-specific through the course of the evaluation. Clients are assigned a primary therapist, such that they attended that counselor’s small group for their entire length of stay. Clients attend two small groups daily. Groups typically focus on a topic of one client’s choosing. The client who selects a topic for the day must write a few paragraphs about what the topic means to him or her and then facilitate discussion of the topic. For example, one client wrote about “happiness” and about how her need for drugs was tied into her quest for happiness. Group members talked about times in their life when they felt happy and how drugs had consistently destroyed happiness.

The adjunct groups are provided to clients by outside professionals to address other areas of health and well-being. The nutrition group is offered to men and women by a community member. Clients are provided with information about how to eat healthy and strategies to eat well at a low cost. The parenting class is facilitated by a counselor from the Child Advocacy Resource Educators (CARE) and is available to clients who have children. Clients are taught basic parenting skills such as establishing healthy safe boundaries for their children, maintaining supervision, and the importance of consistency. Arts and crafts sessions are available to the women every other week. Clients can use this time to make crafts for themselves, family members, or for fellow clients. This is included to provide women with structure, skill development, and self-esteem. Female clients who are scheduled for transfer to TRC attend a women’s issues group composed of clients from both the TRC and RTC programs. These groups allow clients to meet the women they will be living with in the future, reducing their natural anxiety. They address concerns specific to women and are led by a credentialed counselor (CAC III) from the community.

**Research Findings.** *The most significant finding about RTC’s program activities was the astonishingly low number of contact hours for this residential treatment program. After the program downsized, the number of direct contact hours between counselors and clients was effectively reduced. Three days out of every week, clients had no contact with counselors. Even on the days that staff was present, groups were only held a total of four hours. The groups were very short, merely an hour in duration, impeding clients’ ability to delve beyond the superficial issues. Typically, group sessions need to extend at least two hours to give all clients an opportunity to engage in the discussion and to enable effective group processing.*

*The large groups provided a forum for the exploration of various topics that are integral for substance abusing clients from a criminal justice population. The rotation of counselors allowed clients to learn from different counselors and learn from their distinct style of psycho-education. In addition, the rotation allowed counselors to become a relative expert in their topic area and to continue to develop and refine their own lecture series. Also, the rotation was quite amenable to the open-enrollment style of the RTC program.*

The primary concern for the large groups was the client-to-staff ratio. As only one counselor led the entire clientele during the large group, there was usually a 40:1 client to staff ratio. Prior to December 2000, this ratio was even more sizeable with 60 clients to 1 counselor in the men's program. Not only was this ratio inconsistent with ADAD standards, but it also meant that the clients could easily disengage from treatment during lectures. Clients could sit toward the back of the room, offering little to no input, and gain nothing from the group presentation.

Small groups were a defining and important strength at RTC. The groups were same-gender, allowing clients to work on their treatment without the distractions of members of the opposite sex. This might be especially key for female clients, many of whom have extensive histories of victimization. Clients always met with the same small group and counselor, allowing them to develop trust with this subgroup of the facility. Groups were generally composed of ten clients, meeting the ADAD standards for client to staff ratio. Thus, the clients could become familiar with one another, allowing them to give and receive important feedback about their strengths and weaknesses, as well as behavior.

RTC's approach to small groups allowed clients to explore issues that were important to them and to address them when and how they needed them to be addressed. Clients often used this time to deal with grief or victimization, letting them address and show their own fears, pain, and vulnerability in a way that would not have been possible in larger groups. In addition, by selecting topics, clients were given responsibility and a measure of healthy control in the groups. On the other hand, clients sometimes recycled topics due to their own lack of awareness about recovery and treatment. In addition, while some topics did catalyze deep discussion, many topics lead to superficial discussion about a "word." At times, clients kept discussions on an abstract level and talked about concepts or tendencies rather than acknowledging their own feelings, behaviors, and thoughts. Additionally, this approach was very client-centered in that clients were given the control over topics and were expected to do the majority of the processing and feedback. Again, some clients might benefit from learning responsibility through the groups' flexibility. However, as counselors worked toward being non-intrusive, clients missed opportunities to benefit from the counselors' expertise, experience, empathy, and intuition.

## Staff

**Program Model.** The counseling staff consisted of four counselors and a clinical supervisor at the close of the study. In addition to the treatment staff, there are a total of eight counselor aides who support the community corrections center but do not perform routine counselor duties. Prior to December 2000, RTC staff included five counselors for the men's program, two counselors for the women's program, a clinical director, and a dedicated intake counselor. There were approximately 21 counselor aides on staff at that time.

The majority of staff responsibilities did not change with the decline in clientele. The counselors are responsible for assessments, developing treatment curricula, facilitating large and small treatment groups, individual case management, weekly individual counseling, and paperwork. The most recent clinical supervisor manages the program, including administrative and clinical concerns, and provided supervision to counselors. Previously, the clinical supervisor was primarily involved with clinical management of the program and carried a small caseload. The clinical supervisor also took on some responsibilities of the intake counselor whereby she reviewed materials sent by the referral source regarding potential clients, interviewed the referral source to ascertain the appropriateness of the client, and organized intake dates to maintain the established number of clients.

The counselor aides perform general security and milieu duties such as urinalysis and breathalyzer testing, medication distribution, and room searches. Counselor aides also review intake materials with clients and facilitate the completion of SOA materials at admission. Once a week, a counselor aide shows a treatment-oriented video, which may include processing it with clients. Finally, counselor aides are periodically pulled into treatment and may contribute to large group or assist in crisis management situations.

**Research Findings.** As noted above, there were significant staff changes during the period of this evaluation. The program size, and consequently staff, was cut nearly in half. Three staff, including the program director, chose to resign as a result of the administrative changes to the program. Two staff members were

transferred to other positions within the Avalon facility. At the close of the study, there were four counselors, one program director, and one vacant intake counselor position.

Counselor certifications were clearly incongruent with ADAD standards. The previous and current clinical supervisors were both certified as CAC III. One of the counselors, who departed during the program changes, also had a CAC III. None of the other counselors had any level of ADAD certification, although they were attending classes to attain their CAC II credentials. Only the supervisor, composing 20% of the therapeutic staff, was ADAD certified at the close of the study.

Education levels of the counselors ranged from a bachelor's degree to a master's degree. Most staff possessed degrees in relevant fields such as psychology, criminal justice, or spiritual counseling. The staff's experience with this program was very brief. In fact, the most senior counselor worked at RTC for just over a year (previous staff had longer tenure). However, the most recent program director worked as a counselor at RTC nearly 6 years ago and worked as director of another program at the same center until taking this position. None of the counseling staff reported being in recovery.

The gender of the staff included two males and three females. Four of the five treatment staff members were Anglo and one counselor had Hispanic heritage. Notably, staff's ethnic descent was not proportional to that of the clients, which included a large Hispanic population. While the counselor aides possessed greater ethnic diversity, notably several Hispanic and African American individuals, they were positions of lesser therapeutic responsibility. Counselor aides were not in a position to instruct clients in recovery, as were the counselors.

Counselors had regular interactions with the clinical supervisor and one another about current issues with their caseload. These meetings occurred relatively informally as needed. Additionally, supervision was available to counselors at weekly treatment team meetings that typically lasted two hours or more. During the meetings, treatment staff discussed current treatment programming, specific clients who presented as a conduct problem or therapeutic challenge, and general policy. Prior to December 2000, supervision was observed to only occur on an informal, infrequent basis. Recent supervision further included irregular group observation, as well as individual meetings with the counselors.

The staff appeared to be extremely cohesive and supportive of each other. This allowed for a collegial and professional atmosphere. In addition, staff often shared new ideas or approaches to treatment with one another, furthering their personal and therapeutic development. The counselors had slightly different styles, enabling them to connect with varied clients. In addition, they were consistent in their presentation as caring and informed professionals with appropriate boundaries.

## File Review

**Program Model.** ADAD requires treatment documentation for three general areas: client consent forms, client acknowledgments, and treatment documents. Client consent forms include consent to treat, consent to follow-up, and release of information. Client acknowledgments include descriptions of federal confidentiality regulations, client rights, and client responsibilities. Clients must also receive information regarding HIV, TB, other infectious diseases, and the relationship to alcohol and other drug abuse. A final area details client advisement of counselor credentials, appropriate therapeutic practices and boundaries, and agencies governing counselor conduct. Treatment documents include a client assessment, treatment plan, aftercare plan, discharge summary, progress notes, and treatment plan updates. Required items are to be discussed with the clients, signed by both clinician and participant, and placed in client charts.

**Research Findings.** Client charts were examined in accordance with ADAD regulations. A random sample of 24 clients was generated from participants admitted October 1999 through September 2000. This sample included 12 active and 12 discharged clients.

Charts were kept in three locations, according to the type of information (e.g., court documents, medication logs, treatment information). Treatment files were maintained in a secured room that could be accessed only by the therapists. However, the files were consistently disorganized, incomplete, or missing. In numerous instances, files were not even put together until the client approached discharge. These concerns varied by male versus female program and also varied greatly over the course of the research. In particular, problems with the files were notably exacerbated during the time of the program downsizing.

Table I lists the required paperwork along with the percentage of files where the documents were present and the percentage of files where the documents were present with the appropriate client and/or therapist signatures. Low percentages for documents present with appropriate signatures reflect the fact that documents were either not signed by credentialed counselors, counselors did not include their credentials after signatures, or signatures were photocopied. Also, there was no document detailing the risk factors associated with substance use, although a series of lectures imbued the clients with considerable information about HIV and other STDs.

