

# **The Effectiveness of Coerced Treatment for Drug-Abusing Offenders**

M. Douglas Anglin

Michael Prendergast

David Farabee

*UCLA Drug Abuse Research Center*

*1100 Glendon Avenue, Suite 763*

*Los Angeles, California 90024*

*Paper presented at the Office of National Drug Control Policy's Conference of Scholars  
and Policy Makers, Washington, D.C., March 23-25, 1998*

### Abstract

This paper presents an abbreviated survey of the substance abuse treatment literature regarding the effectiveness of various levels of coercion. The review provides overall support for the dictum that legally referred clients do as well or better than voluntary clients in and after treatment. However, our review also reveals some divergence in findings which we consider equally illuminating. We propose that the majority of the variation in coerced treatment outcomes is due to (1) inconsistent terminologies for referral status, (2) neglected emphasis on internal motivation, and (3) infidelity in program implementation. The paper concludes with specific recommendations to improve upon the relative success of current coerced treatment strategies.

## The Effectiveness of Coerced Treatment for Drug-Abusing Offenders

### Background

Criminal justice referrals constitute a substantial proportion of the publicly funded drug treatment population in the United States. According to recent data, the criminal justice system is responsible for 40 to 50 percent of referrals to community-based treatment programs (Maxwell, 1996; Price & D'Aunno, 1992; Spiegelman, 1984; Weisner, 1987). Given our nation's high proportion of criminal justice treatment clients, a major policy and program issue in drug treatment is the effectiveness and appropriateness of coercing offenders to enter and remain in treatment. This paper provides an overview of studies regarding the effectiveness of various levels of coerced treatment and concludes with a number of treatment and policy implications.

Some researchers (Hartjen, Mitchell, & Washburne, 1982; Platt, Buhringer, Kaplan, Brown, & Taube, 1988; Rosenthal, 1988) have argued that little benefit can be derived when a drug user is forced into treatment by the criminal justice system. Some oppose coerced treatment on philosophical or constitutional grounds. Others argue against coerced treatment on clinical grounds, maintaining that treatment can be effective only if the person is truly motivated to change; a variation of this position is that addicts must "hit bottom" before they are able to benefit from treatment, a circumstance that is not true of most coerced clients. According to this view, it is a poor investment to devote resources to individuals who are unlikely to change because they have little or no motivation to change. Furthermore, in situations where treatment slots are limited, it may also violate notions of distributive justice to provide treatment to addicts who don't really want it--even if they might benefit from it--ahead of (or instead of) those who do desire treatment.

Other researchers (Anglin & Maugh, 1992; Salmon & Salmon, 1983) have argued that few chronic addicts will enter and remain in treatment without some external motivation and that legal coercion is as justifiable as any other motivation for treatment entry. It has also been argued that because controlling drug abuse and addiction benefits society as a whole, the criminal justice system *should* bring drug-abusing offenders into treatment to safeguard and promote the interests and well-being of the community (Anglin, 1988; Anglin & Hser, 1991). But consideration of legal and ethical questions surrounding coerced treatment do not arise unless it can be demonstrated that coerced treatment is effective and that resources spent on coerced clients do produce desirable results.

Answering the question regarding the effectiveness of coerced treatment is by no means straightforward. A number of conceptual issues need to be addressed in order to design meaningful empirical studies or to interpret existing studies appropriately. Two issues of particular importance are the definition of coerced treatment and the interaction of coercion (external pressure) and motivation (internal pressure).

The terminology used to discuss “coerced treatment” is far from consistent: “coerced,” “compulsory,” “mandated,” “involuntary,” “legal pressure,” and “criminal justice referral” are all used in the literature, sometimes the terms are used interchangeably within the same article. This would not be a problem if these terms were synonyms. But “coercion” is not a single well-defined entity; it in fact represents a range of options of varying degrees of severity across the various stages of criminal justice processing. “Coercion” can be used to refer to such actions as a probation officer’s recommendation to enter treatment, a drug court judge’s offer of a choice between treatment or jail, a judge’s requirement that the offender enter treatment as a condition of probation, or a correctional policy of sending inmates involuntarily to a prison treatment program

in order to fill the beds. In other cases, a treatment client's merely being "involved with the criminal justice system" is sufficient for him to be brought under the umbrella of "coercion."

