

**Risk and Protective Factors for
Adolescent Drug Use:
Findings from the 1999
National Household Survey on Drug Abuse**

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Highlights

This report presents detailed information about risk and protective factors for substance use among youths aged 12 to 17, using data from the 1999 National Household Survey on Drug Abuse (NHSDA). Risk factors include those individual characteristics or social environments associated with an increased likelihood of substance use, while protective factors are related to decreased likelihood of substance use or of nonuse. These analyses update and expand upon a previous report on risk and protective factors for adolescent drug use based on the 1997 NHSDA.

The classification approach used in this report categorizes the set of risk and protective factors into one of four domains based on categories developed by the Social Development Research Group, School of Social Work, University of Washington, in Seattle: community, family, peer/individual, and school. The community domain includes such factors as community disorganization and crime and the availability of illicit drugs. The family domain includes such factors as parental attitudes toward youth substance use and parental communication with youths about the dangers of substance use. The peer/individual domain includes such factors as antisocial behavior and friends' use of licit and illicit drugs. The school domain includes such factors as sanctions against substance use at school and exposure to prevention messages in school. Most of these items were designed for and asked only of the 12 to 17 year olds in the sample and focused on current or past year perceptions or behavior. Findings in this report are grouped by prevention domain where possible.

Chapter 2: Distributions of Risk and Protective Factors for Substance Use

Community Domain

- An estimated 79 percent of youths reported that most neighborhood adults would strongly disapprove if they tried marijuana, 65 percent reported that neighborhood adults would strongly disapprove if they smoked cigarettes daily, and 70 percent reported that neighborhood adults would strongly disapprove if they drank alcohol daily.
- More than one out of four youths (29 percent) reported that they personally knew at least some adults who used marijuana. Nearly half of youths (45 percent) reported that they personally knew at least some adults who got drunk once a week or more.
- Approximately 57 percent of youths reported that marijuana would be fairly or very easy to obtain if they wanted some.

- Among youths, whites reported less community disorganization and crime, and more neighborhood cohesiveness, than other racial/ethnic groups.
- The perceived availability of marijuana was approximately equal among whites, blacks, and Hispanics, but marijuana was perceived to be less available among youths in the "other" category.¹

Family Domain

- Most youths reported that their parents sometimes or always made them do work/chores around the house (88 percent) and provided help with homework if needed (81 percent); only 39 percent of youths reported that their parents limited the amount of time they could watch television.
- Most youths reported that their parents would strongly disapprove if they tried marijuana once or twice (91 percent), had one or more drinks of alcohol every day (90 percent), or smoked one or two packs of cigarettes a day (87 percent).
- Approximately 57 percent of youths reported that they had spoken with at least one of their parents about the dangers of using tobacco, alcohol, or illicit drugs in the past 12 months.
- Among youths, whites (60 percent) and Hispanics (58 percent) were more likely to report parental communication about the dangers of substance use compared with blacks (47 percent) or youths in the "other" category (51 percent).

Peer/Individual Domain

- Among youths, 22 percent had gotten into a serious fight at school or work at least once in the past year, 17 percent had taken part in a group-on-group fight at least once in the past year, and 8 percent had attacked someone with the intent of seriously injuring him or her at least once in the past year.
- Nearly two out of three youths (64 percent) reported that they would strongly disapprove of same-aged youths trying marijuana once or twice.

¹ Non-Hispanic whites and non-Hispanic blacks are referred to as "whites" and "blacks" in this report. "Other" indicates those other than whites, blacks, and Hispanics (i.e., Asians, American Indians or Alaska Natives, and Native Hawaiians or other Pacific Islanders).

- Nearly two out of three youths reported that their friends would strongly disapprove if they were to try marijuana once or twice (63 percent), drink alcohol daily (60 percent), or smoke cigarettes daily (58 percent).
- Among youths, 42 percent reported that at least a few of their friends used marijuana, and 12 percent reported that most or all of their friends were marijuana users. Nearly 1 out of 5 youths (19 percent) reported that most or all of their friends used cigarettes, nearly 1 out of 4 youths (23 percent) reported that most or all of their friends used alcohol, and nearly 1 out of 10 youths (9 percent) reported that most or all of their friends got drunk at least once a week.
- Among youths, 57 percent reported that there would be great risks from using marijuana once or twice a week, and 37 percent reported there would be great risk from using marijuana once a month.
- Among youths, 80 percent somewhat or strongly agreed that their religious beliefs were a very important part of their life, 73 percent agreed that religious beliefs influenced how they made decisions in their life, and 37 percent agreed that it was important that their friends shared their religious beliefs.
- Compared with females, male youths reported less perceived risk from substance use, higher risk-taking proclivity, friends with more positive attitudes toward substance use, and a reduced likelihood of participation in two or more extracurricular events in the past year.
- Compared with youths aged 12 to 14, youths aged 15 to 17 reported notably higher positive attitudes toward substance use, higher positive attitudes toward substance use among their close friends, higher substance use among their friends, lower perceived risk of marijuana use, and less participation in extracurricular activities.

