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4301 Connecticut Avenue, NW, Suite 350, Washington, DC 20008 Phone 202-572-6000 Fax 202-362-8420 www.childtrends.org

WHAT WORKS FOR PREVENTING AND STOPPING SUBSTANCE USE IN ADOLESCENTS:

Lessons from Experimental Evaluations of Programs and Interventions

Tawana Bandy, B.S., and Kristin A. Moore, Ph.D.

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OVERVIEW

Despite a decade-long decline in substance use among adolescents, research tells us that about 80 percent of teens have begun to drink alcohol and 50 percent have used an illegal drug by their senior year in high school.

Substance use among teens is related to poorer outcomes for adolescents and youth (e.g., unintentional injuries, homicides and suicides, depression, conduct disorder, and unplanned sexual activity);³ therefore, it is important to understand both what works and what doesn't work to prevent and stop substance use. Many evaluated programs include multiple components. Consequently, one can usually determine only whether or not programs work; rarely can we isolate the exact component of a complex intervention that is responsible for producing the effects.

This fact sheet synthesizes the lessons learned from experimentally evaluated programs and interventions targeting adolescent and youth substance use from the Child Trends database of experimental evaluations of social interventions for children and youth – LINKS (Lifecourse Interventions to Nurture Kids Successfully).⁴ This synthesis suggests findings related to both prevention- and cessation-based programs.

WHAT WORKS

Based on a review of experimentally evaluated programs and interventions that use prevention and cessation strategies to deter and combat substance use among adolescents and youth compiled in LINKS, some broad statements are possible:

- **Multi-component programs generally work.** Seven of nine programs that attempt to reach adolescents and youth through a variety of different approaches, such as school, family, community, outside social activities and media campaigns, have an impact on prevention of substance use. ⁵
- **Programs that address all forms of drug use in combination generally work.** Six of 7 programs of this type had impacts on initiation of alcohol, tobacco, marijuana, and/or illicit drug use. 6
- Increasing knowledge of the health consequences of substance use increases the likelihood/success of stopping use of alcohol and other substances. All six programs that taught the consequences and risks of alcohol and substance use had impacts on substance use cessation.⁷
- Programs tailored to address substance use risks that are specific to particular populations, such as those defined by developmental age, gender, and ethnicity, tend to work. Four of six programs that were tailored for specific populations were effective in prevention and/or discontinuation of substance abuse.⁸

- Initial evidence suggests peer teaching works when combined with adult facilitation. Both of the two programs that used a peer-led intervention strategy had an impact on substance use when combined with input teachers or trained facilitators. 9
- Programs that emphasize drug resistance and reinforcement of anti-drug attitudes appear to work. All three programs of this type had impacts on preventing substance use. 10
- Both prevention and cessation programs work for adolescents and youth. Only three of 24 programs had no short-term or long-term impacts on substance use, including cessation of alcohol, tobacco, marijuana, and prevention of illicit drug use. 11

Overall, the above findings indicate that prevention- and cessation-based substance use programs can work. However, research that is focused exclusively on the impact of experimentally evaluated substance use programs on adolescent and youth outcomes is still in its infancy, and many programs have not been evaluated at all, much less looked at as part of a random assignment experimental evaluation. Below is an outline of research needed in this area.

NEEDED RESEARCH

Important but understudied issues in adolescent substance use research include:

- The optimal length of substance use programs to achieve lasting impacts: The evaluations we examined were from programs varying in both length and duration, but this element was not studied experimentally.
- Identification of key variables that contribute to preventing and stopping substance use: It is important that critical program features be identified to inform future intervention strategies.
- **Program factors that contribute to long-term post-intervention success:** Knowledge of specific factors that directly influence long-term intervention success should be studied to improve relapse rates.
- Determinants of the transition from drug use to abuse and the ways that program interventions can affect that transition: None of the experimental evaluations examined addressed the ways in which interventions can influence the transition from substance use to substance abuse.