Coercive treatment approaches for drug addiction have been applied consistently throughout the twentieth century, beginning with the morphine maintenance clinics in some communities during the 1920s. The 1930s marked the establishment of the federal narcotics treatment facilities in Fort Worth, Texas and Lexington, Kentucky. During the 1960s broad-based civil commitment procedures were implemented in the federal system, as well as in New York and California. The present system, beginning in the 1970s, relies less on formal civil commitment procedures and emphasizes community-based treatment as an alternative to incarceration, or as a condition of probation or parole. More comprehensive historical reviews of coerced treatment in the United States can be found elsewhere (Anglin & Hser, 1991; Inciardi, 1988).

Despite some variation in findings, empirical studies have largely supported the use of coercive measures to increase the likelihood of an offender's entering and remaining in treatment. The following section describes the results of 11 such studies, which are briefly summarized in Table 1.

### **Review of Coercion-Based Treatment Studies**

For purposes of this paper, we reviewed 11 published studies involving the relationship between various levels of legal pressure and substance abuse treatment (see Table 1). Of these, five found a positive relationship between criminal justice referral and treatment outcomes, four reported no difference, and two studies reported a negative relationship. How do we account for these different findings? Closer inspection of these studies shows considerable variation in the legal pressure applied, different outcome measures, and a range of types of programs and substances treated.

Table 1: Overview of Coerced Treatment Articles

<b>Authors</b>	<b>Year</b>	<b>Modality(s)</b>	<b>Comparison</b>	<b>Assessed Motivation</b>	<b>Findings</b>
Anglin et al.	1989	Methadone	High, moderate, and low legal coercion	No	Main effect for treatment across all three coercion groups, with regard to drug use and criminality during and after treatment.
Brecht & Anglin	1993	Methadone	No CJ pressure vs. moderate CJ pressure vs. strong CJ pressure	No	All groups showed improvement. Retention and drug use outcomes were similar regardless of coercion level.
Collins & Allison	1983	OP and Residential	No CJ pressure vs. TASC vs. other CJ referral	No	Retention rates were lowest among voluntary clients, slightly higher among CJ referrals, and highest among TASC referrals--presumably due to the closer supervision of the latter.
Harford et al.	1976	Residential--adolescent, residential young adult, OP--adolescent, OP young adult, Methadone	Probation, parole, or pre-trial vs. voluntary	No	Depending on the program, retention rates were the same or worse for CJ-referrals.
Howard & McCaughrin	1996	Non-methadone	Programs 75% + court-mandated clients vs. those w/ 25% or fewer	No	CJ-dominated programs reported lower compliance. Providing CJ clients w/ information and choices was associated w/ better outcomes.
McLellan & Druley	1977	90-day VA Residential	Court-referred vs. voluntary	No	Overall, no sig. differences. Trends indicate that court-referrals are more withdrawn early in treatment but become as engaged as voluntary admissions during latter stages of treatment.
Rosenberg & Liftik	1976	Outpatient--alcohol	Probation referrals vs. voluntary patients	No	Probation referrals had higher attendance rates than voluntary admissions. However, only 16% of probationers continued in treatment beyond probation period.
Salmon & Salmon	1983	Outpatient Drug-Free and Methadone	TASC referrals vs. voluntary	No	Mixed. Coercion associated with better outcomes for subgroups (e.g. older, chronic opiate users), but not others. Effective for OP, but not MM.
Schnoll et al.	1980	Residential	Legal status vs. no legal status at admission	No	Clients entering treatment directly from prison had higher completion rates than those with no legal status.
Siddall & Conway	1988	Residential	Voluntary vs. involuntary (Undefined)	No	Involuntary admission associated with successful discharge.
Simpson & Friend	1988	Methadone, TC, OP, and Detox	Legal status vs. no legal status at admission	No	Retention and drug use outcomes were similar for legal status and non-legal status clients.

Of the five studies which found a positive relationship between legal coercion and substance misuse treatment, two involved Treatment Alternatives to Street Crime (TASC referrals). TASC attempts to identify drug abusers who come into contact with the criminal justice system, refer eligible offenders to appropriate treatment, monitor clients' progress while in

treatment, and return violators to the criminal justice system. The first study involving TASC clients, by Collins and Allison (1983), assessed the impact of legal pressure on a drug abuser's length of stay in treatment. The investigators focused on individuals who entered outpatient drug-free and residential treatment programs through referrals by TASC, through other referrals from the criminal justice system, and through non-legal sources. The investigators found that the effects of being referred to drug abuse treatment by TASC and of being involved with the criminal justice system at the time of treatment intake were statistically significant for both modalities. In addition, the study found that legally referred clients entered treatment earlier in their addiction career than would otherwise have been the case and that they stayed in treatment longer—both circumstances that are conducive to better outcome.