School Domain

- Most youths reported that they would be in a lot of trouble at school if they were caught using an illegal drug (95 percent), alcohol (86 percent), or cigarettes (63 percent).
- Nearly one out of four youths (23 percent) reported that most or all of the students in their grade at school used marijuana.
- Approximately 77 percent of youths reported that they had been exposed to at least one type of prevention message in school.
- White youths reported lower commitment to school compared with other racial/ethnic groups.

- Among youths, whites and youths in the "other" category were less likely to have received grades of "C" or below in the past semester compared with blacks or Hispanics. In addition, males were more likely than females to have received grades of "C" or below.

Chapter 3: Associations Between Risk and Protective Factors and Past Year Marijuana Use

There were strong associations between most of the risk and protective factors and past year marijuana use. Even after adjusting for differences due to gender, race/ethnicity, household income, number of parents in the household, county size, and geographic region, most of the risk and protective factors still displayed the expected association with past year marijuana use.

Community Domain

- Youths who reported that adults in their neighborhood would strongly disapprove if they were to try marijuana once or twice were less likely to have used marijuana in the past year (11 percent) compared with youths who responded that neighborhood adults would either somewhat disapprove or neither approve nor disapprove (28 percent) of that behavior.
- Youths who reported that most or all of the adults they personally knew used marijuana were more likely to have used marijuana in the past year (46 percent) compared with youths who knew few adult marijuana users (33 percent) or no adult marijuana users (6 percent).
- Youths who reported that marijuana would be fairly easy or very easy to obtain were more likely to have used marijuana in the past year (30 percent) compared with youths who reported that marijuana would be fairly difficult, very difficult, or impossible to obtain (24 percent).
- Youths who had been exposed to prevention messages in the media were less likely to have used marijuana in the past year (13 percent) compared with youths who had not been exposed to these types of messages (18 percent).

Family Domain

- Youths were 4 times more likely to have used marijuana in the past year if they believed their parents would only somewhat disapprove or neither approve nor disapprove if they used marijuana (42 percent) compared with

youths who believed their parents would strongly disapprove of their marijuana use (11 percent).

- Youths who selected one of their parents as the person they would talk with if they had a serious problem were less likely to have smoked marijuana in the past year (11 percent) compared with youths who selected someone other than their parents (23 percent).

Peer/Individual Domain

- Youths who reported that they would somewhat disapprove or neither approve nor disapprove of marijuana use by someone their age were 8 times more likely to have used marijuana in the past year (32 percent) compared with youths who reported that they would strongly disapprove of youth marijuana use (4 percent). Similarly, youths who reported that their friends would somewhat disapprove or neither approve nor disapprove of a youth using marijuana were 8 times more likely to have used marijuana in the past year (32 percent) compared with youths who reported that their friends would strongly disapprove of a youth using marijuana (4 percent).
- Youths who reported that most or all of their friends used marijuana were 3 times more likely to have used marijuana in the past year (59 percent) compared with youths who reported that few of their friends used marijuana (20 percent), and they were 30 times more likely to have used marijuana in the past year compared with youths who reported that none of their friends used marijuana (2 percent).
- Youths who reported low religiosity were more than 4 times more likely to have used marijuana in the past year (23 percent) compared with youths who reported high religiosity (5 percent).

School Domain

- Youths who reported that most or all of the students in their grade at school used marijuana were 3 times more likely to be past year marijuana users (41 percent) compared with youths who reported that few of the students in their grade at school used marijuana (12 percent), and they were 20 times more likely to have used marijuana in the past year compared with youths who reported that none of the students in their grade at school used marijuana (2 percent).
- Youths who reported high commitment to school were less likely to have used marijuana in the past year (9 percent) compared with youths who reported low commitment to school (24 percent).

Associations with Marijuana Use, by Race/Ethnicity and Gender

Even though the risk and protective factors displayed the expected associations with past year marijuana use after adjusting for differences in age, race/ethnicity, and gender, the strength of the associations between some of the risk and protective factors and past year marijuana use varied by these characteristics.

