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ABSTRACT

The Minnesota Student Survey was first administered in 1989 to students in grades 6, 9, and 12, when approximately 90,000 students completed the survey. The survey was administered to approximately 131,000 students in 1992. A comparison of the two administrations revealed that the adolescent student population had changed little between 1989 and 1992 as reflected by the demographics and family structure reported by students. Alcohol use appeared to have declined between 1989 and 1992 for all students regardless of age. The greatest change was seen in the increase in students who reported that they had never used alcohol. Marijuana and cocaine use also appeared to decline during the 3-year interval. Tobacco use, in contrast, showed little change between 1989 and 1992. Decreases in alcohol and drug use appeared to hold for both infrequent and frequent use. Fewer adolescents reported initiating alcohol or drug use at young ages, fewer students reported drinking to intoxication, and fewer students reported drinking and driving or riding with drinking friends. Acceptance of drinking and drug use seemed to be waning among adolescents. Antisocial behaviors (vandalism, physical fighting, shoplifting) were unchanged over the 3-year period, as were rates of family violence. Serious emotional distress and low self-esteem showed slight increases, as did sexual abuse. Suicide attempts showed slight decline among younger students between 1989 and 1992. (Other findings are reported in both text and graph form; recommendations are included.) (NB)

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MINNESOTA
STUDENT
SURVEY
1989 * 1992

Reflections of Social Change



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**Minnesota Student Survey
1989 · 1992**

Reflections of Social Change

Minnesota Department of Education

**Prevention and Risk Reduction Unit
550 Cedar Street
St. Paul, MN 55101**

September 1992

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Adolescent risk behaviors have declined in past 3 years

Young people are responding to the challenges presented to them. Fewer are involved in alcohol and other drug use than three years ago. Fewer now take chances with unsafe sexual behavior. Evidence from the Minnesota Student Survey involving adolescents in grades 6, 9, and 12 shows sometimes remarkable changes for a relatively brief period--from 1989 to 1992.

Alcohol and other drug use among preteens and teenagers has dropped off substantially in the past three years. The average age

of first use is higher now than in 1989. Fewer adolescents have initiated alcohol use. Among those who drink, fewer drink frequently, fewer drink to intoxication, and fewer drive after drinking or ride with drinking friends. The use of marijuana, cocaine, and all other drugs combined shows similar declines. Unfortunately, the number of daily tobacco users has remained the same.

Reductions in substance use are so pervasive that not a single school district examined for this report showed a statistically significant increase in use for the previous year.

A change in attitudes is associated with reduced use. In 1992 students who have not used alcohol or other drugs are giving more reasons for their decision. They are also showing less acceptance of teenage drinking. Fewer now think it's okay to drink so long as they don't get drunk or don't drive. In addition, fewer think that adults are exaggerating the dangers of teenage drinking and drug use.

Even though fewer students use alcohol or other drugs, and fewer use frequently, the same proportion now report serious problems with their use as in 1989. One in six high school seniors (16%), 7%

of 9th graders and 1% of 6th graders acknowledged at least three consequences of use. This evidence suggests that the students at highest risk for substance use problems may be the most difficult to deter and require targeted efforts.

What was evident in 1989 still holds true in 1992. Adolescents with serious family problems and those who have been abused are much more likely than others their age to be using alcohol and other drugs. Students with these experiences do show declines in use, but the declines are typically only about half as great as those seen among students without such serious problems.

Declines in alcohol and other drug use cannot be attributed to an overall reduction in antisocial behaviors among young people. The frequency of antisocial behaviors measured in the survey (vandalism, fighting, and shoplifting) has changed very little from three years ago with a single exception. Physical fighting among the youngest group of students is down.

Parents, schools and communities have marshalled their resources to combat alcohol and other drug use among youth. The changes seen are encouraging. The survey shows, however, that a reduction in substance use does not necessarily alleviate other problems that challenge young people. The number of students who report serious emotional problems, low self-esteem, and alienation from their families and other people has increased slightly in the same period that substance use went down.