The other TASC-related study, by Salmon and Salmon (1983), explored the impact of TASC referrals on the rehabilitation of drug abusers in a methadone maintenance clinic and a drug-free treatment setting (clients abusing only alcohol or marijuana were excluded). Unlike other studies, which relied primarily on treatment retention and successful discharge as outcome criteria, this study employed frequency of drug use, times arrested, abstinence, and time worked on the job. They found that coercion facilitated success under certain circumstances: for certain population groups (older, long-term heroin addicts), for certain criteria (arrest and abstinence), and for certain treatment settings (drug-free versus methadone maintenance programs).

In another study finding a positive relationship between legal status and treatment outcomes, Schnoll et al. (1980) examined a modified therapeutic community treating both alcoholics and drug dependent clients in inpatient and residential programs. They grouped clients into one of four mutually exclusive categories involving degree of legal involvement: (1) a “directly from prison” group, (2) an “open cases” group, regardless of probation or parole status,

(3) a “parole and/or probation” group, and (4) a “no legal involvement” group. Schnoll and colleagues found that residents admitted directly from prison were more likely to complete inpatient treatment than any other group since they faced the possibility of incarceration if they did not do so. Siddall and Conway (1988) reported similar results in their study of 100 substance abuse clients in a residential treatment center, 42 of whom were involuntary admissions. They found that clients who successfully completed treatment were more likely to have been admitted on an involuntary basis. Unfortunately, definitions of “voluntary” and “involuntary” were not given. The last study reporting a positive relationship between legal coercion and treatment outcomes focused on outpatient treatment of alcoholism (Rosenberg & Liptik, 1976). The investigators found that the weekly attendance patterns of drivers who were convicted of driving under the influence and who were mandated to treatment were significantly better than those of voluntary admissions.

Four of the studies reviewed found that legal coercion made no difference in substance misuse treatment outcomes (Anglin et al., 1989; Brecht & Anglin, 1993; McLellan & Druley, 1977; Simpson & Friend, 1988). The samples used in these studies were more homogeneous than the studies described above. The majority of the subjects were male opiate addicts and the programs evaluated were primarily methadone maintenance programs, though inpatient rehabilitation and outpatient programs were also included. Outcome measures differed among these studies, however. Two of the studies relied on measures that did not involve treatment retention or successful treatment completion, but rather involved criteria such as criminal involvement, drug involvement, and social functioning (Anglin et al., 1989; Brecht & Anglin, 1993), while another study examined disruptiveness by measuring number of contacts with staff (McLellan & Druley, 1977). Despite these differences in outcome measures, these four studies

concluded that clients who enter treatment under some degree of coercion did as well as clients entering treatment voluntarily or under minimal levels of coercion.

Two studies reported a negative relationship between legal coercion and substance misuse treatment outcomes. In the first, Harford and colleagues (1976) found that four measures of legal pressure were either unrelated or negatively related to treatment retention and outcome in five drug abuse treatment modalities: (1) a residential program for adolescents, (2) a residential therapeutic community for young adults, (3) a day program for adolescents, (4) an outpatient abstinence and narcotic antagonist program serving primarily young adults, (5) and a methadone treatment program. Legal pressure was defined to exist if the applicant reported being on probation, on parole, or awaiting trial at the time of admission. The fourth measure of legal pressure was a logical composite of these three legal coercion status groups. The investigators found that older methadone clients and adolescent clients who were admitted for treatment while on probation were retained in treatment for shorter periods of time than were clients who were not on probation. No other differences in retention or graduation rates involving any of the four measures of legal pressure were statistically significant. The authors suggested the possibility that legal pressure inhibits rather than facilitates treatment for addiction among some clients.

The final study differed from the others discussed here in that it surveyed organizations, not individuals. This study asked whether outpatient substance abuse treatment organizations have different outcomes for court-mandated and voluntary clients depending on the mix of clients (Howard & McCaughrin, 1996). A nationally representative sample of 330 nonmethadone outpatient substance misuse treatment organizations was surveyed in 1990 using two outcome variables: meeting the goals of treatment and failing to comply with the treatment plan. The investigators found that organizations with 75 percent or greater of court-mandated clients had a

greater rate of clients failing to comply with their treatment plan than organizations with 25 percent or less court-mandated clients, but there were no differences in clients meeting their goals of their treatment.