Two types of documents, progress notes and treatment plan reviews, are contingent upon the length of stay in treatment. ADAD requires treatment plan reviews be conducted at regular intervals; however, there are no minimal requirements specified in the regulations. General RTC procedures indicated that progress notes were required for each treatment group, recreation group, and individual session. RTC staff conducts cursory plan reviews that typically consist of one sentence, often indicating continuation with the original treatment plan.

The number of treatment notes was counted for the sample. On average, charts for discharged clients had 29 progress notes, with an average 45-day length of stay. Thus, treatment notes averaged less than one note per treatment day. Current client charts had an average of 26 notes, and the average number of days in treatment for current clients was 30 days. The rate of progress notes for current clients averaged 1.2 notes per treatment day.

Treatment notes for RTC clients were kept in SOAP (Subjective, Objective, Assessment, Plan) format. Many notes were not individualized and the "P" was very brief, usually stating, "continue to treat." Furthermore, there were frequently notes detailing brief interactions with clients rather than ongoing participation and progress in treatment.

**Table I. ADAD Required Documents (n=24)**

<b>Documents</b>	<b>Present in Chart</b>	<b>Present with Appropriate Signatures</b>
Client Consent Forms		
Consent to Treat	50 %	0 %
Consent to Follow Up	50 %	0 %
Consent to Release Information	88 %	0 %
Client Acknowledgments		
Client Rights	92 %	0 %
Client Responsibilities	92 %	0 %
Treatment Practices, Boundaries, and Governing Agencies <sup>a</sup>	92 %	0 %
Risk Factors	0 %	0 %
Information on Chargeable Fees	92 %	0 %
Treatment Documents		
Screening/Evaluations	100 %	4 %
Admission Summary	0 %	0 %
Treatment Plan	100 %	92 %
Continuing Care Plan <sup>b</sup>	100 %	50 %
Discharge Summary <sup>b</sup>	100 %	50 %

<sup>a</sup> Documentation did not include disclosure of counselors' credentials, <sup>b</sup>n = 12.

# STIRRT PROGRAM PROFILE

## Setting

**Program Model.** STIRRT is a 14-day program located in Commerce City (in the north Denver metro area) with 20 beds for male offenders. The program has been in existence since 1996. The treatment provider of STIRRT is Arapahoe House, the largest provider of drug and alcohol treatment in Colorado. The program targets offenders who are at risk of incarceration due to substance abuse.

The program operates from a two-story building with an additional basement level floor. The building houses the STIRRT program, an aftercare program, and a detoxification unit. The building was designed so there are distinct areas for each program. The program's reception area, treatment groups, and staff offices are located on the main floor. Treatment groups are held in a room furnished with classroom desks, a white board, and a few motivational posters hanging on the walls. There is a large office area shared by most of the treatment staff. One counselor's office is adjoining to the main office space, but has a door that can be shut when more privacy is needed. Additionally, the team leader has office space separate from the other counselors.

STIRRT clients reside on the second floor of the building in three dormitory rooms. Two rooms house five clients each and the other room sleeps ten clients. The smaller rooms are designated for junior clients (clients in their first week) and the larger room is for senior clients (clients in their second week). The junior rooms have beds and closet space along with tables for the clients. The senior room has a row of beds and small closet spaces for each client.

The dining and day rooms are located in the basement of the building. Both clients and staff ate in the dining room at mealtimes. Clients are allowed to relax in the day room or outside when they are not in treatment groups. The day room has sofas, recliners, tables, a television and VCR, and pay phone. Also located in the day room is a computer and library area that can be accessed by clients upon request. Movies are also available to clients at their request. Outside of the building, there are picnic tables, a volleyball area, and a basketball court for the clients' use.

**Research Findings.** *The STIRRT program was set in an institutional-type setting, compounded by the industrial surroundings of the neighborhood. The program area was clean and orderly, giving an almost sterile feel to the setting. STIRRT clients were separated from other therapy clients, as well as outside disruptions. Between groups, clients were not permitted to return to their living quarters; rather they were required to stay in the day room. The day room provided a good setting for clients to relax and use other resources, such as the TV, library, and computers.*

*The primary group room was small for the entire group of 20 clients. There was not enough space to hold two small groups, unless the day room was used. Groups were always run with the entire clientele. Most often the desks were crowded along the walls to form a large square, where clients in the corners could easily be overlooked.*

*There was sufficient space for counselors' offices. The shared office space did not allow for private conversations without leaving the room or asking others to leave. On the other hand, the shared office provided an opportunity to staff to connect with each other and discuss treatment issues. Also, there was always a private room available in other areas of the building for individual counseling sessions.*

## Admissions

**Program Model.** All clients are convicted felons who are referred by various criminal justice agencies throughout the state. In order to be admitted to the program, offenders must meet the following criteria: 18 years of age or older, recommended level 4 treatment (intensive outpatient) or above, a LSI score of 29 or higher, and a positive urinalysis test prior to being referred. Psychiatric and medical conditions must be stable and managed by medications. Clients are excluded from STIRRT for the following reasons: presence of an unstable mental health condition, outstanding felony charges, or a SOA recommended treatment level of 7 (no treatment; assess for psychopathy).

Paperwork sent by the referral agency is reviewed to determine the offenders' appropriateness for treatment. If the referred client is accepted to the program, he is added to the waitlist and admitted as space

became available. Each Monday up to ten new clients are admitted and as many as ten clients are discharged. Once admitted to the program, the client's primary counselor conducts an individual assessment of his personal history and creates a treatment plan.

**Research Findings.** *STIRRT averaged 42 admissions per month over the 3-month period that data was collected on-site. The time difference between referral and admission dates was a median of 38 days, extending as long as six months. Referral dates were missing for only one participant.*

*The program compared client characteristics to admission criteria to determine whether STIRRT adhered to its own criteria. Results indicated that all clients were older than 18 years and there was no evidence of unstable medical or mental health conditions. Although it is a strength that STIRRT uses an assessment to determine eligibility, it was found that in 37% of cases that a complete SOA was not in client charts. Like the other program sites, DOC and Probation databases were used to augment SOA data for this study. A full 45% of program admissions violated STIRRT's own admission criteria. In nearly all of these cases, offenders were recommended for a treatment modality lower than level 4.*

*Clients were occasionally admitted to the program after Monday. This happened when a scheduling conflict arose for the clients or when the program tried to fill empty beds resulting from clients not showing up for treatment. In these cases, the clients missed treatment time because they were still discharged with the rest of the group.*

## Discharges

**Program Model.** The STIRRT program duration is 14 days. In order for clients to complete the program successfully, they must remain in treatment for the program duration, attend groups, and show progress toward their treatment goals. Clients who do not actively participate are confronted in individual sessions, and program terminations are considered if a commitment to change is not made at that time.

Unsuccessful completion from STIRRT results when a client quits the program, is expelled, terminates for administrative reasons, or escapes. A client may be expelled for refusal to participate in treatment; stealing; violent behavior or threats; possession of drugs, alcohol, or a weapon; or inappropriate sexual behavior while in the program. Administrative termination may result when medical problems arise that prevent completion or when clients are determined inappropriate for the program after admission.

The consequences for unsuccessful completions are determined solely by the referral agency. The program itself cannot enforce any consequences other than to inform the referral agency of the client's progress, or lack of progress, in treatment and make recommendations as to further treatment needs. Based on STIRRT's recommendations, the referral source can return the client to custody or send him to further treatment, or they could disregard the program's recommendations entirely.

**Research Findings.** *The majority of clients, 98%, successfully completed treatment during the 3-month period that data was collected at STIRRT. Two were expelled and one was terminated for administrative reasons. All but two participants remained in treatment for the full 14 days (n = 124).*

*The percentage of successful discharges was high, which may be somewhat misleading. The program requires that the clients make some progress toward goals, but the researchers found that the primary criterion for successful discharge was merely completion of 14 days in treatment.*

## Treatment Emphasis

**Program Model.** The primary goal of the STIRRT program is to initiate a change in the clients' substance use and criminal involvement. The program aims to return clients to the community with the skills to reduce criminal involvement and substance abuse, so they can avoid further incarceration or jail time. Along with teaching the clients about drug abuse, the program seeks to effect change in clients by building trust in the staff and fellow clients. The clients are encouraged to engage in self-exploration and develop an awareness of their substance use, criminal thoughts, feelings, and actions. They are also asked to make a commitment of long-term change in their thinking. Clients explore their personal triggers for relapse and come to an understanding of how they arrived in the place they are now.

The program has a largely cognitive-behavioral emphasis. Several lessons from the Phase I of the Strategies for Self-Improvement and Change (SSC) curriculum, developed by Wanberg and Milkman (1998),



are utilized by the program. Clients begin to understand how their thoughts and feelings lead to their criminal behavior and substance use, by exploring their beliefs about using substances and managing anger in group and individual sessions.

The cognitive behavioral approach is integrated into the educational and employment skills groups as well. Clients are given the tools to become more aware of their negative thinking patterns, and they are encouraged to consciously change those patterns. The clients learn to recognize expectations, appraisals, attributions, beliefs, and attitudes that had led them to substance abuse and criminality. Clients are also taught how to identify automatic thoughts, false attributions, distorted emotions and illogical or extreme beliefs and attitudes. With this new knowledge, and a different perspective on their situation, the clients may choose to make new decisions about their substance use and criminal activities.

