

Treatment Entry and Retention: Findings from the TRIAD Study Executive Summary - 2001

Overview of Study. Results from the Treating Inmates Addicted to Drugs (TRIAD) study found that the Federal Bureau of Prisons' residential drug abuse program (DAP) reduced arrests and drug use in both the six months and the three years following subjects' release from prison, taking into account the effects of self-selection into treatment. The TRIAD study improved upon previous research by considering the entire population of eligible subjects in comparing the outcomes for those who entered and completed treatment and those who did not.

Consistent with previous research, the results of the study indicated that those who stayed in and completed treatment did better following incarceration. Most studies that address the impact of retention in treatment on treatment outcomes limit their comparisons to treatment subjects who complete treatment versus treatment subjects who do not complete treatment. To further understand the evaluation results, gender similarities and differences in background and attitudinal factors associated with treatment entry and with the combination of treatment entry and completion were studied. In addition, we compared the predictors of treatment entry with those of the combination of treatment entry and completion.

Methods. We made gender comparisons among all subjects in our sample who were eligible for treatment (whether they entered or not) by dividing them into two separate sets of groups. The first set of groups was used to identify predictors of treatment entry and consisted of (1) those eligible for treatment who entered treatment (1,189 men and 300 women) compared to (2) those who did not enter treatment (545 men and 185 women). The second set of groups was used to identify the predictors of the combination of treatment entry and retention until completion and consisted of (1) those who did not enter treatment together with those who entered treatment but did not complete treatment (802 men and 292 women) compared to (2) those who entered *and* completed treatment (932 men and 193 women). In this way, we simultaneously learned about what types of incarcerated individuals were attracted to treatment *and* the characteristics of those who came to treatment and stayed until completion.

Predictors included dynamic attitudinal characteristics as well as background characteristics. These predictors included measures of motivation to change (Change Assessment Scale of Prochaska and DiClemente, 1986), DSM-III-R diagnoses of antisocial personality and depression, an indicator of treatment incentives (availability of a one-year sentence reduction after passage of the Violent Crime Control and Law Enforcement Act (VCCLEA) of 1994), substance use history, and a variety of other background characteristics.

Gender Comparisons on Predictors of Treatment Entry Only. Table 1 indicates that there were both gender similarities and differences in predictors of treatment entry, and that motivation to change was the most consistent attitudinal predictor for both genders. The four factors of the 32-item Change Assessment Scale provide an indication of an individual's level of recognition of a problem and the person's motivation to do something to change the problem.

For both men and women, an increased likelihood to enter treatment was associated with 1) higher scores on the maintenance factor of the Change Assessment Scale, and 2) plans to live with minor children after release, while a decreased likelihood to enter treatment was associated

with 1) higher educational levels and 2) higher scores on the precontemplation factor of the Change Assessment Scale. Gender differences in predictors of treatment entry were such that for men, average/good family ties was associated with a decreased likelihood and having an instant offense of a moderate severity level was associated with an increased likelihood of entering treatment, but for both predictors the reverse was true for women.

The remaining gender-specific predictors indicated that an increased likelihood of entering treatment for females was associated with: 1) older age at first arrest, 2) physical abuse before age 18, 3) unemployment in the month before incarceration, 4) daily use of alcohol only prior to arrest, and 5) no diagnosis of either depression or antisocial personality disorder. In contrast, women who 1) used marijuana only on a daily basis in the year prior to arrest, and 2) who were diagnosed with depression only or antisocial personality disorder only were less likely to enter treatment. For men, an increased likelihood of entering treatment was also associated with higher contemplation factor scores on the Change Assessment Scale, and men who had treatment available after passage of VCCLEA but were not eligible for a sentence reduction and those who had a potential reduction of only 1 to 5.5 months were less likely to enter treatment.

Clinical Implications of Treatment Entry Findings. The findings indicate that both men and women entered treatment because of intrinsic motivation to change their problems with alcohol and drug use, and that they also considered family relationships in their decisions to enter treatment. The role of internal motivation is all the more notable because it occurred even when external incentives were available. While we found that men who could not benefit from the year-off incentive were less likely to enter treatment, we note that this result could be attributed to the relative disappointment occurring when an incentive is newly introduced and one is not eligible to benefit. The effects at present are unknown but are likely to differ from these reported findings. The results also indicated that more severely psychiatrically distressed women were not attracted to treatment. Knowing that participants are intrinsically motivated to enter treatment can be useful in engaging them in treatment and empowering them to take responsibility for their treatment. Likewise clinicians can use the external motivator of participants' minor children (and other family relationships for women) to enhance their motivation to change in order to facilitate treatment engagement and participation. Attracting psychiatrically distressed women might be better accomplished by using such vehicles as the Drug Education program, where there could be a greater focus on explaining psychiatric symptoms associated with problematic substance use and a concerted effort to increase both intrinsic and extrinsic motivation for treatment by highlighting the many benefits of treatment besides possible sentence reduction.