- Exposure to prevention messages in the media was significantly associated with lower odds of past year marijuana use for whites and Hispanics, but not for blacks or youths in the "other" category.
- Higher levels of parental communication about substance use were significantly associated with lower odds of past year marijuana use among Hispanic youths, but not among youths of other racial/ethnic groups.
- Within the school domain, strong sanctions against illegal drug use were significantly associated with lower odds of past year youth marijuana use among whites, Hispanics, and youths in the "other" category, but not for blacks.
- Exposure to prevention messages in school was associated with lower odds of past year marijuana use for whites and Hispanics, but not for blacks or youths in the "other" category.
- The associations between the risk and protective factors and past year marijuana use were similar for males and females for all of the factors.

Chapter 4: Prediction of Past Year Substance Use Using Multiple Regression Models

The associations presented in this chapter were determined using multiple regression models that adjusted for demographic variables as well as for other risk and protective factors. In addition, this chapter addresses the usefulness of hierarchical modeling techniques in explaining variation in past year marijuana use.

- After controlling for demographic and other risk and protective factors, the peer/individual domain had the most factors significantly associated with past year marijuana use. The factors with the strongest associations with marijuana use were antisocial behavior, having friends who used marijuana, perception of risks from marijuana use, and individual attitudes toward marijuana use.
- Relatively speaking, risk and protective factors were better predictors of substance use than were demographic variables, such as gender and

race/ethnicity. For example, demographic factors accounted for only 15 percent of the variation in past year marijuana use by themselves, while peer/individual domain factors accounted for 51 percent of the variation by themselves. The combination of the demographic factors with the peer/individual risk factors explained a total of 53 percent of the variation in past year marijuana use.

- The risk and protective factors studied across all four domains explained a significant amount of the total variation in individual substance use. For example, together with demographic factors, they explained 56 percent of the variation in past year marijuana use.
- The risk and protective factors and demographic variables included in this survey accounted for more of the variation in past year use of marijuana (56 percent) than for past year use of alcohol (46 percent) or cigarettes (43 percent).
- Hierarchical models indicated that most of the total variation in the past year use of marijuana among youths aged 12 to 17 occurred at the person level (78 percent), while another 16 percent was present at the family level and 6 percent at the neighborhood level.

Chapter 5: Change in Risk and Protective Factors Between 1997 and 1999

- Among the 11 items relevant to risk and protective factors that were comparable between the 1997 NHSDA and the 1999 NHSDA, 4 items showed small but statistically significant differences in distributions between the 2 years.² Once the response options for these risk and protective factors were dichotomized so that the direction of the change between 1997 and 1999 could be easily determined, none of these factors showed significant differences in distributions between the 2 years.
- When looking at each factor separately, there was little overall change between 1997 and 1999 in the associations between the risk and protective factors and past year marijuana use. One exception was that the association between past year marijuana use and being approached by a drug seller in the past month was less strong in 1999 than in 1997.

² Comparisons between the 1997 and the 1999 NHSDAs were limited to factors included in both years of the survey that were measured using identical questions. The 1999 NHSDA paper-and-pencil interviewing (PAPI) data, adjusted for field interview experience, were used for comparisons with data from the 1997 NHSDA. For more information, see Chapter 5 of this report.

- When looking at each domain separately, the peer/individual domain explained the most variation in past year marijuana use in both 1997 (55 percent) and 1999 (53 percent).³ The community domain explained more variation in 1997 (44 percent) than in 1999 (34 percent), as did the family domain (34 percent in 1997 vs. 25 percent in 1999). The expanded school domain in 1999 explained more variation than in 1997 (32 vs. 18 percent). Despite these differences between the 2 years, the relative ranking of the domains as measured by their explanatory power was similar in 1997 and 1999. The peer/individual domain explained the most variance, followed by the community domain. The family domain accounted for more variance than the school domain in 1997, but this order was reversed in 1999.
- Given the decrease in youth prevalence rates for marijuana between 1997 and 1999, the analysis suggests that most of this decrease between these 2 years was due to different levels of association between risk and protective factors and marijuana use in 1999 than in 1997. In particular, most of the change was the result of weaker associations of risk factors, and stronger associations of protective factors, with marijuana use. The distributions (or prevalence levels) of the risk and protective factors remained fairly constant over the period.

³ Because the analyses are based on separate logistic regression models for each domain, summing the explained variation for each domain would add to more than 100 percent.