

The Importance of Early Substance Use to Mental Health Treatment Completion

by
Taylor Scarpone

Abstract

This study intends to look at the specific relationship between early substance use, or more specifically the age of first substance use, and treatment completion. It is predicted that early ages of first substance use will be a useful predictor of treatment non-completion.

Introduction

By 2009, there were approximately 5 million people in community-based supervision in the United States alone (Glaze, 2010). Community correction is a term that includes, but is not limited to, probation, parole, and day treatment. Probation has become a more prevalent alternative to prison in the past few decades (Webster 2010). However, much is still being learned about the difficulties probationers have and the most effective ways to treat them. For instance, two thirds of the individuals on probation have reported past substance abuse (Mumola 1998) and half a million probationers have some form of mental health problem. Furthermore, almost 80 percent of individuals with some form of a mental health illness also have a known or reported substance abuse problem (Hartwell 2004), thus illustrating the high rate of comorbidity of these two problems. More specifically, a study found that 58% of probationers were found to have concurrent psychiatric illness along with drug abuse (Hiller, Knight, & Simpson 1996).

The chances are high of a probationer with a substance abuse problem also having a mental illness. However, it is not always seen or recognized. The study by Haegedorn and Willenbring (2003) found that almost 50% of probationers had not been previously identified as having a psychiatric illness, although they did; that overlooked fact could negatively impact their recovery from substance dependence. This is potentially very problematic because the rates of psychiatric illness in individuals in the criminal justice system can be 2 to 5 times greater than the general population. And of those samples, 60%-80% have a history of substance abuse.

The issues of individuals in the criminal justice system with mental health issues, substance abuse problems, or possibly a combination of both, bring about the subject of treatment. It was found that programs that are specifically designed to treat offenders with mental illness were successful in reducing symptoms of distress. Also, the programs designed to meet criminal justice and psychiatric needs specifically produce substantial reductions in psychiatric outcomes and criminal justice recidivism (Morgan, Flora, & Steffan, 2011).

An important part of treatment research with this population involves understanding which variables have the potential to predict possible treatment completion. Many studies have been done that look at a variety of possible predictors; some hypothesize and test whether one particular variable has an effect on treatment completion. A specific study on female offenders found that $\frac{3}{4}$ of the sample population of substance abusing females also had at least one Axis I diagnosis. It was hypothesized that the more Axis I diagnoses, the less likely the individual would be to complete treatment. However, this hypothesis was not supported (Sacks, Mckendrick, & Banks 2008). Another study looked specifically to see if a personality assessment inventory could successfully predict male offenders' conduct throughout substance abuse treatment. Multiple personality assessments were administered to see if any could be viable predictors of treatment outcomes. However, it was found that only the aggression scale was proven to be successful in predicting general noncompliance in treatment and aggressive behavior (Magyar, Edens, & Douglas 2001).

Studies conducted in the past do not attempt to focus on a singular variable, but instead look to find a variety of them that could be possible predictors of treatment completion. One 2011 study found that a particular myriad of characteristics put an offender at a much higher risk of not completing treatment. It was found that the typical treatment non-completer is a “young, single, unemployed, ethnic minority male with limited formal education, low income, history of previous offenses and incarcerations, and is higher risk” (Olver, Stockdale, & Wormith 2011).

In contrast, another study investigated characteristics that individuals possess which might be predictors of successful treatment completion as opposed to non-completion. The study was successful in determining positive predictors of treatment completion. It found that individuals were more likely to complete treatment if they were female, had not used drugs in the 30 days prior to their admission to the program, had never used drugs, and if they remained in treatment longer. Other predictors of successful treatment completion were dependent on whether the individual had secured employment and was living in a stable situation and environment (Hohman, McGaffigan, & Segars 2000). With the variety of variables that were found to predict successful treatment, and the fact that the variables fell into multiple categories, it was concluded that an understanding of psychosocial and treatment characteristics of the individuals who complete treatment can be very beneficial. It can not only assist in designing treatment services in the future, but can also contribute to improving treatment that is already in existence.

This study intends to look at the specific relationship between early substance use, or more specifically the age of first substance use, and treatment completion. It is predicted that early ages of first substance use will be a useful predictor of treatment non-completion.

