

New Perspectives on Marijuana and Youth

Abstainers Are Not Maladjusted, but Lone Users Face Difficulties

A lot of adolescents experiment with marijuana—the National Institute on Drug Abuse estimates that 46% of high school seniors have tried this drug at some time. Pushing boundaries is what young people do, and some researchers believe that trying marijuana is a normal part of growing up.

Does that mean that young people who do not indulge are somehow maladjusted?

Jonathan Shedler and Jack Block¹ raised this possibility in a report in 1990. They suggested that adolescents who experimented with marijuana were better adjusted emotionally and socially than their counterparts who avoided all drugs. Specifically, abstainers were observed to be anxious, emotionally constricted, and lacking in social skills compared with experimenters. Not surprisingly, these findings caused widespread comment in the drug-prevention community.

Now, RAND Corporation researchers have revisited Shedler and Block’s classic study and have uncovered evidence that challenges those initial findings. Kids who abstained from marijuana through the last year of high school were not socially or emotionally troubled. And they had better outcomes as young adults.

¹ Shedler J, and Block J, “Adolescent Drug Use and Psychological Health: A Longitudinal Inquiry,” *American Psychologist*, Vol. 45, No. 5, May 1990, pp. 612–630.

Key findings:

- Although some consider experimenting with marijuana normal behavior for adolescents, those adolescents who abstain are not maladjusted as others have reported.
- Young abstainers do better than experimenters into young adulthood.
- Even strict abstainers—youth who avoid all drugs—fare well in life.
- Solitary substance use is not uncommon among youth.
- Young solitary users are an overlooked at-risk group who face a wide range of psychosocial and behavioral difficulties as teens and young adults.

A second study looked at a largely ignored group of adolescents: kids who go off by themselves to use marijuana and other harmful substances. The researchers documented a wide range of psychosocial and behavioral difficulties faced by youth who use harmful substances while alone, rather than only in social settings like parties. And the troubles followed them into young adulthood.

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This Highlight summarizes RAND Health research reported in the following publications:

Tucker JS, Ellickson PL, Collins RL, and Klein DJ, “Are Drug Experimenters Better Adjusted Than Abstainers and Users?: A Longitudinal Study of Adolescent Marijuana Use,” *Journal of Adolescent Health*, Vol. 39, No. 4, 2006, pp. 488–494.

Tucker JS, Ellickson PL, Collins RL, and Klein DJ, “Does Solitary Substance Use Increase Adolescents’ Risk for Poor Psychosocial and Behavioral Outcomes? A 9-Year Longitudinal Study Comparing Solitary and Social Users,” *Psychology of Addictive Behaviors*, Vol. 20, No. 4, 2006, pp. 363–372.

For policymakers, these two studies help clarify the picture of youthful marijuana use: Marijuana abstainers do well, solitary users do poorly, and kids who use marijuana only in social settings are in between.

Digging for Clues About Youthful Marijuana Use

To reexamine the provocative findings of Shedler and Block, the RAND researchers, led by Joan Tucker, a social psychologist, mined a wealth of data on youthful substance use accumulated since 1985 by the RAND Adolescent/Young Adult Panel Study. This database contains survey responses from thousands of individuals who answered questions about their use of harmful substances, about their social and emotional well-being and behavior, and about school. The survey was given in grades 7, 8, 9, 10, and 12, and again at ages 23 and 29. The database was used to evaluate the effectiveness of the Project ALERT drug use prevention program that RAND developed for middle-school students.

For their study, the researchers examined responses to the surveys given in 12th grade and at age 23. They divided the responders into abstainer and experimenter categories, which replicate as closely as possible those used in the 1990 Shedler and Block study:

Abstainers—those who had never tried marijuana or any other illicit drug.

Experimenters—those who had used marijuana less than 10 times in the year before being surveyed and less than three times in the preceding month, and none or only one other illicit drug in their lifetime.

