



# Evaluating Substance Abuse Treatment Programs for Adolescent Probationers

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In recent years, the number of adolescents referred to substance abuse treatment programs has risen sharply. This increase can be attributed almost exclusively to a steady increase in treatment referrals from the criminal justice system, which now accounts for more than half of all adolescent substance abuse treatment admissions. Unfortunately, there is little information on the effectiveness of those substance abuse treatment services commonly available to adolescent probationers.

There is a growing literature demonstrating that specialized, manual-guided treatment interventions for adolescents can be effective when implemented with intensive training, supervision, and monitoring, but few of these therapies have been implemented widely. Instead, the most common treatment approaches draw on self-help principles derived from recovery communities and the experiential knowledge gained by counselors, many of whom overcame their own problem substance use. Few of these widely available treatment approaches, also known as community-based treatments, have been evaluated rigorously.

In an effort to increase what is known about one widely used community-based treatment program for adolescent probationers, RAND Corporation researchers examined the effectiveness of a Phoenix Academy adolescent therapeutic community treatment program in Los Angeles. Phoenix Academies are developed and operated by Phoenix House Foundation, one of the largest nonprofit substance abuse treatment providers in the United States. There are 12 Phoenix Academies in seven states.

Days in this residential treatment are highly structured. They are organized around school, community meetings, lectures, encounter groups, counseling, recreation, job functions, and other activities. As youths successfully progress through what is planned as a 9- to 12-month residential treatment, they may earn increasing privileges (e.g., leaves on day passes, possession of personal

## Abstract

There is little information on the effectiveness of substance abuse treatment services commonly available to adolescents. In this study, RAND researchers found that one such program helped young probationers reduce substance abuse and improve their psychological functioning. These findings suggest that more research is needed on the relative effectiveness of the types of programs typically available to youths in the community and the specialized services typically found to be effective in rigorous experimental studies of adolescent treatment.

belongings) and responsibilities (e.g., increasingly interesting and more responsible jobs). The program model is guided by a core set of beliefs about substance abuse, recovery, and “right living” common to most therapeutic community treatments.

## Research Approach

The RAND researchers compared the substance abuse, psychological functioning, and criminal activity of 175 adolescent probationers 13 to 17 years of age who received treatment at the Phoenix Academy with those of 274 adolescents who received some other disposition of their case (e.g., supervised release, detention, camp placement, or placement at a long-term residential group home that, unlike Phoenix Academy, does not specialize in substance abuse treatment).

To select probationers who were likely to have similar pretreatment risk characteristics as those entering Phoenix Academy, the researchers interviewed probation officers who make referrals to community placements such as the Phoenix Academy. They asked the probation officers to indicate

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where they would refer a youth best suited for Phoenix Academy if no bed were available there. Comparison youths were drawn from referrals to the alternative facilities.

The researchers used a case-mix adjustment strategy to correct for pretreatment differences between the two groups. This sophisticated statistical matching procedure ensures that, before treatment, comparison-group youths were similar to Phoenix Academy–treated youths in drug use, criminal history, and many other variables.

Participants were interviewed before treatment admission and again for 3-, 6-, and 12-month assessments. Participant retention was excellent: More than 90 percent of the initial sample was located and re-interviewed for follow-up assessments.

## Results

**Substance abuse.** The researchers compared the two groups on a range of substance-use outcomes, including

- Symptoms of substance abuse
- The frequency and intensity of ongoing substance use
- The number of different types of substances currently used
- The time since cigarettes were last smoked.

Phoenix Academy youths showed greater reductions in these measures during the first three months than did youths in other treatments. By the end of 12 months, Phoenix Academy youths had better outcomes than did matched comparison youths on all substance-use outcomes except cigarette smoking. These effects were small but statistically significant.

**Psychological functioning.** The researchers compared psychological functioning between the two groups with measures assessing

- General psychological distress
- Depression
- Anxiety
- Time since the most recent episode of psychological distress.

Phoenix Academy youths experienced more significant psychological benefits over time than did youths in other treatments. Whereas improvements in all psychological measures were similar in the first three months for both Phoenix Academy and matched comparison youths, Phoenix Academy youths had significantly better psychological outcomes in the subsequent nine months, reporting less depression, less loss of energy, less irritability, and fewer physical symptoms of distress. By the twelfth month after the initial interview, Phoenix Academy youths had significantly greater reductions in symptoms of anxiety and general psychological distress.

**Crime outcomes.** The researchers compared crime outcomes between the two groups by analyzing self-reported

- Number of arrests experienced in past 90 days
- Number of days in past 90 during which youths engaged in illegal activities
- Frequency of crimes by type—property, violent, or drug—in past 90 days
- Time since most recent crime.

Phoenix Academy youths showed greater reductions than comparison youths in all crime measures. The consistency of these trends across diverse crime measures suggests the possibility that true treatment effects on crime exist; however, because these differences were small, the researchers could not rule out the possibility that they occurred by chance.

## Implications

The results of the study support the conclusion that admission to Phoenix Academy is associated with reduced drug use and fewer psychological problems for youths similar to those typically admitted to Phoenix Academy. And these benefits are observable for at least the first year after program admission.

To understand whether a treatment is effective, researchers would, ideally, compare treated to untreated youths. Because all probationers receive some services, however, such a comparison was not feasible for this study. Instead, the RAND researchers compared Phoenix Academy youths to probationers who received a variety of standard probation services. Assuming these services benefited members of the comparison group, the study design actually underestimates the magnitude of treatment effects associated with Phoenix Academy compared with no treatment at all.

In this study, researchers compared Phoenix Academy outcomes to those associated with all other probation dispositions typically received by youths, rather than comparing their outcomes to those of youths receiving specific alternative programs or services. Consequently, the researchers were unable to draw any conclusions about specific program elements or their effectiveness.

Because community-based programs similar to Phoenix Academy are difficult to evaluate rigorously, the only evidence-based treatments for adolescents with strong empirical support are for the handful of novel interventions, typically developed and tested in university settings, that have been evaluated experimentally. Whether these new approaches can be effectively implemented in community settings remains to be seen, however. This research, showing that one more commonly available community-based approach to adolescent substance abuse treatment can effectively address the problems of adolescent probationers, suggests that more study is needed to establish whether the limited number of new validated treatments are, in fact, superior to traditional ones already in place. ■

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This research brief describes work done in the RAND Drug Policy Research Center documented in “Effectiveness of Community-Based Treatment for Substance Abusing Adolescents: 12-Month Outcomes of Youths Entering Phoenix Academy or Alternative Probation Dispositions,” *Psychology of Addictive Behaviors*, Vol. 18, No. 3, September 2004, by Andrew R. Morral, Daniel F. McCaffrey, and Greg Ridgeway. The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND’s publications do not necessarily reflect the opinions of its research clients and sponsors. RAND® is a registered trademark.



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