Materials and Methods

In this study, the completion status of $N = 162$ patients at the Community Reporting Engagement Support and Training Center (CREST) were compared with their intake report of age of first substance use. Of those 162 patients, 81.5% were male and 18.5% were female. The demographic data for ethnicity showed that 56.8% of patients were African American, 21% were white, and 17.3% were Hispanic. The remaining patients fell under other

or undisclosed. Of the patients, 68.5% were single/never married, 11.1% were divorced/annulled, and 6.2% were married.

The data regarding completion status was coded with either a 1 or 2 to represent completed or not completed, respectively. This data was then analyzed with the age of first use data using an independent t-test

Results

The sample's mean age of first substance use was 15, with a standard deviation of 6. Of the sample population, 58% completed treatment, including being referred, while 42% were discharged for other reasons.

The distribution also included which substance was used at the age of first use. 36.4% of patients used alcohol at their age of first use, .6% used benzodiazepines, 3.1% used cocaine, 13.6% used crack-cocaine, 3.1% used heroine, 40.1% used marijuana, and 3.1% used PCP.

An independent samples T-test was performed comparing those who completed the program versus those who were discharged for other reasons. While completers began substance use at a younger age ($m=14.33$, $SD=5.33$) than non-completers ($m=16.0$, $SD=7.8$), this difference did not reach significance, $t(160)=-1.60$, $p = .112$.

Conclusions

The tests showed that the original hypothesis about lower age of first use predicting treatment non-completion was incorrect. In fact, the t-test showed it was actually treatment completers who began substance use at a younger age, although the difference was not significant.

There could be many factors that influenced these results. For instance, the age of first use data is all self-reported and, therefore, not always reliable.

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References

Hartwell, S. (2004). Triple stigma: persons with mental illness and substance abuse problems in the criminal justice system. *Criminal justice policy review*, 15 (1), 84-99.

Hiller, M. L. (1996). An assessment of comorbid psychological problems in a residential criminal justice drug treatment program. *Psychology of addictive behaviors*, 10 (3), 181-189.

Glaze, L. (2010). Correctional populations in the United States, 2009. *Bureau of Justice Statistics*.

Hagedorn, H., and Willenbring, M. (2003). Psychiatric illness among drug court probationers. *The American Journal of Drug and Alcohol Abuse*, 29 (4), 775-788.

Hagedorn, H., & Willenbring, M. (2003). Psychiatric illness among drug court probationers. *The American Journal of Drug and Alcohol Abuse*, 29 (4), 775-788.

Magyar, M. S., Edens, J. F., Lilienfeld, S. O., Douglas, K. S., Poythress, N. R. and Skeem, J. L. (2012). Using the Personality Assessment Inventory to predict male offenders' conduct during and progression through substance abuse treatment. *Psychological Assessment*, 24 (1), 216-225.

Morgan, R. D., Flora, D. B., Kroner, D. G., Mills, J. F., Varghese, F. and Steffan, J. S. (2012). Treating offenders with mental illness: A research synthesis. *Law and Human Behavior*, 36 (1), 37-50.

Mumola, C. J., & Bonczar, T. P. (1998). Substance abuse and treatment of adults on probation, 1995. Washington, D.C.: U.S. Department of Justice.

Olver, M. E., Stockdale, K. C., and Wormith, J. (2011). A meta-analysis of predictors of offender treatment attrition and its relationship to recidivism. *Journal Of Consulting And Clinical Psychology*, 79 (1), 6-21.

Sacks, J. Y., McKendrick, K., Hamilton, Z., Cleland, C. M., Pearson, F. S., and Banks, S. (2008). Treatment outcomes for female offenders: Relationship to number of axis I disorders. *Behavioral Sciences and The Law*, 26 (4), 413-434.

Webster, J. M. (2010). Substance use, criminal activity, and mental health among violent and nonviolent rural probationers. *Journal of Addictions and Offender Counseling*, 30, 99-111.



Taylor Scarpone is a junior hoping to graduate in May of 2014 with B. S. degrees in Psychology and English. She hopes to further her education at graduate school. This was her first time working on psychological research.

