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**Citation:** White, W. & Dennis, M. (2002) The Cannabis Youth Treatment Study: Key lessons for student assistance programs. *Student Assistance Journal*, 14(3), 16-19. Posted at [www.williamwhitepapers.com](http://www.williamwhitepapers.com)

## The Cannabis Youth Treatment Study: Key Lessons for Student Assistance Programs<sup>1</sup>

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For the past decade, student assistance professionals have been and continue to be at the forefront of responses to resurging illicit drug experimentation in the United States. As they consult with youth and their families and fellow educators, they are often asked about the short or long term effects of drug use and the relative effectiveness of various prevention and intervention programs. These questions intensify when the subject involves cannabis (i.e., marijuana, hashish, blunts) because of the drug's seeming pervasiveness and the propensity by many to still trivialize its use ("It's only marijuana."). This article will use one of the largest studies of adolescent treatment ever conducted to provide brief answers to three questions:

1) What are the major risk factors and characteristics of adolescents seeking treatment for cannabis abuse and dependence?

2) Are there brief, low cost interventions that are effective in treating adolescent cannabis abuse and dependence?

3) What role can the SA professional play in supporting the long term recovery of students following their treatment for cannabis abuse or dependence?

Cannabis is the most prevalent psychoactive substance used by adolescents in the United States. Though the rates of use have leveled off recently, adolescents in the U.S. still report more past-month cannabis use than all other illicit substances combined and more daily use of cannabis than alcohol. Moreover, during the past two decades the age of first use of cannabis has dropped from mid to late adolescence to early and pre-adolescence at the same time the potency of cannabis has increased threefold. While many youth experiment with and then cease marijuana use, certain groups of youth are at much higher risk for developing drug-related problems. These higher risk groups include those who begin use at a younger age and those who experience mental distress (e.g., depression, anxiety, inattentive or hyperactivity disorders, impulsive or violent behavior).

By 1999, 7% of U.S. 18-year old youth met criteria for past-year cannabis dependence, and cannabis is now the leading substance reported in adolescent arrests, emergency room and treatment admissions. From 1992 to 1998, the number of adolescents with cannabis-related problems who presented to the U.S.

public treatment system grew from 51,081 to 109,875 (a 115% increase). Unfortunately, many of these programs were using adult models of treatment. A lack of adolescent treatment resources in many communities and poor clinical outcomes within existing programs left many families, school staff and other professionals pessimistic about the ability to reduce cannabis-related problems among adolescents.

The Center for Substance Abuse Treatment (CSAT) of the Substance Abuse and Mental Health Services Administration (SAMHSA) responded to the lack of evidence-based approaches for treating adolescent cannabis users by funding a cooperative agreement called the Cannabis Youth Treatment (CYT) study.<sup>45</sup> With 600 families, CYT is the largest randomized experiment of adolescent substance abuse treatment ever conducted in community-based settings. Adolescents were randomly assigned to one of five types of short-term (6 to 13 weeks) outpatient treatment that varied in theoretical orientation, format (individual, group, family), service components and service duration. All treatments were manual-guided to enhance fidelity to the treatments being tested across the study sites. Copies of the five treatment manuals utilized within the CYT study are available at no cost from the National Clearinghouse for Alcohol and Drug Information (1-800-729-6686).

Seventy-one percent of admitted youth completed treatment and 94% were interviewed quarterly for the first year following treatment. Each experiment comparing the effectiveness of the various treatments was replicated in a community-based clinic and in a major medical research center. The adolescents treated had an average age of 16, were most likely to be male (83%), white (61%), enrolled in school (87%), and involved in the juvenile justice system (62%).

During the three-month treatment phase, all interventions reduced the days of cannabis

use and the number of substance problems. These reductions were sustained through the twelfth month of follow-up. From intake to 12 months, participation in treatment was also significantly associated with reductions in family problems, inattentive-ness/hyperactivity type behavioral problems, arguing/violence, illegal activity, missing school, and problems at school. We are currently collecting data on 30-month outcomes.