This discussion highlights the fact that, despite their addressing an apparently similar issue—coerced treatment, these studies have concerned themselves with treatment of different kinds of substances (drugs, alcohol, or both), different program types, different outcome measures, and various measures of legal involvement or coercion. While the relative robustness of this finding provides overall support for coercing substance-abusing offenders into treatment, there are several equally important lessons to be learned from the variation among these studies.

### **Reasons for Cross-Study Variations**

Based on our review, we propose that the majority of the variation in coerced treatment outcomes is due to (1) inconsistent terminologies, (2) neglected emphasis on internal motivation, and (3) infidelity in program implementation. These are summarized below:

#### *Inconsistent Terminology*

“Criminal justice referral” does not necessarily mean that a client is entering treatment involuntarily. The importance of this distinction is clearly evident in studies of psychiatric populations, which show that the majority of patients whose official records indicated that they entered treatment voluntarily actually were under some form of official custody and were under the threat of involuntary commitment if they failed to enter treatment “voluntarily” (Gilboy & Schmidt, 1971). Conversely, other studies have indicated that clients entering mental health treatment under involuntary status are not necessarily involuntary. For example, one study of committed psychiatric patients revealed that approximately one-half did not know their commitment status, and among those who said that they were denied the opportunity to enter

voluntarily, approximately one-half said that they would have chosen to enter voluntarily if they had been given the choice (Toews, el-Guebaly, Leckie, & Harper, 1984).

Likewise, the assumption that all criminal justice clients are entering treatment involuntarily has little empirical support. In a study of 1,030 male prison inmates in Texas, 50 percent of the general population inmates said that they would be interested in participating in a drug or alcohol treatment program at that time. Among those indicating an interest in treatment, approximately 50 percent reported that they would be willing to participate in an in-prison drug or alcohol program *even if it meant extending their stay in prison for three months* (Farabee, 1995). Clearly, in spite of their criminal justice status, these potential clients would probably be entering treatment voluntarily.

Recent data from the NIDA-funded Drug Abuse Treatment Outcome Study (DATOS)<sup>1</sup> provide further evidence that clients entering community-based treatment under a legal referral are not necessarily involuntary. In fact, 39.8% of clients referred to treatment by the criminal justice system report that “think [they] would have entered drug treatment without pressure from the criminal justice system.” Among clients for whom treatment was required (rather than suggested), 42.6% reported that they would have been willing to enter treatment even without the use of criminal justice pressure. When the sample is limited to criminal justice referrals, a second level of diversity becomes apparent related to the *level* of criminal justice pressure. Among this subgroup, 23.3% were merely referred to treatment without a formal mandate and without drug testing (low

---

<sup>1</sup> DATOS is a comprehensive multisite prospective study of drug treatment effectiveness. Among several other objectives, one of the main purposes of this study is to examine the effectiveness of the drug abuse treatment programs through a study of treatment clients in 11 cities in the United States followed longitudinally over a period of 36 months. A population of 10,010 DATOS clients have been interviewed at entry to treatment in a sample of 99 programs within the United States from 1991 to 1993. Cities and programs were purposively (not randomly) chosen for participation; they were representative at the time of their selection of typical, stable drug treatment programs in large and medium sized U.S. cities. Clients were selected from four drug treatment modalities, which were presumed to reflect the current treatment system: 3,122 clients from 14 short-term inpatient programs, 2,774 clients from 21 long-term

pressure). Twenty-two percent of the criminal justice referrals were mandated to treatment, but without drug testing (moderate pressure), and 54.6% were mandated to enter treatment and to undergo periodic drug tests (high pressure). However, Hiller et al.'s (1998) recent study of retention in long-term residential programs suggests that the level of criminal justice pressure may be less important than its mere presence.

### *The Role of Internal Motivation*

According to Miller (1991), a client entering treatment prior to recognizing his or her substance use as being problematic is unlikely to be open to therapeutic intervention. In this early stage, a client is most likely to benefit from non-directive feedback and information to help raise awareness of the problem. Direct challenges to the client will be perceived as aversive and will typically disrupt therapeutic progress. Over time, these clients tend to shift between acknowledging and denying that they have a substance use problem. Again, direct challenges by a counselor may only serve to shift the client's perception back to denial. However, more direct recommendations toward taking action can be made during the client's ephemeral phases of problem recognition. Thus, both external and internal motivation play important roles in the treatment process and relapse. Failure to address both types of motivation results in inferior treatment participation and less favorable outcomes than if these motivational sources are treated as complementary. Leukefeld and Tims (1988, p.243) have suggested that:

Recovery from drug abuse is an interactional phenomenon involving...client factors with nontreatment factors, such as social climate, as well as treatment itself...Client factors include...external pressure and internal pressure. Legal referrals belong in the external pressure category. A stable recovery cannot be maintained by external (legal) pressures

---

residential programs, 1,540 clients from 29 outpatient methadone maintenance programs, and 2,574 clients from 35 outpatient drug-free

only; motivation and commitment must come from internal pressure. The role of external pressure from this point of view is to influence a person to enter treatment.