Certain family situations outside the control of adolescents undoubtedly contribute to their feelings of sadness, inadequacy, and isolation. Unfortunately, these situations are virtually

"Alcohol and other drug use has dropped off substantially"

"Students at highest risk for substance use problems may be most difficult to deter"

unchanged since the first Minnesota Student Survey was conducted in 1989.

One in five students surveyed report a family alcohol or drug problem. One in eight have been physically abused by an adult in their household. One in seven have seen another family member physically abused. And by age 15 one in 6 females and one in 25 males have been sexually abused. Combining these experiences means that over one third of adolescents have had to deal with the traumatic effects of sexual or physical abuse, family violence, or alcohol/drug problems in the family.

Recent suicide attempts have declined, particularly among 9th graders. Lifetime suicide attempt rates do not vary much by grade for males (about 8%). For females, however, the rates increase; 6% of females in 6th grade, 17% in 9th grade, and 18% in 12th grade report a suicide attempt. In part, this difference reflects higher rates of sexual abuse victimization among young women. Sexual abuse is strongly correlated with suicide attempts for both females and males.

The survey reveals some other interesting changes. Fewer young women believe they are overweight than three years ago. More importantly, there has been a marked reduction in unhealthy weight control behaviors among young women. Unfortunately, there is no corresponding reduction in preoccupation with weight. In 6th grade twice as many females as males indicate that weight is a major concern; for older students, the rate is three times higher for females.

Students' survey answers clearly reflect changes in the world around them. Their fears of nuclear war have lessened. More than twice as many are now concerned about racial discrimination than three years ago. And more worry about getting a job when they're out of school.

Rates of sexual activity are virtually unchanged. Thirty percent of 9th graders and 61% of 12th graders have had sexual intercourse. However, many more report taking precautions against pregnancy and sexually transmitted diseases. More young people are using condoms and contraception, and more are talking with a partner about the risk of HIV/AIDS before having sex.

"Young people are responding to society's challenge to change."

What can account for the changes seen in the Minnesota Student Survey? Prevention efforts seem to be paying off. Increased parental involvement is clearly a factor. More students now than three years ago cite their parents as a major source of information about alcohol and other drugs, sex, and HIV/AIDS. As in 1989, students who get information from either parents or school are less likely than others to be involved with alcohol or other drugs. Students who get information from both sources are at lowest risk.

Information from authoritative sources is also associated with a lower likelihood of sexual activity. Students who cite parents as a primary source of sex education are less likely to be sexually active than students who don't. Those who cite school as a primary source of information have even lower rates of sexual activity.

Young people are responding positively to society's challenge to change. Parents, schools, communities, and young people themselves should feel gratified by the results of their efforts to promote healthy and responsible behavior and encouraged to continue those efforts. At the same time, more must be done to alleviate the abusive and distressing family and environmental situations that put too many young people at risk for serious emotional and behavioral problems.

Important facts about the Student Survey

Goals

The Minnesota Student Survey was developed with several goals in mind:

- To get a more accurate picture of students' perspectives
- To ascertain the level of a variety of problems that confront students
- To assist educators, parents, and communities with responding to young people's needs
- To monitor the effectiveness of prevention efforts
- To establish a standardized mechanism for evaluating students' concerns and problem behaviors across communities and over time.

History and process

The Minnesota Student Survey was first administered in 1989 to students in grades 6, 9, and 12, with a repeat of the survey planned for every three years. For school districts, the incentives to participate are persuasive. The survey allows the districts to meet requirements for evaluating their prevention efforts. Each district receives a detailed report of results for their students. Since the Department of Education provides survey design, printing, data analysis, and production of reports, individual districts are saved all these expenses. In addition, each district can make comparisons with county and statewide results in order to better understand the needs of their students and the success of their efforts.

Participation of school districts is voluntary, and so is that of students. Parents are informed about the survey and can choose not to have their children participate. Students themselves can opt out, or if they take the survey, they can skip any question or stop at any point. Surveys are anonymous.