The Perpetrator Model, developed by the former team leader, was used in combination with the SSC curriculum during the beginning of this study. In the Fall 2000, STIRRT stopped using the Perpetrator Model and shifted to the Shadow Model that includes the same concepts. The Perpetrator Model challenges the clients to understand how they became offenders and to identify the mechanisms that keep them in the cycle of perpetrating. The clients are encouraged to take an honest look at the duality in their lives between the perpetrators and healthy protectors they carry along with them. The staff introduces the model to them in a group setting, and the clients are given a written assignment to explore how the model applies to them. They share their new awareness in the subsequent groups.

The groups held at the STIRRT program cover a variety of topics. The programming includes groups on criminal behavior, negative thinking, strategies for change, and relapse prevention. Clients additionally have the opportunity to explore the grief and loss involved in their addictions. Interpersonal groups are offered on relationships, communication, practical supports, and the emotional cycles of relapse. There are skills groups provided for the clients on anger management, conflict management, problem solving and decision-making. The clients also discuss self-esteem, addiction, spirituality, morals and values, thinking and feeling, and cross-cultural tolerance.

**Research Findings.** *The use of the SSC, a cognitive behavioral approach to offender treatment, is a strength of the STIRRT program. Cognitive behavioral approaches are known to benefit this population, and moreover, the SSC curriculum was designed specifically for offenders. The lessons address both criminal involvement and substance abuse. The SSC provides a structured and formal training in substance abuse recovery; the same material is covered for each group of clients. On the other hand, the SSC is prone to a lecture-style format, resulting in a loss of clients' attention, loss of therapist impact on group, and decreased processing of therapeutic material.*

*The Perpetrator Model provided a nice complement to the SSC curriculum. Similar to the SSC, this model was designed specifically for offenders. While the model itself was an important component to the treatment setting, the way it was implemented made it unique. Clients explored their personal development into crime and substance abuse, and they acknowledged their past influences on their current behavior. Exploration of the model successfully broke through the criminal façade to allow clients to deal with personal issues at an emotional level. Clients were then challenged to take a different perspective and make different decisions when they returned to the community.*

*The Shadow Model was used in lieu of the Perpetrator Model, commencing in the Fall of 2000. The Shadow Model incorporated the same concepts as the Perpetrator Model. However, the new staff members were not familiar with either the concepts or the implementation. The Shadow Model was introduced to the clients, but the therapeutic processing related to the model declined. At the same time, more sessions from the SSC were added to the STIRRT program. The primary disadvantage of this change was the increase in lecture-style groups with a concurrent decline in processing material at an emotional level.*

## Program Activities

**Program Model.** Structured program activities are held seven days a week. A full schedule of groups is held each day, Sunday through Saturday. Each week usually consist of 46 hours of treatment activities involving direct client contact and 10½ additional hours of structured activities. The weekly activity schedule

includes a 30-minute community meeting each morning, 46 hours of treatment groups, and a treatment oriented movie. Staff meetings are also conducted each week.

Clients are responsible for running the community meetings, held each morning. Counselors are in attendance only to make observations about the group dynamics. The purpose of the community meeting is for clients to problem solve with one another. These groups also serve as a time for announcements to be presented. During community meetings, the rules of STIRRT are read to the members. At the end of the meeting, an inspirational or thought-provoking passage is read.

Treatment groups are held three times each day. The program has a weekly structured schedule for the group times and topics. Cognitive behavioral techniques along with the Perpetrator Model are employed in the group setting. A lecture is given at the beginning of each week covering the Perpetrator Model. The clients are introduced to the terms perpetrator, healthy protector, and unhealthy protector. Typically, therapists must work with clients' resistance to the model when it is first introduced.

Clients are given the assignment to identify the characteristics of his own perpetrator and healthy protector. In the group setting, the clients individually reveal their results and the group is encouraged to express their perceptions of the client. The goal is to give clients insight into how they have come to think, feel, and behave the way they do. Clients are encouraged to contemplate about whether they want to continue their lives in a similar pattern or if they would like to make changes in their thoughts, feelings, and actions to effect changes in their lives.

Each individual client becomes the focus of a group session when he presents findings on the Perpetrator Model in his own life. Motivational interviewing techniques are used to persuade the client to explore the problems in his life. With gentle prodding and many affirmations, the client gains insight into the problems that have been covered up by his substance abuse and criminal attitude. These groups are typically very emotional as the client may discover for the first time his current actions are linked to the pain in his life that he has been trying to avoid.

The "board meeting" is also a significant component of the program. In this team building exercise, clients are forced to use communication skills, problem-solving skills, and interpersonal skills to complete the task. Each week the junior clients are asked to physically re-order their group without stepping off the board that is 10 feet long, 4 inches wide, and 4 inches tall. The senior clients are assigned the relapse role. They try to distract the junior clients as much as possible without touching them. Juniors who touch other objects (the floor, ceiling, or senior clients) are considered in relapse and cannot communicate verbally or non-verbally. When this happens, they must return to their original positions on the board and start again. The group members work together and encourage each other in order to complete the task.

Graduation ceremonies are held each Sunday for clients who successfully complete STIRRT. The ceremony is attended by staff, current clients, graduating clients, and past graduates of the program. Clients may share what they have learned over the past two weeks and how they have changed. The past graduates are also given the opportunity to speak about how the knowledge and experiences gained at STIRRT are applied in the real world. The staff acknowledge the work each client has done while in the program and distribute certificates.

**Research Findings.** *STIRRT clearly provided participants with a highly intense, structured therapeutic milieu. The schedule for groups was followed closely, although groups sometimes began late and ended early. Treatment staff was present on-site every day of the week and provided 46 hours of direct contact hours with clients. In addition, treatment staff conducted weekly individual sessions with participants.*

*All clients attended groups together, where there was often only one therapist present for the entire group of 20 clients. The concern with such a large group includes natural impediments to group processing. Furthermore, this large size was contrary to ADAD's standards of care. Occasionally, an uncredentialed therapist was observed to run the group alone, but most groups were facilitated by a credentialed staff person.*

*Treatment participants appeared to be actively engaged in groups. They contributed to the group process, particularly through group discussions. Some of the groups required high levels of group participation, such as the board meeting. The board meeting provided a good variation from traditional therapy. While it was found to be a concrete task, it had strong symbolism about its relevance to relapse. The staff did an excellent job of*

not only facilitating the process, but in explaining its relevance to recovery. The board meeting also provided a good opportunity for bonding among clients.

The skills and relapse prevention groups were found to be concrete. Making the treatment readily applicable to the client's daily lives is important. Another primary component of the program was encouraging the clients to gain trust in one another and the counselors. Team building groups help to break down barriers between clients and build trust. For these clients, building trust is not an easy task. The program has developed an asset by creating activities that successfully target such a difficult issue for these clients.

## Staff

**Program Model.** The STIRRT treatment staff consists of four counselors and a team leader. The counselors and team leader are responsible for assessments, facilitating treatment groups, individual case management, and paperwork. The team leader has the additional responsibility of overseeing the counselors. There is also an on-call counselor position to fill in for absent counselors as needed by the program.

**Research Findings.** There were significant staff changes over the course of the study. For approximately the first year, there were virtually no changes. When the STIRRT team leader left in the Fall 2000, several additional staff departed and two new positions were added for a total of six counselors. Of the original staff, two counselors had CAC III certification and one had CAC I certification. The team leader and one counselor were not certified as addictions counselors. Subsequent to the staff turnover, three counselors were certified at the CAC III level and one at the CAC II level. The team leader and two counselors remained uncredentialed. To the program's credit, vacated staff positions were primarily replaced with well-credentialed staff rather than inexperienced workers. However, STIRRT did not meet the ADAD standards for ratio of credentialed to uncredentialed staff.

Educational levels were high among STIRRT program staff. Degrees ranged from a bachelor's degree to a doctorate in clinical psychology before the staff turnover and ranged from a GED to a master's degree after the changes. Half of the staff had a recovery background prior to the staff turnover and nearly all had a recovery background after the changes. The early staff's tenure with STIRRT dated back to the opening of STIRRT; however, with the turnover, only one counselor maintained some history with the program.

The ethnic and gender breakdown of the staff was not proportional to the clientele demographics before the staff changes. The staff was predominately Anglo and female. Four of the five staff members were Anglo, including the team leader, and one was African American. There were three female staff members and two males. Following the turnover, greater diversity was evidenced among the staff. Three were Anglo, one Hispanic, one Native American, and two bi-racial.

The team leader changed over the course of the study. The initial team leader was trained as a psychologist but was not licensed. The next team leader did not have certifications or licensure either. This posed a problem in terms of clinical supervision. While counselors had daily interactions with the team leader about current issues with their caseload, she was not qualified to supervise them. Group supervision and feedback was also available in weekly staff meetings, where several certified persons were in attendance. A qualified Arapahoe House superior was sometimes in attendance at these staffings to provide additional direction. Reportedly, the team leader's primary functions were administrative tasks related to program operations. However, the researchers observed that the team leader was perceived as the supervisor for more clinical domains, such as caseload issues or problems among staff. Even if the team leader did perform solely administrative functions, the concern is that the clinical supervisor was as readily available to staff as was the team leader. Without a designated individual, it would be unclear for staff on how to get assistance with clinical issues. It would seem important that the staff develop a rapport with their clinical supervisor in order to have quality supervision, particularly if supervision focused on counselor's skill development. Finally, the role of clinical supervisor is one that should be taken on by someone perceived as a superior rather than a peer.

The staff members seemed to work well together and they approached treatment as a team effort. There were many times when a client requested an individual session with a therapist. The client was given time by any available therapist, even if that client was not on the therapist's caseload. Because of the good communication between staff members, individual sessions with clients outside their caseload were possible.