There are many lessons to be drawn from the CYT study, but five lessons have special implications for student assistance programs (SAPs) in the United States.

**Lesson 1.** *The risk and severity of cannabis-related problems are related to lower age of first use, frequency of use, presence of co-occurring psychological problems, and access (among friends or family members).*

The risk of cannabis abuse or dependence is not uniform within either adolescent or adult using populations. Those who begin drug use before age 15 are six times more likely than those who begin drug use after age 18 to develop adult symptoms of drug dependence. Nearly 85% of the CYT adolescents started using between the ages of 12 and 14. At-risk populations are also distinguished by their frequency and intensity of use. Weekly (or more frequent) users were most likely to develop disorders. In CYT, 71% reported weekly marijuana use (including 38% using daily). CYT participants had serious substance-related and co-morbid disorders reinforcing the growing recognition that people with pre-existing problems are at higher risk to develop marijuana-related problems, and that marijuana use tends to exacerbate or lead to other problems, particularly within social environments characterized by high availability and pro-drug norms.

*These findings suggest that SAPs need to increase prevention and early intervention activities in the elementary and junior or middle schools and that SAPs could play an important role in educating staff, parents and adolescents*

*about the risk factors for developing cannabis-related problems.*

**Lesson 2.** *Cannabis-related disorders constitute serious, debilitating disorders that can dramatically affect the developmental trajectory of adolescents.*

For the past 30 years, the rates of adolescent cannabis use have gone up when it was perceived as relatively benign and gone down when it was perceived as risky. Unfortunately, the current tendency is to trivialize adolescent marijuana use. (The Internet is full of such misinformation.) The rapidly growing research on the effects of marijuana suggests the existence of a subset of people (particularly adolescents and those with co-occurring mental disorders) who are at very high risk of developing cannabis disorders that disrupt normal development and functioning. Weekly or more frequent cannabis users are far more likely than non-users to have problems at home, school, or with the law. The link between cannabis use and these problems is further confirmed by the rapid reduction in these very problems among youth who stopped using marijuana following their treatment in the CYT study.

*SAPs have an important role in carrying the message to parents, their professional peers and the wider community that problems related to cannabis use are on the increase and that adolescents who continue to use cannabis in spite of adverse consequences should be recognized as needing intervention on par with adolescents with other drug choices generally perceived as more dangerous than cannabis.*

**Lesson 3.** *Cannabis-related disorders interact synergistically with other problems of youth and families.*

Of the adolescents in CYT, 95% reported one or more other problems (83% had three or more). These included alcohol use disorders, other substance use disorders, internal emotional disorders (major depression, generalized anxiety, suicidal thoughts or

actions, traumatic stress disorders), and external behavioral disorders (conduct disorder, attention deficit-hyperactivity disorder). Sixty percent reported a history of victimization. High percentages also reported illegal activity other than just drug possession or use and two thirds reported having previously engaged in acts of physical violence such as assault.

*These findings reinforce the need for global (as opposed to categorical) screening and assessment procedures, and the need for multi-disciplinary and multi-agency intervention models that can provide an integrated response to multiple, co-occurring problems. SAPs are in a unique role to encourage and participate in such integrated service models for multiple-problem youth and families.*

**Lesson 4.** *The severity of adolescent cannabis problems and their response to treatment varies.*

The five CYT treatments were all relatively brief (6-13 weeks), affordable, and able to positively impact many of the youth seeking treatment services. Each was associated with major reductions in cannabis use, symptoms of dependence or abuse, behavioral problems, family problems, school problems, and illegal activity. At 12 months, nearly a third of those youth completing CYT treatment were living in the community without any marijuana use or substance related problems. The good news of adolescent treatment is that brief treatment can have a significant impact on the lives of many young people and their families.