Participation rates

The 1989 survey was a huge success, providing accurate baseline information about many areas of adolescents' lives. Not surprisingly, more districts chose to participate in 1992. About 90,000 students in the target grades took the 1989 survey, and 131,000 the 1992 survey. The first year 390 of 433 districts participated in time for the report; in 1992 all but one participated.

Comparing 1992 with 1989

Although the increased participation is gratifying, the difference poses a challenge for comparing 1992 results with 1989 results. Accurate and meaningful results were achieved by limiting the comparison to those districts which participated in both years and by weighting district samples proportional to their actual enrollments. Details of this process and a discussion of the validity of adolescent surveys are included at the end of this report (see page 46).



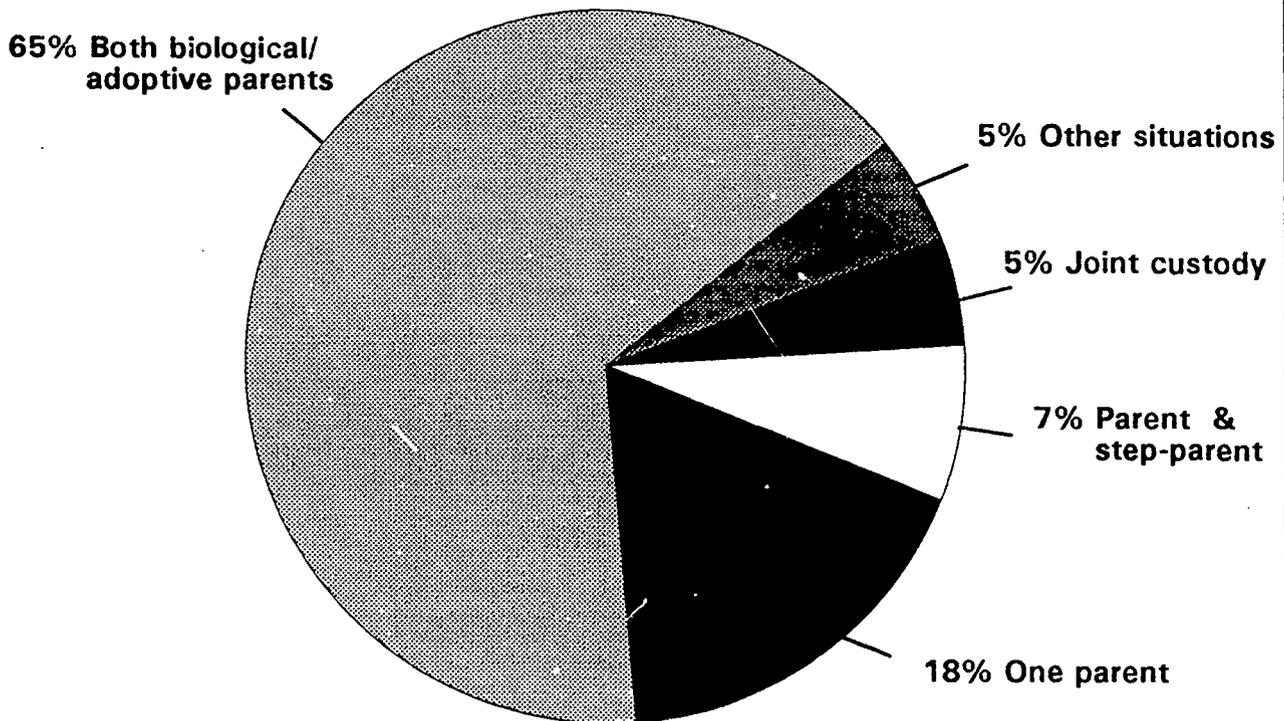
Student populations are remarkably similar in 1989 and 1992