One study comparing voluntary and criminal justice-referred substance abuse clients entering treatment showed both groups to be almost identical on a battery of psychosocial measures, with the primary difference being significantly lower self-assessments of drug problems, desire for help, and readiness for treatment reported by those who had been legally referred (Farabee, Nelson, & Spence, 1993). Involuntary clients are also more likely to claim that their substance use is purely recreational and does not pose a problem for their lives (Schottenfeld, 1989). Consequently, a large proportion of clients currently entering community-based treatment under criminal justice referral have treatment needs similar to those of their voluntary counterparts, but lack the internal motivation to readily engage themselves in the treatment process. This lack of internal motivation for change is associated with lower treatment retention rates (De Leon & Jainchill, 1986) and inferior outcomes (Simpson et al., 1997).

#### *Fidelity of Program Implementation*

Even among similar types of programs there is exceedingly high within-group variation in actual implementation (Britt et al., 1992; Jones & Goldkamp, 1991; Visser, 1992). The level of coordination between treatment providers and the criminal justice system is often inconsistent between programs--a difference that has been associated with treatment retention (Hiller et al., 1998). This lack of inter-organizational coordination and communication negatively impacts two critical aspects of the legal coercion process. First, many offenders deemed eligible for treatment by the criminal justice referral source may not necessarily be appropriate candidates for a given modality, or for treatment in general. According to a large-scale evaluation of the Treatment

---

programs.

Alternatives to Street Crime (TASC) programs, TASC referrals with the lowest problem severity demonstrated the least improvement overall. In contrast, substance abuse treatment appeared to have more favorable effects on “hard core” TASC referrals, as defined by baseline drug use prior to TASC involvement (Anglin et al., 1996). As a result, inter-program variations in screening and referral criteria can have a profound impact on the measurable success of these programs.

The second crucial impact of implementation relates to inter-agency communication. Poor communication between treatment and criminal justice organizations inevitably diminishes the provider’s ability to enact immediate sanctions for non-attendance or non-compliance. A notable example of this problem was observed in the administration of the federally funded Narcotic Addiction Rehabilitation Act of 1966, which included, among other treatment-related sections, six months of narcotics addiction treatment through the U.S. Public Health System hospitals in Lexington, Kentucky and Fort Worth, Texas. A commonly cited problem with these programs was the providers’ lack of autonomy and their inability to communicate efficiently with the court system. In fact, any movement or status change of an addict in these programs required court approval, which, in turn, required that the addict be transported to and from the federal court for the case to be presented (Anglin & Hser, 1991). Despite some positive findings for these programs, the cumbersome administrative structure and poor linkages between the treatment providers and the court system led to their eventual closure in 1972.

### **Conclusions and Recommendations**

In general, our review of 11 empirical studies of compulsory substance abuse treatment supports the use of the criminal justice system as an effective source of treatment referral, as well as a means for enhancing retention and compliance. However, the divergence among these results--with five of the studies reporting a positive relationship between legal coercion and

treatment outcomes, four reporting no difference, and two studies reporting a negative relationship--leads to a number of additional conclusions.

First, from a methodological standpoint, we reiterate De Leon's (1988) contention that research in this area has been confounded by the misuse of terms such as "legal referral," "legal status," and "legal pressure." De Leon suggests that *legal referral* should be used to express an explicit procedure in which an offender is referred to treatment via probation, parole, diversion, or specific sentencing stipulations. *Legal status* should be used to describe clients with any form of legal involvement, ranging from warrants to incarceration. Finally, De Leon suggests that the term *legal pressure* be used to describe the extent to which the offender experiences discomfort over the potential consequences of noncompliance. Future studies should avoid using subjective terms such as "involuntary" or "coerced" without directly assessing the client's perception of the referral process.