A different picture emerges of youth and marijuana

From their analyses of survey responses, the RAND researchers pieced together a picture of marijuana abstainers and experimenters as teens and as young adults that contradicts that painted by earlier studies. Their key findings, some of which are shown in the figure, include

Youth who stayed away from marijuana through their senior year of high school functioned better overall than did seniors who experimented with the drug. Compared with experimenters, abstainers

- had more parental support
- devoted more time to homework
- spent more time in extracurricular school activities
- earned better grades
- got into less trouble
- were emotionally better off.

Both groups were similar in that

- on average, they rarely felt lonely
- they reported similar levels of peer support and ease in interacting with the opposite sex.

The one exception was that,

- although abstainers were socially active, they went to parties and dances significantly less frequently than did experimenters.

By the time they turned 23, those who had avoided marijuana in high school functioned better overall as young adults than those who had experimented with it in their youth. Compared with experimenters, abstainers

- were better educated
- were happier with their friends
- were less involved in deviant behavior (stealing and drug selling).

Both groups were similar in that

- they showed no differences in their satisfaction with family life and with general mental health, or with limitations due to emotional problems.

The emotional and social well-being of strict marijuana abstainers—those who had tried neither marijuana nor cigarettes and had not used alcohol in the past year—was also compared with that of experimenters, both in high school and as young adults:

- Even this more-stringent subgroup of marijuana abstainers did not show the adjustment problems suggested by earlier studies.

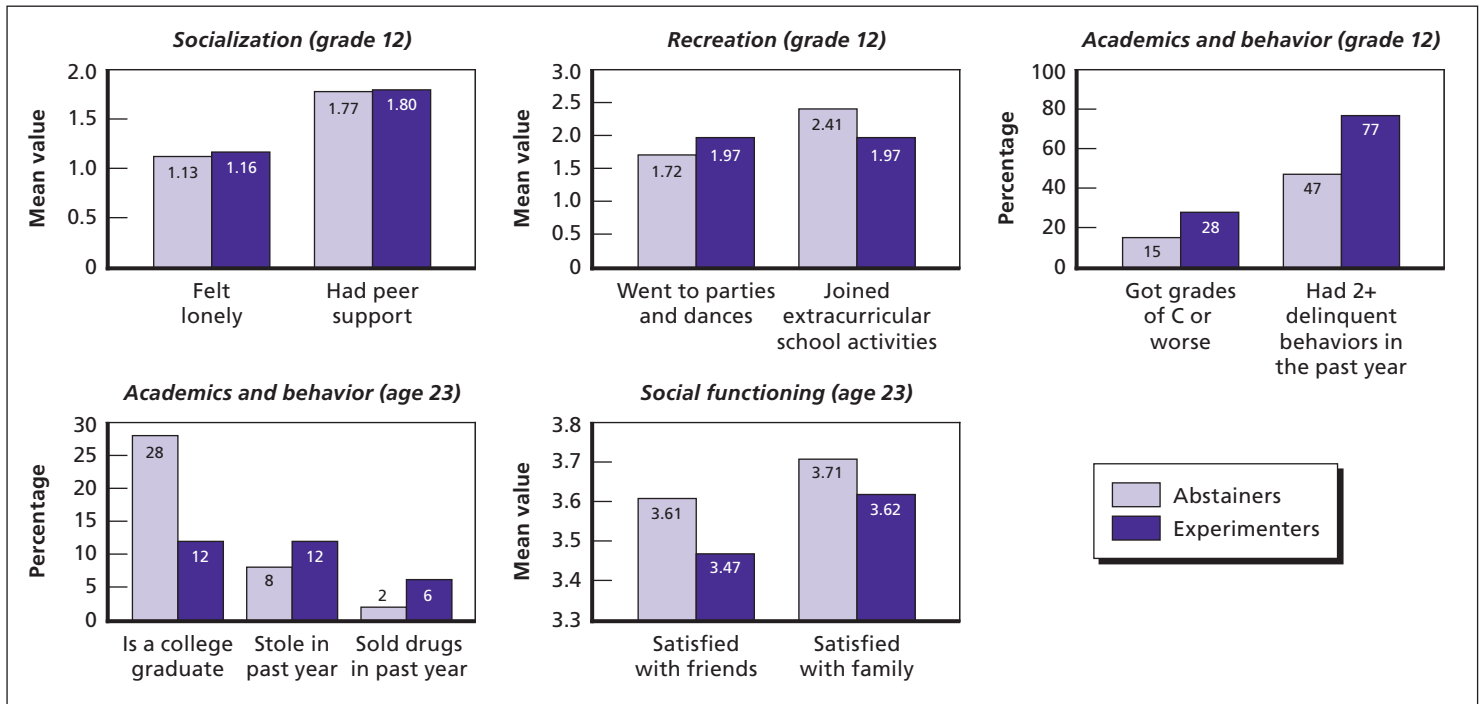
Why did two different pictures emerge?