Family structure

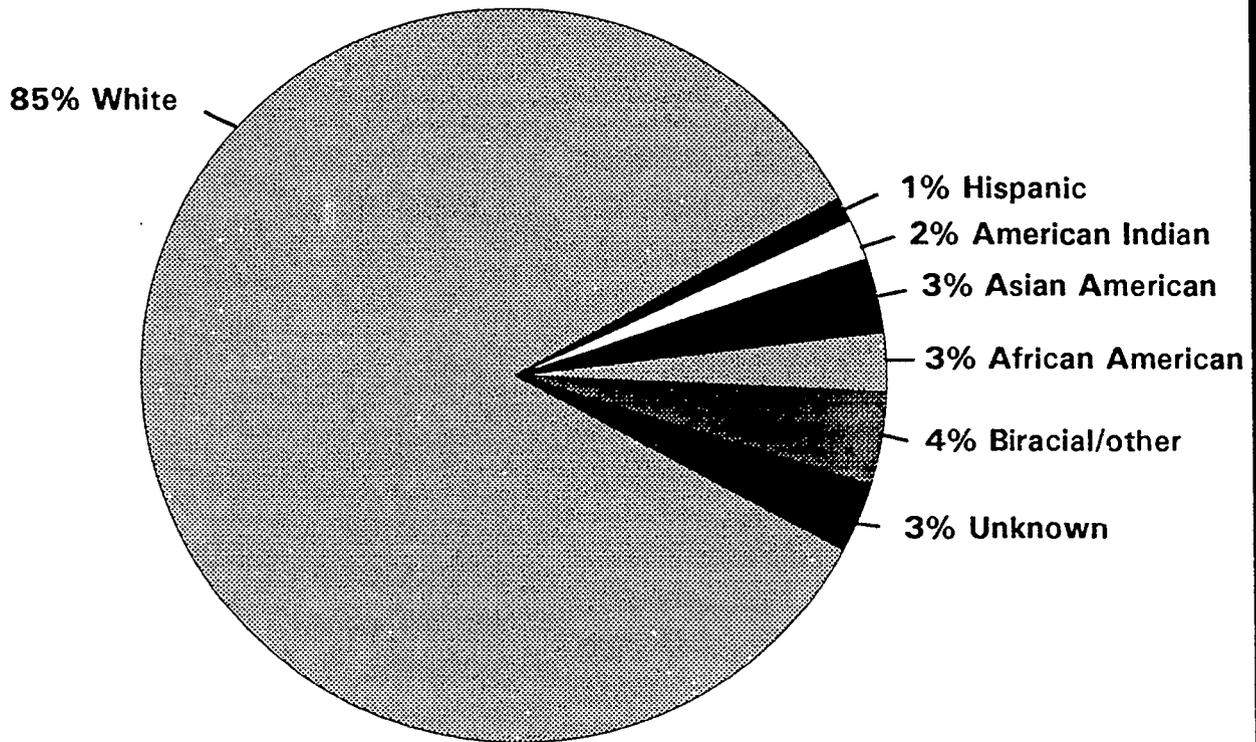
The Minnesota adolescent student population has changed little between 1989 and 1992 as reflected by the demographics and family structure reported by students in grades 6, 9, and 12. Two out of three students live with both parents (biological or adoptive). An additional 7% live with a parent and a step-parent. The proportion

living in single-parent households is also stable at 18%. The comparability of these figures for the two survey years means that family structure is unlikely to account for any changes seen in student behaviors in 1992 compared with three years earlier.

**FAMILY STRUCTURE
1989 and 1992**



RACE/ETHNICITY 1992



1989 sample includes 86% white, 2% African American, 1% American Indian and the same percentages of other categories.

Race/ethnicity

The 1992 survey sample reflects a small increase in the numbers of students of color. Not identifying a specific race is much more common for 6th graders (13%) than older students (5% of 9th graders and 2% of 12th graders). The decrease in "unknown" probably reflects increased identity awareness among older students. It is not clear, however, whether the decrease in "other or mixed race" reflects a greater tendency toward a single cultural identification as students get older, a higher dropout rate among students of biracial or multiracial heritage, or a combination of these or other factors.