## File Review

**Program Model.** ADAD requires treatment documentation for three general areas: client consent forms, client acknowledgments, and treatment documents. Client consent forms include consent to treat, consent to follow-up, and release of information. Client acknowledgments include descriptions of federal confidentiality regulations, client rights, and client responsibilities. Clients must also receive information regarding the HIV, TB, other infectious diseases, and their relationship to alcohol and other drug abuse. A final area details client advisement of counselor credentials, appropriate therapeutic practices and boundaries, and agencies governing counselor conduct. Treatment documents include a client assessment, treatment plan, continuing care plan, discharge summary, progress notes, and treatment plan updates. Required items are to be discussed with the clients, signed by both clinician and participant, and placed in client charts.

**Research Findings.** *Client charts were examined with respect to ADAD standards. Client files were kept on a cart in the main therapists' office. They were out in the open while therapists were in the room, but they were secured when no one was present. The files themselves were quite orderly; the forms were placed in a consistent order for each file, making the information easy to locate.*

*A random sample of 24 clients was generated from participants admitted October 1999 through September 2000. This sample included 12 active and 12 discharged clients. The results of the file review are shown in Table J. Percentages are shown for documents found in client charts and documents with appropriate signatures. The low percentages for documents present with staff or counselor signatures plus credentials reflect the fact that many documents in the files were either not signed by credentialed counselors, counselors did not include their credentials after signatures, or signatures were photocopied. There was often not a place on the form to indicate that the counselors needed to sign it.*

*Information given to clients was generally very good. The information provided about counselor credentials, treatment practices, boundaries, and governing agencies was very detailed and specific. However, information pertaining to risk factors associated with substance use was incomplete. There was a form included in the intake packet signed by clients documenting the date that they received information on HIV and AIDS. It was unclear if the information also included TB, other infectious diseases, or pregnancy.*

*Two types of documents, progress notes and treatment plan reviews, are contingent on the length of stay in treatment. ADAD requires treatment plan reviews be conducted at regular intervals; however, there are no minimal requirements specified. Progress notes for the clients at STIRRT were completed for each group or individual session, in addition to an overnight note. STIRRT counselors conducted plan reviews for clients in their second week. The number of treatment notes was totaled for the sample. On average, charts for discharged clients had 49 progress notes (3½ per day). Current client charts had an average of 20 notes, with an average of six days in treatment.*

*Progress notes detailed the groups, individual sessions, or overnight stay. Notes were placed in the file in chronological order. The notes were written in the DAP (Data, Appearance, and Plan) format. The notes gave a brief synopsis of each group, but provided little information about the individual clients' progress. They were often vague and similar for each client. The forms used for treatment notes were already made out with the Data and Plan completed for each group, leaving space for the counselors to fill in the Appearance section and sign. The added information usually stated that the clients attended the group and whether they participated in the activities. Progress notes describing individual sessions with their primary counselor were more detailed.*

**Table J. ADAD Required Documents (n=24)**

<b>Documents</b>	<b>Present in Chart</b>	<b>Present with Appropriate Signatures</b>
Client Consent Forms		
Consent to Treat	100 %	0 %
Consent to Follow Up	71 %	58 %
Consent to Release Information	88 %	0 %
Client Acknowledgments		
Client Rights	88 %	0 %
Client Responsibilities	88 %	0 %
Counselor Credentials, Treatment Practices, Boundaries, and Governing Agencies	79 %	0 %
HIV, TB, & Other Infectious Diseases	83 %	0 %
Information on Chargeable Fees	0 %	0 %
Treatment Documents		
Screening/Evaluations	92 %	17 %
Admission Summary	50 %	42 %
Treatment Plan	83 %	54 %
Continuing Care Plan <sup>a</sup>	92 %	33 %
Discharge Summary <sup>a</sup>	92 %	33 %

<sup>a</sup> n = 12.

# DISCUSSION

## Participants

This study reveals interesting differences between the clientele at the four IRT sites; however, caution should be used when interpreting the findings due to substantial amounts of missing data. Although there are numerous differences across sites, many of those are specific to clients' demographic characteristics. Client gender and ethnicity clearly vary by program, as do several other characteristics. Females are only treated at the DART and RTC programs. Ethnicity differences are likely a reflection of the demographics of the regions from which the clientele is drawn; there were more Latino clients at the rural RTC and CIRT sites and more African American clients at the Denver-based DART program. Other differences in clientele across sites, unrelated to gender or ethnicity, include LSI score, number of nonviolent felonies, and motivation scores. STIRRT's minimum required score of 29 easily explains their higher LSI scores. It is also evident that the criminal justice system uses the programs differently, as manifested by divergent referrals across programs.

Gender accounts for many of the differences across sites. These factors include number of children, SSI scores, number of violent felonies, drug of abuse, and motivation. One factor that emerged in the gender comparisons, not found to vary across sites, was the ASUS Mood scale; women scored higher than men.

Ethnic differences were also found to relate to differences among the sites. Marital status, number of children and dependents, drug of abuse, lifetime use of opiates and sedatives, and number of violent felonies and misdemeanors were more likely related to ethnic differences than actual site differences. On the other hand, several differences surfaced in the ethnicity comparisons that were not found to account for program variations. These factors included age at first drug use, exposure to various drugs, and ASUS Involvement and Disruption scores. Despite the number of findings between ethnic groups, the impact of other factors was not measured. Differences between ethnic groups may instead be a product of environmental factors (e.g., urban vs. rural), socioeconomic status, cultural bias within the criminal justice system, or other unidentified factors.

These participant profiles can be useful for thinking about treatment delivery. For example, demographic characteristics, substance use patterns, and degree of motivation are important areas that should impact the content of treatment services. It is not evident that the programs specifically address these areas, other than limited focus on gender issues. Ideally, clients' ethnicity should impact staffing patterns. While it is not inherently problematic to have ethnic differences among the programs, the staff's ethnicity should align with that of the clients whenever possible. Program delivery should also be culturally sensitive to diverse client backgrounds; researchers found only limited training on cultural sensitivity.

## Programs

There are more commonalities across these level 5 programs than differences. Plenty of evidence was found to indicate that the IRTs are treating their target population: serious substance abusers posing a high risk within the community. Many struggles and challenges are linked to treating this population. The setting alone establishes an interesting dynamic whereby participants are housed in a correctional-type facility isolated from their own supervising agent.

The programs encounter difficulties starting with the lack of information provided by the referral sources. Conspicuously void from client files are standardized substance abuse assessments. Even basic information, such as the reason for referral or criminal history data, often is not forwarded with the referral. Consequently, it is a challenging task for the treatment providers to individualize treatment services to fit the particular needs of a client. They become reliant upon the offender to gather relevant data for treatment planning.

The programs have very few consequences or privileges at hand to enlist participants' cooperation. Available to counselors is therapeutic skill to motivate clients, representing an important tactic for handling lesser disruptions. The authority to enforce more stringent consequences remains with the supervising agent, who is remarkably absent during a client's treatment episode. Even expelling clients from treatment may not be a viable option given the short waitlists and the difficulty associated with gathering information on new clients. Short waitlists may mean empty beds and, subsequently, an absence of funding.

There is very little to guide best practices of treatment. As the regulatory agency with oversight responsibility for substance abuse treatment, ADAD prescribes standards for licensed programs. The existing

standards were limited at best, and it was discovered that those standards were often violated. The programs may have held ADAD waivers allowing them to vary from accepted practices or met those standards under the umbrella of a larger organization; however, it is noted that the intent of the standards was not upheld. There was a genuine lack of knowledge about recommended practices for level 5 services, as many guidelines are not specified in the ADAD regulations. For example, the standards do not detail what should be included in an admission summary or how often progress notes should be written. Neither do the standards address topics such as the amount of direct contact between staff and clients, frequency of individual contacts, or standard caseload size. Prior to the 1998 revision of the ADAD standards, there were more specific, detailed standards in place for licensed programs.

Level 5 treatment alone has a limited ability to impact outcomes. Widely accepted standards for treatment duration are about 9 months, as established in the research literature and by ADAD standards. Thus, level 5 is best maximized when coupled with continuing outpatient therapy (level 3 or 4). However, linkages with aftercare services are generally not reinforced with clients. The available aftercare services offered by these programs are limited to clients staying on in community corrections or living in the Denver metro area. While these programs may not have the resources to provide aftercare services themselves, they should link clients to appropriate services. The programs do not typically make contact with treatment providers in the communities to which their clients are returning, nor is even a phone contact made between the treatment staff and the supervising agent to discuss the importance of continuing treatment.

Staffing problems uncovered in this study are indicative of a trend in Colorado, regardless of setting or modality. Staff vacancies are frequent, and a high rate of uncredentialed staff is found. Typically, staff with the least credentials has the most contact with clients. Counselors in recovery are on the decline while individuals with college degrees are increasing. This is a change in the tradition of addictions treatment, one that requires some careful consideration. It is perhaps a good value to require higher educational qualifications, but many counselors hold degrees unrelated to human services. Others have bachelor-level degrees, where clinical training is not provided. Only in rare instances are counselors trained at the master's level or higher, the juncture at which formal clinical training begins. Therefore, fewer counselors who have training and experience in treatment are being hired. At a minimum, recovering staff have a personal devotion to the field, as well as their own experiences in treatment to serve as a model. The difficulty of attracting culturally diverse, recovered, skilled, credentialed staff cannot be emphasized enough.