The conflicting findings may be due to methodological factors. For example, the RAND team examined longitudinal data for more than 3,000 individuals who were originally recruited from 30 California and Oregon schools. These schools were chosen to represent a wide range of community types, socioeconomic status, and racial/ethnic composition. Thus, the RAND sample was considerably larger and more diverse than the 100 or so youth from the San Francisco Bay area whom Shedler and Block followed.

Young Solitary Substance Users: An Overlooked, At-Risk Group

Surprisingly little research looks at the sizable minority of teens who use marijuana and other harmful substances when alone rather than only in social settings. In a second study, researchers again used the RAND Adolescent/Young Adult Panel Study database for clues about the extent of solitary substance use, as well as about the well-being, behavior, and future risks, of this largely ignored group. For this study, these youth are referred to as “solitary users,” even though they may also use marijuana, cigarettes, or alcohol in social settings with others. This time, the researchers analyzed responses to the surveys given in 8th grade and at age 23. They found that:

Youth who stayed away from marijuana through their senior year of high school were not socially or emotionally maladjusted. Abstainers did better academically and engaged in fewer deviant behaviors than did experimenters as 12th graders and as young adults. Selected measures at grade 12 (top row) and at age 23 (bottom row) are graphed.



Although they constitute a small percentage, solitary users are an overlooked, at-risk group:

- In 8th grade, 4% of young people said they sometimes or often used marijuana alone rather than limiting its use to parties or other social occasions. This figure was 16% for cigarettes and 17% for alcohol.

By 8th grade, solitary substance users are worse off than classmates who use only in social settings. Compared with social-only users, solitary users

- engaged in heavier and more-frequent drug use
- got into more trouble (e.g., stealing, acting out at school)
- confided less in their parents about personal problems
- performed more poorly in school (had lower grades, spent less time on homework, participated less in extracurricular school activities).

Solitary users are not social outsiders. Contrary to what might be expected, these youth are not loners. They are socially active teens who spend more time hanging out with friends, going to parties, and dating than do youth who limit substance use to social settings. Popularity with peers may help compensate solitary users for their poorer academic track records and behavioral problems in the short term.

Solitary use foreshadows problems down the road. Compared with social-only substance users, teen solitary users faced more

difficulties as young adults: They made fewer educational strides, had poorer health, and experienced more substance-use problems.

Solitary users perceive drug consequences differently than do social-only users. Solitary users more strongly believed that turning to marijuana, cigarettes, or alcohol helped them get away from their problems, relax, and have more fun—an optimistic bias that could lead them to underestimate the potential for serious negative consequences.

Implications for Drug-Prevention Programs

New insight into youthful substance use emerged from the RAND studies that can help improve drug-prevention programs for adolescents and teens.

Experimentation with drugs has sometimes been viewed as developmentally appropriate and adaptive. In contrast, the RAND results indicate that youth who experiment with marijuana are worse off in many respects than those who abstain throughout their teenage years. This insight helps the drug-prevention community put into perspective the conflicting conclusions from prior studies about marijuana use and its consequences.

The research also documented the wide range of psychosocial and behavioral difficulties that lone substance users, as opposed to strictly social users, face as teens and young adults. These findings suggest that drug-prevention programs should pay closer attention to this at-risk group of young people. ■

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