Second, the research emphasis on external pressure to enter treatment, and its relative success, has largely eclipsed the potential role of internal motivation. There is strong support for the role of internal motivation as a predictor of program retention and positive treatment outcomes. Examining the role of coercion for clients in an alcohol treatment program, Freedberg and Johnston (1978) found that, while external sources of coercion played an important role in bringing the client into treatment, the *decline* in perceived external coercion over the following year was a significant predictor of abstinence one year later. Likewise, Simpson et al. (1997) report that a client's internal motivation for change at the time of program admission significantly predicted long-term post-treatment outcomes. Clearly, the relative success of external motivators for treatment (i.e., legal coercion) should not preclude our efforts to enhance the internal motivation of coerced clients.

The variation in outcomes by the type of offender referred to treatment suggests another conclusion regarding the type of offender most likely to benefit from legal coercion. According to a panel of experts commissioned by the Center for Substance Abuse Treatment (CSAT; 1994), substance-abusing clients in the criminal justice system can be grouped into four major categories: (1) Young offenders who have recently begun abusing substances and have not yet experienced any serious consequences of that behavior, (2) Offenders who have abused substances for five or more years, have experienced some negative consequences of their substance abuse, but have not yet “hit bottom,” (3) Offenders whose substance abuse has resulted in a personal crisis such as losing a job, going to jail, or the loss of an important personal relationship, and (4) Career criminals who abuse substances. The CSAT panel recommended that treatment priority should be given to offenders in the first and third groups: young substance abusers who have used for a short period of time, and substance abusers who have experienced some kind of major negative consequence of their substance use and, therefore, would be most willing to change their behavior. However, according to the nationwide TASC evaluation mentioned above (Anglin et al., 1996), low-level offenders are less likely to benefit from treatment than those with more extensive drug use and criminal histories. Therefore, we would argue that, while both of these groups should be targeted for treatment, substance-abusing offenders early in their criminal careers may be best served with briefer interventions, rather than mandating them to programs targeted for more impaired populations.

The final conclusion derived from the variation in the reviewed studies is the importance of fidelity in program implementation. As we have learned from the Title II and III NARA hospitals, program administration must be designed to facilitate the treatment process, rather than the converse. Programs serving criminal justice clients must maintain close linkages with these

referral sources if the threat of criminal justice sanctions is to be taken seriously. Based on NARA and other historical examples, Anglin and Hser (1991) recommend four important considerations for the design and implementation of programs serving legally coerced clients:

- **The period of intervention should be lengthy**, since drug dependence is a chronic, recurring condition. Prior research suggests an ideal treatment of 3 to 9 months (Gendreau, 1996; Wexler, Falkin, Lipton, & Rosenblum, 1992), and several episodes of primary treatment, aftercare, and relapse should be expected.
- **Treatment programs should provide a high level of structure**, particularly during the early stages. This period should require either a residential stay or close urine monitoring in an outpatient program. Other ancillary services that enhance retention should be offered on an individual basis. These include psychological/psychiatric services, vocational training, and GED courses.
- **Programs must be flexible**. Among community-based treatment clients, occasional drug use that does not appear to seriously disrupt the overall recovery process should be handled on a client by client basis. However, detection of relapse should be addressed immediately, by returning the substance abuser to detoxification, if necessary, and an intensive level of treatment (e.g., residential or methadone maintenance).
- **Programs must undergo regular evaluation to determine their level of effectiveness and to detect changes in the client population they serve**. Recurring process and outcome evaluations, ideally by an external evaluator, help to ensure program fidelity or, as dictated by program retention and outcomes, to identify the need for change. Periodic research exposure can also help keep treatment staff up-to-date on new treatment strategies being developed or practiced at other programs.

Although the majority of the studies reviewed here examined the relationship between legal status, legal referral, or legal pressure to treatment retention and outcomes, coercion undoubtedly accounts for some of the variance in all of these measures. We have suggested that terms like “involuntary” and “coerced” not be used without first measuring the subjective perception of the clients in question; these assessments should also include internal motivation. High internal motivation for change prior to treatment is predictive of two-fold increases in the likelihood of positive outcomes for substance use and criminality (Simpson, Joe, & Rowan-Szal, 1997). Consequently, while external motivators such as criminal justice pressure, and presumably coercion, are often associated with positive treatment outcomes, the role of internal motivation and treatment engagement must not be overlooked. Given that intrinsic motivation for change is the primary distinction between voluntary and criminal justice-referred substance abuse treatment clients (Farabee, Nelson, & Spence, 1993), treatment protocols of legally coerced substance abuse clients should reflect our knowledge that, in the end, it is the client who decides upon the outcome.