The dichotomy between programs that have a mental health versus addictions focus is clearly evident. CIRT and RTC endorse the mental health model, while DART and STIRRT are firmly grounded in the addictions model. This difference manifests itself in two noticeable ways. First, no recovering addicts are on treatment staff at CIRT and RTC. Secondly, the two programs with a mental health orientation tend to use individual sessions to address personal issues. Contrarily, DART and STIRRT rely on the group dynamics as the primary mode of therapy. Not only is the group setting more economical, it follows the tradition of public living and peer support that is inherent to addictions treatment.

Clinical supervision occurs in all of the programs on an informal basis. Typically, supervision is available during staff meetings where clients' cases are discussed. The supervisor, or another qualified staff member, is usually available on a daily basis to address more pressing caseload issues. However, supervision that directly addresses counselors' clinical skills was not found to occur. Clinical supervision was not perceived as a mechanism for giving feedback and training to counselors, but rather as a problem-solving tool. In fact, supervisors rarely observed their staff during group sessions, limiting their ability to share meaningful insights with their staff.

Paperwork in clinical files is clearly an area that needs improvement across all of the sites. For most sites, required documentation was frequently absent from the files. When required documentation was found, appropriate signatures were rarely found. Furthermore, progress notes were kept very brief and vague, making it difficult to distinguish one client from another. Also, notes and other documentation that require co-signing by credential counselors, were typically co-signed when the files were being closed out at the end of the clients' treatment stay. This entirely circumvents the supervisory aspect of the regulations.

The IRT programs exhibit an overall lack of intensity. Many of the factors discussed above contribute to this temperance. Easily identifiable variables include untrained or uncertified staff, staff vacancies, large group

sizes, limited expulsions for disruptive or uncooperative clients, and the relatively short duration of treatment for this high-risk population. These factors intertwine with each other to produce a moderated effect from treatment. Group sessions typically incorporate more lecturing than processing, meaning that the counselors are firmly directing the sessions. It is problematic when therapists are working harder than the clients in therapy. Most of these participants have been in numerous treatment settings; it seems imperative for them to begin practicing and engaging in the treatment process with guidance from the counselors rather than merely attending lectures.

While programs may share many characteristics with each other, they are markedly different from each other. Each IRT program has its own strengths and challenges that they face in doing intensive residential treatment.

DART is set in a distinctly relaxed, therapeutic environment. It has a high rate of recovering staff that are impassioned about their work. DART staff, well matched to their environment, are approachable and informal individuals. Some the challenges the program faces are the high number of unsupervised, uncredentialed staff directing group sessions, as well as groups operating without a therapist present. The research uncovered specific concerns over ethical, professional boundaries between staff and clients, such as inappropriate attire. While DART fulfills a needed niche by treating female offenders, they do not adequately address female-specific issues.

The RTC program is unique from the other sites for several reasons. It operates small groups for processing sensitive, personal issues. While there are lecture-style groups, RTC emphasizes group discussions as a complement to their lecture series. They also make a special effort to address gender-specific issues in treatment. On the other hand, RTC provides an extremely low number of therapeutic contact hours. Other challenges faced by this program include the excessively high rate of uncredentialed staff, a concern compounded by the high prevalence of mental health disorders among the female population. The lack of curriculum or training model suggests a disorderly approach to treatment that may be confusing to staff and clients alike. Finally, the program downsizing in December 2000 was clearly an administrative decision that did not take to heart the clients' best interests, causing concerns over ethical program practices.

The CIRT program has some notable strengths that set it apart from the other sites. There is a cohesive staff with diverse multi-cultural backgrounds. Several of the staff members are bilingual, enabling them to work with Spanish-speaking clients in need of treatment. This program draws clients from around the state, particularly from rural regions of southern and western Colorado. The challenge to the CIRT treatment program includes its particularly low-intensity of treatment. The program's implementation of the SSC model consists primarily of lecturing from the manual, which does little to engage participants in the therapeutic enterprise.

The STIRRT program offers several assets for treating criminal justice clients. They provide an extremely high number of contact hours over a rather short duration. Due to the short treatment stays, STIRRT has the luxury of closed groups that have a more cohesive approach. The Predator Model endorsed by this program set it apart from the other sites, particularly in its quality implementation of it. There was an exceedingly stable, qualified staff until a large turnover near the close of the study. The main challenge faced by STIRRT includes a staff composed of several new individuals, managed by an uncertified supervisor. Furthermore, more recent implementation of the Predator Model tends to occur in a lecture-style format that is less successful at breaking through the criminal façade at an emotional level as it did previously.

## Recommendations

There are many recommendations that could be made based on the findings herein. Perhaps the key recommendation is for the criminal justice system to work closely with these programs to refine the services provided to high-risk substance abusers. Just as the programs rely upon the criminal justice system for their clientele, so does the system rely on the treatment programs for important offender habilitation services. The consistent lack of communication between these two entities impedes the goals of substance abuse treatment. Merely delineating each other's needs, sharing information, and developing standard operating procedures would vastly improve services.



There is a statewide need to examine the hiring practices with substance abuse counselors. The frequent turnover among program staff is a chief indication of a larger problem. The low salary ranges associated with the substance abuse field make it difficult to attract and keep qualified individuals. Consistent hiring of untrained, unskilled, and uncertified staff devalues the field and in essence dictates this as an unskilled job classification. A disservice is paid to clients when they are pressured into treatment staffed with unqualified personnel.

Another global recommendation is to revise or adopt standards of care for substance abuse treatment. While it may appear to some as though standards inhibit services, they influence the quality of treatment in fundamental ways. Clearly, without strong support and guidance, programs demonstrate that they do not implement the highest standards of care when left to their own devices. Along with latitude to create more complete regulations, ADAD needs to be given increased responsibility within the substance abuse field. Prior to the 1998 revision, ADAD provided a great deal of specificity in its licensure rules. ADAD's role need not be minimized, as it provides integral monitoring functions for vital statewide services.

Further research is needed to examine the therapeutic milieu of the settings. While positive peer cultures are usually associated with therapeutic communities, they are a key element to any residential program. Pervasive negative attitudes and influences are detrimental to the success of treatment. Evaluation of counselors' clinical skills and the programs' therapeutic milieu would be prudent subsequent to implementation of programmatic changes recommended herein.

## REFERENCES

- Abram, K.M. (1989). The effect of co-occurring disorders on criminal careers: Interaction of antisocial personality, alcoholism, and drug disorders. *International Journal of Law and Psychiatry*, 12, 133-148.
- Andrews, D.A. (1982). *The Level of Supervision Inventory (LSI): The first follow-up*. Toronto: Ontario Ministry of Correctional Services.
- Andrews, D.A., & Bonta, J.L. (1994). *The Psychology of Criminal Conduct*. Cincinnati: Anderson.
- Andrews, D.A., & Bonta, J.L. (1995). *LSI-R: The Level of Service Inventory - Revised*. Toronto: Multi-Health Systems.
- Anglin, M.D., & Hser, Y. (1990). Treatment of drug abuse. In M. Tonry & J.Q. Wilson (Eds.), *Drugs and Crime*, pp. 393-460. Chicago: University of Chicago Press.
- Anker, A.L., & Crowley, T.J. (1982). Use of contingency contracts in specialty clinics for cocaine abuse. In L.S. Harris (Ed.), *Problems of Drug Dependence 1981* (NIDA Research Monograph 41, pp. 452-469). Rockville, MD: National Institute of Drug Abuse.
- Archeriou, M., & Manohar, V. (1978). Relative effectiveness of nonalcoholics and recovered alcoholics as counselors. *Journal of Studies on Alcohol*, 39(5), 793-799.
- Arens, S., Durham, R., O'Keefe, M., Klebe, K., & Olene, S. (1996). *Psychometric Properties of Colorado Substance Abuse Assessment Instruments*. Technical Report. Colorado Springs, CO: Department of Corrections.
- Bale, R.N., Van Stone, W.W., Kuldau, J.M., Engelsing, T.J.M., Elashoff, R.M., & Zarcone, V.P. (1980). Therapeutic communities versus methadone maintenance: A prospective controlled study of narcotic addiction treatment. *Archives of General Psychiatry*, 37, 179-193.
- Ball, J.C., Corty, E., Bond, H.R., & Tommasello, A. (1988). The reduction of intravenous heroin use, non-opiate abuse and crime during methadone maintenance treatment: Further findings. In L.S. Harris (Ed.), *Problems of Drug Dependence 1987* (NIDA Research Monograph 81, pp. 224-230). Rockville, MD: National Institute of Drug Abuse.
- Barthwell, A.G., Bokos, P., Bailey, J., Misenbaum, M., Devereux, J., & Senay, E.C. (1995). Interventions/Wilmer: A continuum of care for substance abusers in the criminal justice system. *Journal of Psychoactive Drugs*, 27, 39-47.
- Beckman, L.J., & Bardsley, P.E. (1986). Individual characteristics, gender differences and drop-out from alcoholism treatment. *Alcohol & Alcoholism*, 21(2), 213-224.
- Bogue, B., & Timken, D. (1993). *Substance Use History Matrix*. (JDF Publication No. 328P). Denver: Colorado Judicial Branch.
- Bonta, J., & Motiuk, L.L. (1985). Utilization of an interview-based classification instrument: A study of correctional halfway houses. *Criminal Justice and Behavior*, 12, 333-352.
- Bonta, J., & Motiuk, L.L. (1987). The diversion of incarcerated offenders to correctional halfway houses. *Journal of Research in Crime and Delinquency*, 24, 302-323.
- Bonta, J., & Motiuk, L.L. (1990). Classification to correctional halfway houses: A quasi-experimental evaluation. *Criminology*, 28, 497-506.
- Brennan, P.I. (1998). Cognitive behavioral program vs. twelve-step program: Comparative effectiveness of two outpatient drug/alcohol treatment models. *Dissertation Abstracts International: Section B: The Sciences & Engineering*, 59(6), 3049.
- Brown, B.S., (1979). *Addicts in Aftercare: Community Integration of the Former Drug Abuser*. Beverly Hills: Sage Publication.
- Carroll, J.F.X. (1990). Treating drug addicts with mental health problems in a therapeutic community. *Journal of Chemical Dependency Treatment*, 3(2), 237-259.
- Center for Substance Abuse Treatment (1994). *Simple screening instruments for outreach for alcohol and other drug abuse and infectious diseases*. (DHHS Publication No. SMA 94-2094). Washington, DC: U.S. Government Printing Office.
- Condelli, W.S. (1994). Domains of variables for understanding and improving retention in therapeutic communities. *The International Journal of the Addictions*, 29, 593-607.