Students' favorite activities

In many respects, very little has changed about the major interests and sources of pleasure for adolescents. Most still find the greatest pleasure in the time they spend with friends. Doing well in school is cited second most often as a source of satisfaction. Other favorite activities include making money, spending money, and doing things outdoors. Roughly two out of three students also get pleasure from doing a good job of something they undertake, sports, music, and their families. There are signs of increased altruism among students in 1992, especially older ones. More say they derive pleasure out of taking care of other people and involving themselves in volunteer work. There are other positive signs as well: more students say they like school and fewer are skipping classes. More are also interested in creative activities.

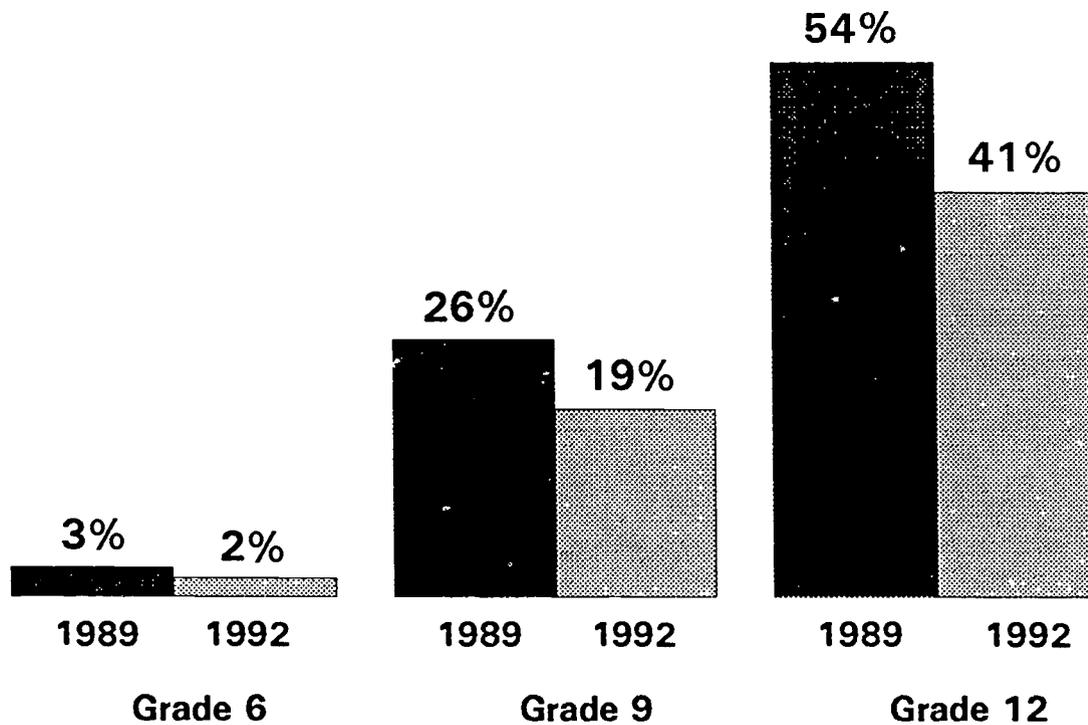
Alcohol use declines among students

Alcohol use at all levels is down among students regardless of age. The greatest change is seen in the increase in students who report that they have never used alcohol. There is no increase in the number who quit using.

The declines are quite dramatic for a three-year period. Proportionately, there is a 25% decline in

the number of 6th graders using alcohol in the previous 12 months in 1992 compared with 1989. In 9th grade, the decline represents 19% fewer current users, and in 12th grade 13%. The drop in regular use is even more dramatic and more encouraging: 30% fewer 6th graders, 26% fewer 9th graders and 23% fewer 12th graders drink as often as once a month.

ALCOHOL USE AT LEAST ONCE A MONTH IN PREVIOUS YEAR



Use of drugs other than alcohol has declined across all three grades surveyed. (Tobacco use is considered separately on page 15.) Marijuana is by far the most commonly used drug besides alcohol, and marijuana use is down for all three grades. Cocaine use, while involving a much smaller proportion of students, is also down across grades. It is the decline in these two substances that accounts for the overall drop in drug use shown for the past year. Other drugs reflect variable patterns and require more detailed explanation.