The more ominous side of the treatment outcome story is that for another subgroup of adolescents, cannabis use has become a more chronic condition. In CYT, 41% of the adolescents had failed several prior attempts to quit, a quarter had been to formal treatment before, and a third went back to treatment in the year following their discharge from the CYT study. This does not mean that there is no hope for the resolution of such chronic problems, but it does convey that different models of

intervention over a longer period of time may be required to fully resolve such problems.

*SAPs can play an important role in overcoming the current pessimism about treatment effectiveness and help to implement relatively low cost programs that can serve many adolescents. At the same time they also need to recognize that, for some adolescents, cannabis use can constitute a more chronic, relapsing condition. For this group, more sophisticated assessment, and more intensive and longer programs of recovery management will be required.*

**Lesson 5:** *Nearly half of treated adolescents will vacillate between periods of recovery and periods of drug use and drug-related problems in the year following their first treatment episode. Post-treatment recovery support services could greatly benefit these youths and their families.*

The common view of adolescent treatment as a time-limited event that either works (complete and enduring abstinence following treatment) or does not work (any drug use following treatment) is inconsistent with the actual phenomenon of adolescent recovery. After CYT treatment, we found that 60% had some period of recovery: 29% who went into recovery but later relapsed; 7% who went into recovery, relapsed, but then got back into recovery; 15% who did not respond to treatment right away but did get better during the subsequent months; and 9% who recovered right away and stayed in recovery through the first year following treatment. These different pathways to recovery underscore how fluid and

fragile the post-treatment period is for most youth. Such fluidity calls for new service models that resemble not the “diagnose, admit, treat, and discharge” approach of the hospital emergency room, but the approaches used to manage such chronic diseases as diabetes, hypertension and asthma. These latter approaches focus on problem stabilization, recovery education, ongoing monitoring and support, and, when needed, early re-intervention.

*SAPs can play a significant role in tipping the scales toward sustained recovery by: a) linking the adolescent to existing community resources that support recovery, b) conducting post-treatment checkups to monitor progress, c) setting up early re-intervention programs to refer youth who need more intensive services, d) creating or facilitating recovery focused support structures (e.g., recovery-themed support groups, classrooms, social activities) and e) working with the school and community to reduce the “stigma” and isolation of youth in recovery.*

## **Conclusion**

Adolescent cannabis use is a major problem that SAPs can play an important role in addressing through education, identification, intervention, referral, ongoing monitoring and support, and early re-intervention. Even the empirically-grounded CYT treatments do not replace the need for sustained recovery support systems in the adolescent’s natural environment. It is SAPs that can help create a vibrant culture of recovery within the school environment.

## Notes:

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1.. This paper was prepared with funds from the Center for Substance Abuse Treatment (CSAT's) Persistent Effects of Treatment Study (PETS, Contract No. 270-97-7011). The opinions are those of the authors and do not reflect official positions of the government. The literature and statistics are summarized from Dennis, M.L., Titus, J.C., Diamond, G., Donaldson, J., Godley, S.H., Tims, F.M., Webb, C., Kaminer, Y., Babor, T., Roebuck, M.C., Godley, M.D., Hamilton, N. Liddle, H., & Scott, C. and the CYT Steering committee (2002). The Cannabis Youth Treatment (CTY) experiment: Rationale, Study Design, *Addiction*, 97 (Suppl. 1), S16-S34.; Dennis, M.L., Godley, S.H., Diamond, G.S., Tims, F.M., Babor, T., Donaldson, J., Liddle, H., Titus, J.C., Kaminer, Y., Webb, C., Hamilton, N., & Funk, R.R. (2004). The Cannabis Youth Treatment (CYT) Study: Main findings from two randomized trials. *Journal of Substance Abuse Treatment*, 27, 197-

213, and Analysis Plans. *Addiction*. More information is on the web about the PETS ([www.samhsa.gov/centers/csat](http://www.samhsa.gov/centers/csat)) and CYT studies ([www.chestnut.org/li/cyt](http://www.chestnut.org/li/cyt)).

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Based on articles (listed on website) in a special issue of *Addiction*.