ENDNOTES

¹ Johnston, L. D., Bachman, J. G., & O'Malley, P. M. (2006). Monitoring the Future: Questionnaire responses from the nation's high school seniors,

^{2005.} Ann Arbor, MI: Institute for Social Research

² Johnston, L. D., O'Malley, P. M., Bachman, J. G., Schulenburg, J. E. (2006). *Monitoring the Future: National Results on Adolescent Drug Use:*

Overview of Key Findings, 2005. Bethesda, MD: National Institute on Drug Abuse. NIH publication 06-5882.

³ Knight, J. R., Harris, S. K., Sherritt, L., Van Hook, S., Lawrence, N., Brooks, T., Carey, P., Kossack, R., & Kulig, J. (2007). Prevalence of positive abuse screen results among adolescent primary care patients. *Archives of Pediatric & Adolescent Medicine*, *161*, 1036-1041.

⁴ http://www.childtrends.org/links

⁵ Adolescent Alcohol Prevention Trial, Bicultural Competence Skills Program, Know Your Body, Life Skills Training Program, Preparing For The Drug Free Years, Project Northland

⁶ Across Ages, Bicultural Competence Skills Program, Big Brothers/Big Sisters, Life Skills Training Program, Project Northland

⁷ <u>All Stars, Brief Alcohol Screening (BASICS)</u>, <u>ProjectEX</u>, <u>Project SixTeen</u>

⁹ Girls Inc. Friendly PEERsuasion, Project Alert

10 Adolescent Alcohol Prevention Trial, Bicultural Competence Skills Program, , Project Alert

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⁸ <u>Bicultural Competence Skills Program, Brief Alcohol Screening (BASICS), Girls Inc. Friendly PEERsuasion, Spit Tobacco Intervention,</u>

Hutchinson Smoking Prevention Project, Keep A Clear Mind, Preventive Alcohol Education Program

Experimental Evaluations of Social Programs that Examined Impacts on One or More Substance Use Outcomes and Whether They Were Found to Work, Not Proven to Work, or Had Mixed Findings (Source: http://www.childtrends.org/links)

Tobacco Use Prevention		Project 4 Health is a 5-session educational program aimed at preventing tobacco use among 10- to 14-year-olds in California in 1987 enrolled in 4-H clubs. Additional goals of the program are to involve participants in keeping others from	Know Your Body is a special curriculum instituted in school by teachers that aims to reduce the risk of developing chronic disease by teaching healthy diet and lifestyle choices. The cigarette smoking prevention
		using tobacco and to develop youth leadership for tobacco avoidance.	component targeted those health beliefs, psychological influences, and social influences believed to contribute to adolescent smoking decisions.
Tobacco Use Cessation			ProjectEX is a school-based smoking cessation program that targets high school smokers. The ultimate goal of Project EX is smoking cessation.
			Project SixTeen is a school-based program supplanted by a multi-pronged community-based program that included a family component, a youth campaign, a media campaign, and an enforcement campaign.
Proj social enhancement	tchinson Smoking Prevention roject is designed to counteract the cial influences to use tobacco by hancing resistance skills and rrecting exaggerated perceptions of w common tobacco use is.	Spit Tobacco Intervention is a behavioral intervention program designed to target male high school athletes. The program's goal is to prevent the initiation of spit, or chewing tobacco, use among a highrisk population and to encourage those already using to quit.	
Proy alco adol high know	reventive Alcohol Education regram was designed to reduce cohol use and abuse among olescents. The program provided gh school students with the owledge and skills to understand d, in turn, refuse peer pressures to ink.		Adolescent Alcohol Prevention Trial is a school-based drug prevention program that uses different methods of social psychology-based strategies. The program gives students behavioral skills and knowledge to prevent the onset of substance use.
			Big Brothers/Big Sisters is a well-established, intensive mentoring program. The program targets at-risk 5- to 18-year-old children and teens (e.g., from single- parent families, economically deprived) who want a match with a Big Brother or Big Sister.
			Preparing for the Drug Free Years is a skills training program designed to decrease a child's likelihood of using drugs and alcohol. Preparing for the Drug Free Years strives to reduce adolescent substance use by altering the ways in which families interact and communicate regarding risky behaviors. Project Northland is a community-