12th grade

Among 12th graders, marijuana is the most commonly used drug besides alcohol. Use in the past year has dropped from 19% to 14% and monthly use has dropped from 10% to 7%. The use of amphetamines or speed is next most common; the decline for past year use for this group of drugs is very small--from 6.0% to 5.8%. Cocaine, though used by fewer students, showed a much greater decline--from 2.9% to 1.3%.

Small increases were seen for two drug classes among high school seniors. Use of other people's prescription drugs went up from 2.7% to 3.1% and use of downers went up from 1.4% to 1.8%. This latter increase may result from a change in questions, however. The 1989 survey asked one question about "sedatives or downers" while the 1992 survey asked two questions: one about "tranquilizers" and the other about "sedatives, downers, or barbiturates." It's quite likely that the increase is attributable to the more inclusive description of drugs in this class contained in the 1992 survey.

9th grade

As with older students, marijuana is the most commonly used drug besides alcohol. Marijuana use in the past year dropped from 10% to 7% and monthly use dropped from 6% to 4%. Past year use of amphetamines or speed dropped from 5.4% to 5.1% and cocaine use from 1.5% to 1.2%. As with 12th graders, use of prescription drugs and downers showed slight increases. Use of other people's prescription drugs went up from 3.8% to 4.0% and use of downers from 2.0% to 2.4%.

6th grade

In 6th grade the use of other people's prescription drugs is more common than use of marijuana or other drugs. For this age group, prescription drug use in the past year dropped from 2.4% to 1.7%. Marijuana use in the past year dropped from 0.9% to 0.7% but monthly use stayed the same at 0.5%. Stimulant use for the past year went up from 0.5% to 1.1%; the use of downers was stable at 0.4%; and the use of cocaine dropped from 0.5% to 0.3%.

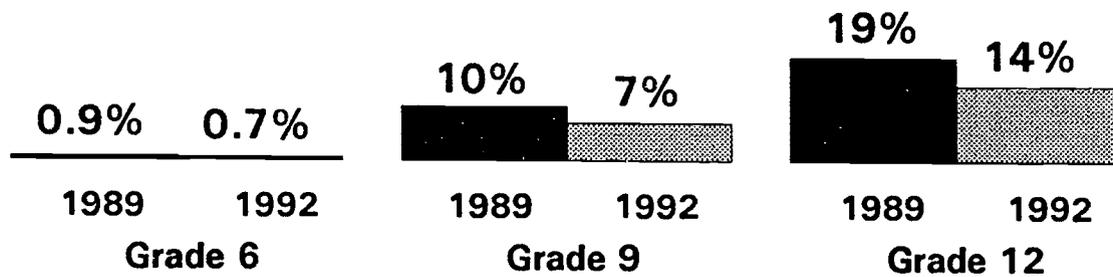
Interpreting these patterns

Drug use prevention efforts, especially media campaigns, focus their attention on cocaine and other illegal drugs. Whether the declines seen can be attributed specifically to prevention efforts or to a combination of factors cannot be determined. Nonetheless, the decreases in use of these drugs are significant.

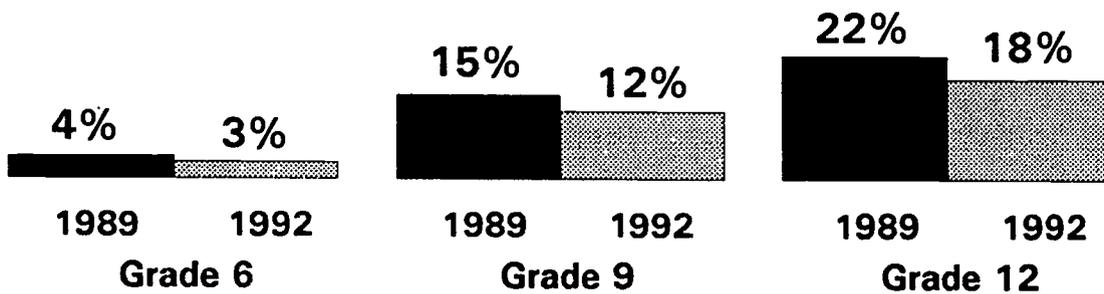
The use of drugs that are available by prescription do not receive much attention. Students in both 9th and 12th grades report an increase in the use of other people's prescription drugs and in the use of tranquilizers and sedatives. There is overlap among the students reporting the use of these drugs, suggesting that many students reporting use of downers are taking tranquilizers and sedatives prescribed for someone else rather than obtaining pills off the streets. The number of students involved with these drugs is small (between 3% and 4%), but greatly exceeds the number who use cocaine. Since all drug use poses dangers, education and other prevention efforts cannot ignore this problem.