- Condelli, W.S., & Hubbard, R.L. (1994). Relationship between time spent in treatment and client outcomes from therapeutic communities. *Journal of Substance Abuse Treatment, 11*, 25-33.
- DeLeon, G. (1991). Retention in drug-free therapeutic communities. In R.W. Pickens, C.G. Leukefeld, & C.R. Schuster (Eds.), *Improving Drug Abuse Treatment* (NIDA Research Monograph 106, pp. 218-241) Rockville, MD: National Institute on Drug Abuse.
- DeLeon, G., & Jainchill, N. (1986). Circumstances, motivation, readiness, and suitability as correlates of treatment tenure. *Journal of Psychoactive Drugs, 18*, 203-208.
- DeLeon, G., Melnick, B., Kressel, D., & Jainchill, N. (1994). Circumstances, motivation, readiness, and suitability (the CMRS scales): Predicting retention in therapeutic community treatment. *American Journal of Drug & Alcohol Abuse, 20*, 495-515.
- DeLeon, G., Wexler, H.K., & Jainchill, N. (1982). The therapeutic community: Success and improvement rates 5 years after treatment. *International Journal of the Addictions, 17*(4), 703-747.
- Dell, D., & Schmidt, L. (1976). Behavioral cues to counselor expertness. *Journal of Counseling Psychology, 23*, 197-201.
- DiClemente, C.C., & Hughes, S. (1990). Stages of change profiles in outpatient alcoholism treatment. *Journal of Substance Abuse, 2*, 217-235.
- Field, G. (1984). The Cornerstone program: A client outcome study. *Federal Probation, 48*, 50-55.
- Field, G. (1989). A study of the effects of intensive treatment on reducing the criminal recidivism of addicted offenders. *Federal Probation, 53*, 51-56.
- Finn, P. (1994). Addressing the needs of cultural minorities in drug treatment. *Journal of Substance Abuse Treatment, 11*, 325-337.
- Fiorentine, R., & Anglin, M.D. (1996). More is better: Counseling participation and the effectiveness of outpatient drug treatment. *Journal of Substance Abuse Treatment, 13*(4), 341-348.
- Gendreau, P., & Andrews, D.A. (1990). Tertiary prevention: What the meta-analyses of the offender treatment literature tell us about "what works". *Canadian Journal of Criminology, 32*, 173-184.
- Gendreau, P., Little, T., & Goggin, C. (1996). A meta-analysis of the predictors of adult offender recidivism: What works. *Criminology, 34*(4), 575-607.
- Gorski, T.T., Kelley, J.M., Havens, L., & Peters, R.H. (1993). *Relapse Prevention and the Substance-Abusing Criminal Offenders* (Technical Assistance Publication Series 8). Rockville, MD: Center for Substance Abuse Treatment.
- Graham, K., Annis, H.M., Brett, P.J., & Venesoen (1996). A controlled field trial of group versus individual cognitive-behavioural training for relapse prevention. *Addiction, 91*(8), 1127-1139.
- Griffin, M.L., Weiss, R.D., Mirin, S.M., & Lange, U. (1989). A comparison of male and female cocaine abusers. *Archives of General Psychiatry, 46*(2), 122-126.
- Heppner, P., & Pew, S. (1977). Effects of diplomas, awards, and counselor sex on perceived expertness. *Journal of Counseling Psychology, 24*, 147-149.
- Higgins, S.T., Budney, A.J., Bickel, W.K., Hughes, J.R., Foerg, F., & Badger, G. (1993). Achieving cocaine abstinence with a behavioral approach. *American Journal of Psychiatry, 150*, 763-769.
- Higgins, S.T., Delaney, D.D., Budney, A.J., Bicke, W.K., Huges, J.R., Foerg, F., & Fenwick, J.W. (1991). A behavioral approach to achieving initial cocaine abstinence. *American Journal of Psychiatry, 148*, 1218-1224.
- Hiller, M.L., Rowan-Szal, G.A., Bartholomew, N.G., & Simpson, D.D. (1996). Effectiveness of a specialized women's intervention in a residential treatment program. *Substance Use and Misuse, 31*(6), 771-783.
- Hoffmann, N.G., & Miller, N.S. (1993). Perspectives of effective treatment for alcohol and drug disorders. *Recent Advances in Addictive Disorders, 16*, 127-140.
- Hser, Y. (1995). A referral system that matches drug users to treatment programs: Existing research and relevant issues. *The Journal of Drug Issues, 25*, 209-224.
- Hser, Y., Anglin, M.D., & Fletcher, B. (1998). Comparative treatment effectiveness: Effects of program modality and client drug dependence history on drug use reduction. *Journal of Substance Abuse Treatment, 15*(4), 513-523.

- Hser, Y., Anglin, M.D., Grella, C., Longshore, D., & Prendergast, M.L. (1997). Drug treatment careers: A conceptual framework and existing research findings. *Journal of Substance Abuse Treatment, 14*(6), 543-558.
- Hser, Y., Polinsky, M.L., Maglione, M., & Anglin, M.D. (1999). Matching clients' needs with drug treatment services. *Journal of Substance Abuse Treatment, 16*(4), 299-305.
- Hubbard, R.L., Collins, J.J., Rachal, J.V., & Cavanaugh, E.R. (1988). The criminal justice client in drug abuse treatment. In Leukefeld, C.G. & Tims, F.M. (Eds.), *Compulsory Treatment of Drug Abuse: Research and Clinical Practice* (NIDA Research Monograph 86, pp. 57-79). Rockville, MD: National Institute of Drug Abuse.
- Husband, S.D., & Platt, J.J. (1993). Cognitive skills component in substance abuse treatment in correctional settings: A brief review. *Journal of Drug Issues, 23*, 31-42.
- Izzo, R.L., & Ross, R.R. (1990). Meta-analysis of rehabilitation programs for juvenile delinquents: A brief report. *Criminal Justice and Behavior, 17*, 134-142.
- Johnson, M.E., & Prentice, D.G. (1990). Effects of counselor gender and drinking status on perceptions of the counselor. *Journal of Alcohol & Drug Education, 35*(3), 38-44.
- Kaskutas, L.A. (1994). What do women get out of self-help? Their reasons for attending Women For Sobriety and Alcoholics Anonymous. *Journal of Substance Abuse Treatment, 11*(3), 185-195.
- Khalsa, H.K., & Anglin, M.D. (1991). Treatment effectiveness for cocaine abuse. In *Cocaine Today and Its Effects on the Individual and Society* (United National Interregional Crime and Research Institute Monograph 44, pp. 89-98). Rome: UNICRI.
- Khalsa, H.K., Anglin, M.D., & Paredes, A. (1992). Cocaine abuse: Outcomes of therapeutic interventions. *Substance Abuse, 13*(4), 165-179.
- Khalsa, H.K., Paredes, A., Anglin, M.D., Potepan, P., & Potter, C., (1993). Combinations of treatment modalities and therapeutic outcome for cocaine dependence. In F.M. Tims & C.G. Leukefeld (Eds.), *Cocaine Treatment: Research and Clinical Perspectives* (NIDA Monograph 135, pp. 237-259). Rockville, MD: National Institute of Drug Abuse.
- Kirk, W.G., Best, J.B., & Irwin, P. (1985). The perception of empathy in alcoholism counselors. *Journal of Studies on Alcohol, 47*, 82-84.
- Knight, K., & Hiller, M.L. (1997). Community-based substance abuse treatment: A 1-year outcome evaluation of the Dallas county judicial treatment center. *Federal Probation, 61*, 61-68.
- Kosten, T.R., Rounsaville, B.J., & Kleber, H.D. (1985). A 2.5 year follow-up of depression, life crises, and treatment effects on abstinence among opioid addicts. *Archives of General Psychiatry, 43*(8), 733-738.
- Lipsey, M.W. (1989, November). *The efficacy of intervention for juvenile delinquency: Results from 400 studies*. Paper presented at the 41<sup>st</sup> annual meeting of the American Society of Criminology, Reno, NV.
- LoBello, D.L. (1984). Counselor credibility with alcoholics and non-alcoholics: It takes one to help one? *Journal of Alcohol and Drug Education, 29*, 58-65.
- LoScuito, L., Aiken, L.S., Ausetts, M.A., Brown, B.S. (1984). Paraprofessional versus professional drug abuse counselors: Attitudes and expectations of the counselors and their clients. *International Journal of Addictions, 19*, 232-252.
- Losel, F. (1995). Increasing consensus in the evaluation of offender rehabilitation? Lessons from recent research synthesis. *Psychology, Crime & Law, 2*, 19-39.
- Loza, W., & Simourd, D.J. (1994). Psychometric evaluation of the Level of Supervision Inventory (LSI) among male Canadian federal offenders. *Criminal Justice and Behavior, 21*, 468-480.
- Luborsky, L., McLellan, A.T., Woody, G.E., O'Brien, C.P., & Auerbach, A. (1985). Therapist success and its determinants. *Archives of General Psychiatry, 42*, 602-611.
- Luborsky, L., Singer, B., & Luborsky, L. (1975). Comparative studies of psychotherapies: Is it true that "everyone has won and all must have prizes"? *Archives of General Psychiatry, 30*, 995-1008.
- Machell, D.F. (1991). Counselor substance abuse history, client fellowship, and alcoholism treatment outcome: A brief report. *Journal of Alcohol and Drug Education, 37*, 25-30.
- Maddux, J.F., & Desmond, D.P. (1979). Crime and drug use behavior: An areal analysis. *Criminology, 19*, 281-302.