OUTCOME AREA	NOT PROVEN TO WORK	MIXED REVIEWS	FOUND TO WORK
OUTCOME AREA	NOI PROVEN TO WORK	MIAED REVIEWS	based alcohol prevention program that includes an in-school curriculum, parent education, and participation by youth in alcohol-free activities outside of school.
Alcohol Use Cessation			
Alcohol Use Intervention			Brief Alcohol Screening and Intervention of College Students BASICS is a preventive intervention program to reduce drinking and enhance awareness about alcohol-related issues. BASICS targets college students who are considered at risk because of heavy drinking behaviors.
Illicit Drug Use Prevention			
Illicit Drug Use Cessation		Adolescent Training and Learning to Avoid Steroids (ATLAS) was designed to lower the use of anabolic steroids among high school athletes. The program combined classroom and weight-training sessions to teach students about strength training, nutrition, and risk factors for steroid use.	
Illicit Drug Use Intervention			
Alcohol/Tobacco Marijuana Prevention			Life Skills Training Program is a school-based drug prevention programs in which students are taught a combination of social resistance skills (such as resisting pressures of advertisements and building selfesteem), and general life skills (such as effective communication and developing interpersonal relationships). The intervention purposefully focuses on messages that were more salient to prevention, such as prevalence rates for substance, rather than on the long-term health effects of drug use. Midwestern Prevention Project is a community-based prevention program designed to inhibit drug use among middle school students.
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Alcohol/Tobacco/ Marijuana Use Cessation			
Alcohol/Tobacco Marijuana Use Intervention			
Alcohol/Tobacco/ Illicit Drug Use Prevention			Bicultural Competence Skills Program is a 10-session program designed to promote "fluency" in the two distinct cultures in which bicultural adolescents exist. The program trains participants in a variety

OUTCOME AREA	NOT PROVEN TO WORK	MIXED REVIEWS	FOUND TO WORK
			of skills to promote social competence and positive identity. Keepin' It REAL is a school-based prevention program designed to reduce substance use and promote anti-drug attitudes and norms among middle school students.
Alcohol/Tobacco/ Illicit Drug Use Cessation		Project Toward No Tobacco Use is a school-based program that teaches youth about coping and self-control skills, the myths of drugs and alcohol, and the consequences of drug and alcohol use.	
Alcohol/Tobacco/ Illicit Drug Use Intervention		Girls Inc. Friendly PEERsuasion is a program aimed at preventing substance abuse and changing substance abuse behavior of at-risk middle school-aged girls. The program, based on social influence and life skills models, is designed to offer girls skills and support systems to prevent future substance abuse through sessions facilitated by a trained adult leader, hands-on interactive activities, and group discussions.	
Alcohol/Tobacco/ Marijuana/Illicit Drug Use Prevention	Keep A Clear Mind is a program designed to help improve parent-child communications about substance abuse. The program is designed so that parents and their upper elementaryaged children work on the activities together and engage in communication about the effects of drug use.	Across Ages is a positive youth development, mentoring, and community service program designed to curtail substance use in high-risk children.	Creating Lasting Connections is a community- and faith-based initiative designed to delay the onset and subsequent use of alcohol and other drugs by adolescents. The program operates by targeting various community, family, and youth protective factors in an attempt to enhance the overall resiliency of families and children.
Alcohol/Tobacco/ Marijuana/Illicit Drug Use Cessation		Skills For Adolescence is a life skills program designed to promote positive youth development. Skills for Adolescence helps youth build social and emotional competence, good citizenship, positive character, a drugfree lifestyle, and an ethic of service.	All Stars is a school-based intervention program designed to reduce adolescents' engagement in risky behaviors such as substance use, violence, and sexual activity.
Alcohol/Tobacco/ Marijuana/Illicit Drug Use Intervention		Project Alert is designed to prevent and reduce substance use in adolescents. The program is designed to promote resistance and refusal skills and perceptions of self-efficacy, and to change perceptions of drug use. Project ALERT specifically targets four "gateway drugs": alcohol, marijuana, cigarettes, and inhalants.	