## References

- Anglin, M. D. (1988). The efficacy of civil commitment in treating narcotics addiction. Special issue: a social policy analysis of compulsory treatment for opiate dependence. *Journal of Drug Issues, 18*(4), 527-545.
- Anglin, M.D., Brecht, M., & Maddahian, E. (1989). Pretreatment characteristics and treatment performance of legally coerced versus voluntary methadone maintenance admissions. *Criminology, 27*(3), 537-557.
- Anglin, M.D., & Hser, Y. (1991). Criminal justice and the drug-abusing offender: Policy issues of coerced treatment. *Behavioral Sciences and the Law, 9*, 243-267.
- Anglin, M.D., Longshore, D., Turner, S., McBride, D., Inciardi, J.A., Prendergast, M.L (1996). *Studies of the functioning and effectiveness of Treatment Alternatives to Street Crime (TASC) programs*. UCLA Drug Abuse Research Center, Los Angeles CA.
- Anglin, M. D., & Maugh, T. H. (1992). Overturning myths about coerced drug treatment. *California Psychologist, 19*-22.
- Brecht, M., & Anglin, M.D. (1993). Treatment effectiveness for legally coerced versus voluntary methadone maintenance clients. *American Journal of Drug and Alcohol Abuse, 19*(1), 89-106.
- Britt, C.L., Gottfredson, M.R., & Goldkamp, J.S. (1992). Drug testing and pretrial misconduct: An experiment on the specific deterrent effects of drug monitoring defendants on pretrial release. *Journal of Research in Crime and Delinquency, 29*(1), 62-78.
- Center for Substance Abuse Treatment (CSAT; 1994). *Screening and assessment for alcohol and other drug abuse among adults in the criminal justice system*. DHHS Publication No. (SMA) 94-2076, pp. 37-38.

- Collins, J.J., & Allison, M.A. (1983). Legal coercion and retention in drug abuse treatment. *Hospital and Community Psychiatry, 34*(12), 1145-1149.
- De Leon, G. (1988). Legal pressure in therapeutic communities. In C.G. Leukefeld & F.M. Tims (Eds.), *Compulsory treatment of drug abuse: Research and clinical practice*. (NIDA Research Monograph 86, DHHS Publication No. ADM 89-1578, pp. 236-249) Washington, D.C.: U.S. Government Press.
- De Leon, G., & Jainchill, De Leon, G., & Jainchill (1986). Circumstances, motivation, readiness and suitability as correlates of treatment tenure. *Journal of Psychoactive Drugs, 18*, 203-208.
- Farabee, D. (1995). *Substance Use Among Male Inmates Entering the Texas Department of Criminal Justice-Institutional Division, 1993*. Austin, TX: Texas Commission of Alcohol and Drug Abuse.
- Farabee, D., Nelson, R., & Spence, R. (1993). Psychosocial profiles of criminal justice- and noncriminal justice-referred substance abusers in treatment. *Criminal Justice and Behavior, 20*, 336-346.
- Freedberg, E.J., & Johnston, W.E. (1978). Effects of various sources of coercion on outcome of treatment of alcoholism. *Psychological Reports, 43*, 1271-1278.
- Gendreau, P. (1996). The principles of effective intervention with offenders. In A.T. Harland (Ed.) *Choosing correctional options that work*. Thousand Oaks, CA: Sage.
- Gilboy, J., & Schmidt, J. (1971). "Voluntary" hospitalization of the mentally ill. *Northwestern University Law Review, 66*, 429-453.
- Harford, R.J., Ungerer, J.C. & Kinsella, J.K. (1976). Effects of legal pressure on prognosis for treatment of drug dependence. *American Journal of Psychiatry, 133*(12), 1399-1403.