- Marlatt, G.A., & Gordon, J.R. (1985). *Relapse prevention: Maintenance strategies in the treatment of addictive behaviors*. New York: Guilford.
- McConaughy, E.A., DiClemente, C.C., Prochaska, J.O., & Velicer, W.F. (1989). Stages of change in psychotherapy: A follow-up report. *Psychotherapy, 26*, 494-503.
- McConaughy, E.A., Prochaska, J., & Velicer, (1983). Stages of change in psychotherapy: Measurement and sample profiles. *Psychotherapy: Theory, Research, and Practice, 20*, 368-375.
- McGovern, T.F., & Armstrong, D. (1987). Comparison of recovering and non-alcoholic alcoholism counselors: A survey. *Alcoholism Treatment Quarterly, 4*(1), 43-60.
- McKay, J.R., Alterman, A.I., Cacciola, J.S., Rutherford, M.J., O'Brien, C.P., & Koppenhaver, J. (1997). Group counseling versus individualized relapse prevention aftercare following intensive outpatient treatment for cocaine dependence: Initial results. *Journal of Consulting and Clinical Psychology, 65*(5), 778-788.
- McLellan, A.T., Luborsky, G.E., Woody, C.P., O'Brian, C.P., & Druley, K.A. (1989). Methadone vs. therapeutic community in the treatment of mixed abusers: Role of psychiatric symptoms. *Annals of New York Academy of Sciences*.
- McLellan, A.T., Woody, G.E., Luborsky, L., & Goehl, L. (1988). Is the counselor an "active ingredient" in substance abuse rehabilitation? An examination of treatment success among four counselors. *The Journal of Nervous and Mental Disease, 176*, 423-430.
- McLellan, A.T., Woody, G.E., Metzger, D., McKay, J., Durell, J., Alterman, A.I., & O'Brien, C.P. (1996). Evaluating the effectiveness of addiction treatments: Reasonable expectations, appropriate comparisons. *The Milbank Quarterly, 74*, 51-85.
- Miller, W.R., Benefield, R.G., & Tonigan, J.S. (1993). Enhancing motivation for change in problem drinking: A controlled comparison of two therapist styles. *Journal of Consulting & Clinical Psychology, 61*(3), 455-461.
- Miller, W.R., & Rollnick, S. (1991). *Motivation Interviewing: Preparing People to Change Addictive Behavior*. New York: The Guilford Press.
- National Institute of Justice. (1996). *1996 Drug Use Forecasting: Annual Report on Adult and Juvenile Arrestees*. Washington, DC: U.S. Government Printing Office.
- Nurco, D.N., Shaffer, J.W., Hanlon, T.E., Kinlock, T.W., Duszynski, K.R., & Stephenson, P. (1988). Relationships Between Client/Counselor Congruence and Treatment Outcome Among Narcotic Addicts. *Comprehensive Psychiatry, 29*, 48-54.
- O'Keefe, M.L., Klebe, K., & Hromas, S. (1998). *Validation of the Level of Supervision Inventory (LSI) for Community Based Offenders in Colorado*. Technical Report. Colorado Springs, CO: Department of Corrections.
- O'Keefe, M.L., Klebe, K.J., & Timken, D.S. (1999, August). *Reliability and validity of the Simple Screening Instrument for offenders*. Poster session presented at the annual meeting of the American Psychological Association, Boston.
- Perkins, K.A., Simpson, J.C., & Tsuang, M.T. (1986). Ten-year follow-up of drug abusers with acute or chronic psychosis. *Hospital and Community Psychiatry, 27*(5), 481-490.
- Peters, R.H. & Greenbaum, P.E. (1996). *Prison Substance Abuse Screening Project*. Technical report. Texas Department of Criminal Justice.
- Polinsky, M.L., Hser, Y., Anglin, M.D., & Maglione, M.A. (1998). Drug-user treatment programs in a large metropolitan area. *Substance Use and Misuse, 33*(8), 1735-1761.
- Prendergast, M.L., Anglin, M.D., & Wellisch, J. (1995). Treatment for drug-abusing offenders under community supervision. *Federal Probation, 59*(4), 66-75.
- Prochaska, J.O., DiClemente, C.C., Norcross, J.C. (1992). In search of how people change. *American Psychologist, 47*, 1102-1114.
- Rawson, R.A., Obert, J.L., McCann, M.J., & Marinelli-Casey, P. (1993). Relapse prevention models for substance abuse treatment. *Psychotherapy, 30*(2), 284-298.
- Sansone, J. (1980). Retention patterns in a therapeutic community for the treatment of drug abuse. *International Journal of the Addictions, 15*(5), 711-736.

- Sinnett, E.R., Hagen, K., & Harvey, W.M. (1976). Credibility of sources of information about drugs to heroin addicts. *Psychological Reports*, 37(3), 1239-1242.
- Simpson, D.D. (1981). Treatment for drug abuse: Follow-up outcomes and length of time spent. *Archives of General Psychiatry*, 38, 875-880.
- Simpson, D.D. (1984). Treatment for drug abuse: Follow-up outcomes and length of time spent. *Archives of General Psychiatry*, 38, 875-880.
- Simpson, D.D., Joe, G.W., Lehman, W.E.K., & Sells, S.B. (1986). Addiction careers: Etiology, treatment, and 12-year follow-up procedures. *Journal of Drug Issues*, 16(1), 107-121.
- Simpson, D.D., & Sells, S.B. (1982). Effectiveness of treatment for drug abuse: An overview of the DARP research program. *Advances in Alcohol and Substance Abuse*, 2, 7-29.
- Sterne, M.W., & Pittman, D.J. (1965). The concept of motivation: A source of institutional and professional blockage in the treatment of alcoholics. *Quarterly Journal of studies on Alcohol*, 26, 41-57.
- Stevens, S.J., & Arbiter, N. (1995). Therapeutic community for substance-abusing pregnant women and women with children: Process and outcome. *Journal of Psychoactive Drugs*, 27, 49-56.
- Stevens, S.J., Arbiter, N., & Glider, P. (1989). Women residents: Expanding their role to increase treatment effectiveness in substance abuse programs. *International Journal of the Addictions*, 24(5), 425-434.
- Stoffelmayr, B.E., Mavis, B.E., & Kasim, R.M. (1998). Substance abuse treatment staff: Recovery status and approaches to treatment. *Journal of Drug Education*, 28(2), 135-145.
- Wanberg, K.W. (1997a). *Adult Substance Use Survey*. Arvada CO: Center for Addictions Research and Evaluation.
- Wanberg, K.W. (1997b). *User's guide to the Adult Substance Use Survey – ASUS*. Arvada, CO: Center for Addictions Research and Evaluation.
- Wanberg, K.W., & Milkman, H.B. (1998). *Criminal Conduct and Substance Abuse Treatment: Strategies for Self-Improvement and Change*. Thousand Oaks, CA: Sage Publications.
- Wellisch, J., Prendergast, M.L., & Anglin, M.D. (1995). Toward a drug abuse treatment system. *Journal of Drug Issues*, 25(4), 759-782.
- Wexler, H.K., Falkin, G.P., & Lipton, D.S. (1988). Outcome evaluation of a prison therapeutic community for substance abuse treatment. *Criminal Justice and Behavior*, 17(1), 71-90.
- Wickizer, T., Maynard, C., Atherly, A., Frederick, M., Koepsell, T., Krupski, A., & Stark, K. (1994). Completion rates of clients discharged from drug and alcohol treatment programs in Washington state. *American Journal of Public Health*, 84(2), 215-221.
- Wilsnack, S.C., Vogeltanz, N.D., Klassen, A.D., & Harris, T.R. (1997). Childhood sexual abuse and women's substance abuse: National survey findings. *Journal of Studies on Alcohol*, 58, 264-271.
- Woody, G.E., McLellan, A.T., Luborsky, L., & O'Brien, C.P. (1985). Sociopathy and psychotherapy outcome. *Archives of General Psychiatry*, 42(11), 1081-1086.
- Woody, G.E., McLellan, A.T., Luborsky, L., & O'Brien, C.P. (1990). Psychotherapy and counseling for methadone-maintained opiate addicts: Results of research studies. In L.S. Onken & J.D. Blaine (Eds.), *Psychotherapy and Counseling in the Treatment of Drug Abuse* (NIDA Research Monograph 104, pp. 9-23). Rockville, MD: National Institute on Drug Abuse.
- Younge, S.L., Oetting, E.R., Banning, J.H., & Younge, K.A. (1991). Psychological messages from the physical environment: The drug and alcohol treatment center environment. *The International Journal of the Addictions*, 25, 905-955.