Predictors of Combined Treatment Entry and Retention. Approximately 78% of the men completed treatment as compared to 64% of the women. As with the predictors of treatment entry alone, there were gender similarities and differences in the prediction of combined treatment entry and retention. For both genders, the combination of treatment entry and retention was positively associated with 1) having an offense rated greatest severity, 2) not having a diagnosis of either antisocial personality or depression, and 3) higher maintenance factor scores on the Change Assessment Scale, and it was negatively associated with higher precontemplation factor scores on the Change Assessment Scale. Among women only, those who 1) were older at first arrest and 2) had a diagnosis of antisocial personality but not depression were more likely to enter and remain in treatment until completion. In addition, among women only, those who 1)

had an offense of moderate severity, and who 2) had diagnoses of both antisocial personality disorder and depression were less likely to enter and complete treatment. In contrast, among men only, the combination of treatment entry and completion was positively associated with 1) older age at current commitment, 2) plans to live with minor children after release, and 3) higher contemplation factor scores on the Change Assessment Survey; while treatment entry and completion was negatively associated with 1) having a recent history of violence (less than 5 years ago), 2) longer sentence lengths, 3) average or good family ties, 4) prior drug treatment, and 5) having treatment available after passage of VCCLEA but being too close to release to be able to benefit from its sentence reduction provision.

Clinical Implications for Combined Treatment Entry and Completion Findings. These findings are instructive in a number of ways. Firstly, they indicate that the DAP programs are adept at attracting, treating, and retaining men who want to change for themselves. However, men who do not have comorbid psychiatric disorders are not likely to remain in treatment.

DAP programs are also successful at attracting, treating and retaining women who are intrinsically motivated to change. However, the programs appear less successful at treating and retaining women with more severe psychiatric problems. In fact, more so than the men, the women who were retained in treatment differ from those who originally entered treatment, suggesting that treatment programs had problems retaining those with histories of abuse, those whose pre-incarceration substance use pattern was daily alcohol use only, those who planned to live with minor children following release. These results are consistent with research which suggests that women have unique treatment needs which are not typically addressed in programs designed to treat men. The literature suggests that DAP programs could improve entry and retention rates for more psychiatrically impaired female participants by ensuring that the programs are perceived as safe environments in which women might find expedient relief for their psychiatric symptoms. It is likely that female participants would benefit more and that treatment retention would be improved if comprehensive assessments and reassessments before, during, and after treatment were conducted to identify the individual diagnosis to be used in developing the most appropriate treatment plan. Some female participants with psychiatric disorders and traumatic childhood experiences may require increased levels of individual psychotherapy and may also require psychotropic medication as early as while they are in the general population waiting to be assigned to the DAP unit or while they are in the orientation phase of DAP treatment.

Summary. DAP programs attract, treat, and retain men and women who are motivated to change their alcohol and drug use behavior. Programs attract all types of men and are effective at retaining the men they attract. In contrast, programs are less likely to attract women having problems with only alcohol use and are also less likely to either attract or retain women with severe psychiatric problems. Treatment entry and entry and completion can be improved for men by increasing the salience of the internal and external benefits they stand to gain from participating in treatment, and for women by providing comprehensive assessments at various stages in the treatment process to better address psychiatric and other problems.

Table 1. Predictors of Treatment Entry and Treatment Completion, by Gender

	Treatment Entry		Treatment Entry & Completion	
	Men	Women	Men	Women
I. Background Characteristics				
Education Level	Negative	Negative	NA	NA
Plan to Live with Minor Children after Release	Positive	Positive	Positive	NA
Average/Good Family Ties	Negative	Positive	Negative	NA
Severity of Instant Offense - Moderate	Positive	Negative	NA	Negative
Severity of Instant Offense - Greatest	NA	NA	Positive	Positive
Sentence Length	NA	NA	Negative	NA
History of Violence, <5 years ago	NA	NA	Negative	NA
History of Physical Abuse Before Age 18	NA	Positive	NA	NA
Not in Work Force at Time of Incarceration	NA	Positive	NA	NA
Age at First Arrest	NA	Positive	NA	Positive
Age at Time of Commitment	NA	NA	Positive	NA
II. Change Assessment Scale				
Pre-contemplation	Negative	Negative	Negative	Negative
Contemplation	Positive	NA	Positive	NA
Maintenance	Positive	Positive	Positive	Positive
III. Substance Use History				
Daily Alcohol Use (Only) Prior to Arrest	NA	Positive	NA	NA
Daily Marijuana Use (Only) Prior to Arrest	NA	Negative	NA	NA
Previous Drug Treatment	NA	NA	Negative	NA
IV. Psychiatric Diagnoses				
Diagnosis of Depression Only	NA	Negative	NA	NA
Diagnoses of Both APD & Depression	NA	Negative	NA	Negative
Diagnosis of Neither APD or Depression	NA	Positive	Positive	Positive
V. Treatment Incentives				
Time Off Sentence Available, 0 Months	Negative	NA	Negative	NA
Time Off Sentence Available, 1-5 Months	Negative	NA	NA	NA