- Hartjen, C. A., Mitchell, S. M., & Washburne, N. F. (1981). Sentencing to therapy: Some legal, ethical, and practical issues. *Journal of Offender Counseling, Services & Rehabilitation, 6*(1-2), 21-39.
- Hiller, M.L., Knight, K., Broome, K.M., Simpson, D.D. (1998). Legal pressure and treatment retention in a national sample of long-term residential programs. Manuscript submitted for publication.
- Howard, D.L., & McCaughrin, W.C. (1996). The treatment effectiveness of outpatient substance misuse organizations between court-mandated and voluntary clients. *Substance Use & Misuse, 31*(7), 895-926.
- Inciardi, J.A. (1988). Compulsory treatment in New York: A brief narrative history of misjudgment, mismanagement, and misrepresentation. *Journal of Drug Issues, 18*, 547-560.
- Jones, P.R., & Goldkamp, J.S. (1991). *Measuring the impact of drug testing at the pretrial release stage: An experimental approach*. Paper presented at the Annual Meeting of the American Society of Criminology, San Francisco.
- Leukefeld, C.G., & Tims, F.M. (1988). Compulsory treatment: A review of findings. In C.G. Leukefeld & F.M. Yims (Eds.), *Compulsory treatment of drug abuse: Research and clinical practice*. (NIDA Research Monograph 86, DHHS Publication No. ADM 89-1578, pp. 236-249) Washington, D.C.: U.S. Government Press.
- Maxwell, J.C. (1996). Substance abuse trends in Texas, December 1995. *TCADA Research Briefs*. Austin, TX: Texas Commission on Drug and Alcohol Abuse.
- McLellan, A.T., & Druley, K.A. (1977). A comparative study of response to treatment in court-referred and voluntary drug patients. *Hospital and Community Psychiatry, 28* (4), 241-242.

- Miller, W.R. (1989). Increasing motivation for change. In R.K. Hester & W.R. Miller (Eds.) *Handbook of alcoholism treatment approaches* (pp.67-80). New York: Pergamon Press.
- Platt, J. J., Buhninger, G., Kaplan, C. D., Brown, B. S., & Taube, D. O. (1988). The prospects and limitations of compulsory treatment for drug addiction. Special issue: A social policy analysis of compulsory treatment for opiate dependence. *Journal of Drug Issues, 18(4)*, 505-525.
- Price, R.H., & D'Aunno, T. (1992). *NIDA III Respondent Report Drug Abuse Treatment System Survey: A National Study of the Outpatient Drug-Free and Methadone Treatment System, 1988-1990 Results*. Ann Arbor, MI: University of Michigan, Institute for Social Research.
- Rosenberg, C.M., & Liftik, J. (1976). Use of coercion in the outpatient treatment of alcoholism. *Journal of Studies on Alcohol, 37 (1)*, 58-65.
- Rosenthal, M. P. (1988). The constitutionality of involuntary civil commitment of opiate addicts. *Journal of Drug Issues, 18(4)*, 641-661.
- Salmon, R.W., & Salmon, R.J. (1983). The role of coercion in rehabilitation of drug abusers. *The International Journal of the Addictions, 18(1)*, 9-21.
- Schnoll, S.H., Goldstein, M.R., Antes, D.E., Rinella, V.J. (1980). The impact of legal involvement on substance abusers in a residential treatment setting. *Corrective and Social Psychology, 26(1)*, 21-28.
- Schottenfeld, R.S. (1989). Involuntary treatment of substance abuse disorders: Impediments to success. *Psychiatry, 52*, 164-176.
- Siddall, J.W., & Conway, G.L. (1988). Interactional variables associated with retention and success in residential drug treatment. *The International Journal of the Addictions, 23(12)*, 1241-1254.

- Simpson, D.D., Joe, G.W., & Rowan-Szal, G.A. (1997). Drug abuse treatment retention and process effects on follow-up outcomes. *Drug and Alcohol Dependence*, 47, 227-235.
- Simpson, D.D., & Friend, H.J. (1988). Legal status and long-term outcomes for addicts in the DARP followup project. In C.G. Leukefeld and F.M. Tims (Eds.), *Compulsory treatment of drug abuse: Research and clinical practice*. NIDA Research Monograph 86, DHHS number (ADM)89-1578, pp. 81-98.
- Spiegelman, R. (1984). *Alcohol Treatment and Social Control: Contradiction in Strategies for California's Skid Rows*. Presented at a meeting of the International Group for Comparative Alcohol Studies, Stockholm, October 23-27.
- Toews, J., el-Geubaly, N., Leckie, A., & Harper, D. (1984). Patients' attitudes at the time of their commitment. *Canadian Journal of Psychiatry*, 29, 590-595.
- Visher, C.A. (1992). Pretrial drug testing. *National Institute of Justice Research in Brief*. Washington, DC: National Institute of Justice.
- Weisner, C.M. (1987). The social ecology of alcohol treatment in the United States. *Recent Developments in Alcoholism*, 5, 203-243.
- Wexler, H.K., Falkin, G.P, Lipton, D.S., & Rosenblum, A.B. (1992). Outcome evaluation of a prison therapeutic community for substance abuse treatment. In C.G Leukefeld and F.M. Tims (Eds.) *Drug Abuse Treatment in Prisons and Jails* (NIDA Research Monograph 118, DHHS pub no. [ADM]92-1884).