## APPENDIX A: Statistical Results

### Demographic Characteristics

1. Ethnicity ( $\chi^2(6, 543) = 81.95, p < .01$ )
2. Marital status ( $\chi^2(3, 554) = 14.96, p < .01$ )
3. Education ( $\chi^2(9, 455) = 17.49, p = .04$ )
4. Age ( $F(3, 554) = 1.33, p = .26$ )
5. Number of children ( $F(3, 473) = 5.05, p < .01$ )
6. Number of dependents ( $F(3, 455) = 4.24, p < .01$ )

### Substance Use

7. Age at first drug use ( $F(3, 500) = .33, p = .80$ )
8. Drug of abuse ( $\chi^2(9, 491) = 65.08, p < .01$ )
9. Lifetime use of alcohol ( $\chi^2(3, 541) = 3.92, p = .27$ )
10. Lifetime use of marijuana ( $\chi^2(3, 527) = 4.60, p = .20$ )
11. Lifetime use of cocaine ( $\chi^2(3, 523) = 10.42, p = .02$ )
12. Lifetime use of amphetamines ( $\chi^2(3, 496) = 7.37, p = .06$ )
13. Lifetime use of opiates ( $\chi^2(3, 473) = 35.47, p < .01$ )
14. Lifetime use of hallucinogens ( $\chi^2(3, 480) = .45, p = .93$ )
15. Lifetime use of sedatives ( $\chi^2(3, 467) = 15.17, p < .01$ )
16. Lifetime use of tranquilizers ( $\chi^2(3, 472) = 10.93, p = .01$ )
17. Lifetime use of inhalants ( $\chi^2(3, 465) = 1.37, p = .71$ )
18. SSI ( $F(3, 289) = 4.17, p < .01$ )
19. ASUS Involvement ( $F(3, 410) = 1.20, p = .31$ )
20. ASUS Disruptions ( $F(3, 418) = 1.79, p = .15$ )
21. ASUS Social ( $F(3, 407) = 3.20, p = .02$ )
22. ASUS Mood ( $F(3, 406) = 3.24, p = .02$ )
23. ASUS Defensive ( $F(3, 410) = 2.86, p = .04$ )
24. ASUS Global ( $F(3, 418) = 1.65, p = .18$ )
25. LSI ( $F(3, 500) = 11.80, p < .01$ )

### Criminal History

26. Failure to appear ( $F(3, 553) = 1.11, p = .34$ )
27. Technical violation ( $F(3, 553) = 2.19, p = .09$ )
28. Misdemeanor ( $F(3, 553) = 10.48, p < .01$ )
29. Nonviolent felony ( $F(3, 553) = 7.65, p < .01$ )
30. Violent felony ( $F(3, 552) = 4.74, p < .01$ )

### Gender Comparisons

31. Ethnicity ( $\chi^2(2, 543) = 2.74, p = .25$ )
32. Marital status ( $\chi^2(1, 554) = .16, p = .69$ )
33. Education ( $\chi^2(3, 455) = 8.02, p = .05$ )
34. Age ( $\chi^2(1, 558) = 4.34, p = .04$ )
35. Number of children ( $\chi^2(1, 477) = 29.32, p < .01$ )
36. Number of dependents ( $\chi^2(1, 459) = 1.65, p = .20$ )
37. Age at first drug use ( $\chi^2(1, 504) = 1.84, p = .18$ )
38. Drug of abuse ( $\chi^2(3, 491) = 48.97, p < .01$ )
39. Lifetime use of alcohol ( $\chi^2(1, 541) = 2.11, p = .15$ )
40. Lifetime use of marijuana ( $\chi^2(1, 527) = 5.53, p = .02$ )

41. Lifetime use of cocaine ( $\chi^2(1, 523) = 6.96, p < .01$ )
42. Lifetime use of amphetamines ( $\chi^2(1, 496) = 1.95, p = .16$ )
43. Lifetime use of opiates ( $\chi^2(1, 473) = 1.86, p = .17$ )
44. Lifetime use of hallucinogens ( $\chi^2(1, 480) = .44, p = .51$ )
45. Lifetime use of sedatives ( $\chi^2(1, 467) = 2.65, p = .10$ )
46. Lifetime use of tranquilizers ( $\chi^2(1, 472) = 1.42, p = .23$ )
47. Lifetime use of inhalants ( $\chi^2(1, 465) = 2.22, p = .14$ )
48. SSI ( $\chi^2(1, 293) = 11.65, p < .01$ )
49. ASUS Involvement ( $\chi^2(1, 414) = 2.00, p = .16$ )
50. ASUS Disruptions ( $\chi^2(1, 422) = 4.57, p = .03$ )
51. ASUS Social ( $\chi^2(1, 411) = 1.96, p = .16$ )
52. ASUS Mood ( $\chi^2(1, 410) = 15.13, p < .01$ )
53. ASUS Defensive ( $\chi^2(1, 414) = 5.00, p = .03$ )
54. ASUS Global ( $\chi^2(1, 422) = 4.28, p = .04$ )
55. LSI ( $\chi^2(1, 504) = .37, p = .55$ )
56. Failure to appear ( $\chi^2(1, 556) = .03, p = .87$ )
57. Technical violation ( $\chi^2(1, 556) = 6.23, p = .01$ )
58. Misdemeanor ( $\chi^2(1, 556) = 2.69, p = .10$ )
59. Nonviolent felony ( $\chi^2(1, 556) = 1.92, p = .17$ )
60. Violent felony ( $\chi^2(1, 555) = 25.69, p < .01$ )
61. URICA Precontemplation ( $\chi^2(1, 442) = 9.96, p < .01$ )
62. URICA Contemplation ( $\chi^2(1, 447) = 14.60, p < .01$ )
63. URICA Action ( $\chi^2(1, 452) = 16.59, p < .01$ )
64. URICA Maintenance ( $\chi^2(1, 444) = 2.84, p = .09$ )
65. Circumstances ( $\chi^2(1, 401) = 17.99, p < .01$ )
66. Motivation ( $\chi^2(1, 423) = 48.14, p < .01$ )
67. Readiness ( $\chi^2(1, 429) = 31.37, p < .01$ )

### Ethnic Comparisons

68. Gender ( $\chi^2(2, 543) = 2.74, p = .25$ )
69. Marital status ( $\chi^2(2, 540) = 13.23, p < .01$ )
70. Education ( $\chi^2(6, 441) = 16.86, p = .01$ )
71. Age ( $F(2, 540) = 4.80, p < .01$ )
72. Number of children ( $F(2, 464) = 11.51, p < .01$ )
73. Number of dependents ( $F(2, 445) = 20.58, p < .01$ )
74. Age at first drug use ( $F(2, 488) = 5.69, p < .01$ )
75. Drug of abuse ( $\chi^2(6, 480) = 100.97, p < .01$ )
76. Lifetime use of alcohol ( $\chi^2(2, 527) = 1.92, p = .38$ )
77. Lifetime use of marijuana ( $\chi^2(2, 513) = 3.76, p = .15$ )
78. Lifetime use of cocaine ( $\chi^2(2, 510) = .11, p = .95$ )
79. Lifetime use of amphetamines ( $\chi^2(2, 483) = 108.61, p < .01$ )
80. Lifetime use of opiates ( $\chi^2(2, 460) = 12.70, p < .01$ )
81. Lifetime use of hallucinogens ( $\chi^2(2, 467) = 32.61, p < .01$ )
82. Lifetime use of sedatives ( $\chi^2(2, 454) = 12.91, p < .01$ )
83. Lifetime use of tranquilizers ( $\chi^2(2, 459) = 7.64, p = .02$ )
84. Lifetime use of inhalants ( $\chi^2(2, 452) = 5.07, p = .08$ )
85. SSI ( $F(2, 281) = 2.38, p = .10$ )
86. ASUS Involvement ( $F(2, 400) = 25.97, p < .01$ )
87. ASUS Disruptions ( $F(2, 407) = 10.00, p < .01$ )
88. ASUS Social ( $F(2, 397) = 3.93, p = .02$ )



89. ASUS Mood ( $F(2, 396) = .62, p = .54$ )
90. ASUS Defensive ( $F(2, 400) = 3.25, p = .04$ )
91. ASUS Global ( $F(2, 407) = 13.04, p < .01$ )
92. LSI ( $F(2, 488) = 1.80, p = .17$ )
93. Failure to appear ( $F(2, 538) = .79, p = .46$ )
94. Technical violation ( $F(2, 538) = .40, p = .67$ )
95. Misdemeanor ( $F(2, 538) = 8.17, p < .01$ )
96. Nonviolent felony ( $F(2, 538) = .55, p = .58$ )
97. Violent felony ( $F(2, 537) = 10.47, p < .01$ )
98. URICA Precontemplation ( $F(2, 427) = 1.79, p = .17$ )
99. URICA Contemplation ( $F(2, 432) = 1.34, p = .26$ )
100. URICA Action ( $F(2, 437) = 1.07, p = .35$ )
101. URICA Maintenance ( $F(2, 429) = 2.71, p = .07$ )
102. Circumstances ( $F(2, 387) = 3.97, p = .02$ )
103. Motivation ( $F(2, 408) = .32, p = .73$ )
104. Readiness ( $F(2, 414) = .65, p = .52$ )