A word about inhalants: "Sniffing" paint, glue, and a variety of other solvents is also a problem among some young people. In the 1989 survey 2% of 6th graders, 4% of 9th graders, and 2% of 12th graders reported inhalant use in the past year. In the 1992 survey, the question was much more explicit and response choices were changed, rendering comparisons inexact. Inhalant use, however, remains relatively rare and infrequent.

ANY MARIJUANA USE DURING THE PAST YEAR



MARIJUANA AND OTHER DRUG USE DURING THE PAST YEAR (ALCOHOL EXCLUDED)



Decreases in alcohol/drug use hold for infrequent and frequent use

One question that worries everyone concerned with alcohol and other drug use among adolescents is whether declines in use will affect only those young people least likely to get heavily involved in the first place. The repeat of the Minnesota Student Survey allows this concern to be addressed.

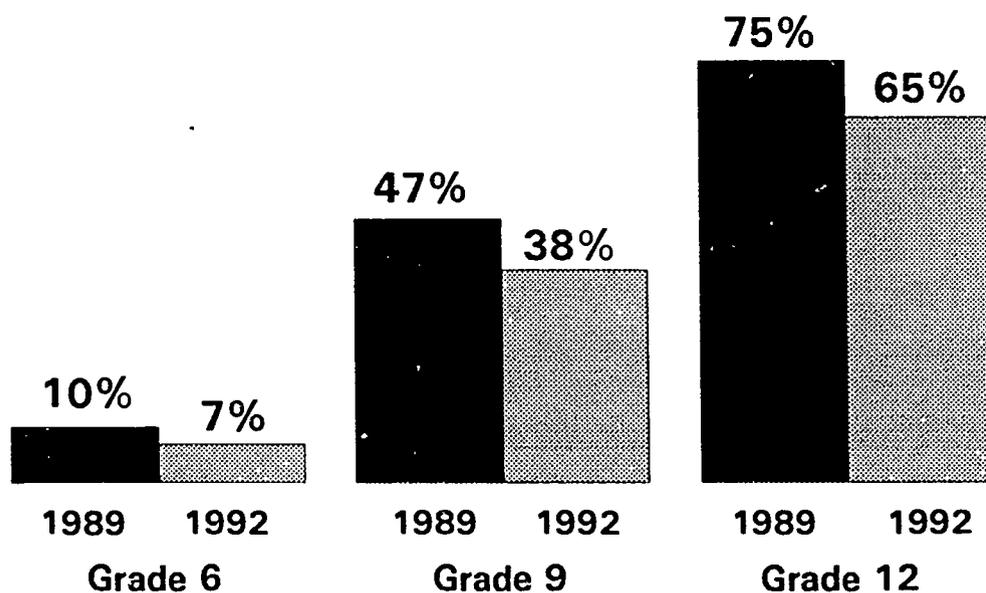
The number of alcohol and other drug users is down from three years ago no matter which frequency of use is examined. The number who have used anything at all in the year before the survey is down consistently across grades. So is the number who report use at least once a month, at least once a week, or every day. In fact, the numbers who use at monthly or weekly intervals

show a greater proportional decline than the number who used in the past year. Daily use, however, shows the smallest proportional decline: from 1.1% to 0.7% for 6th graders, 2.5% to 2.2% for 9th graders, and 4.1% to 3.3% for 12th graders.

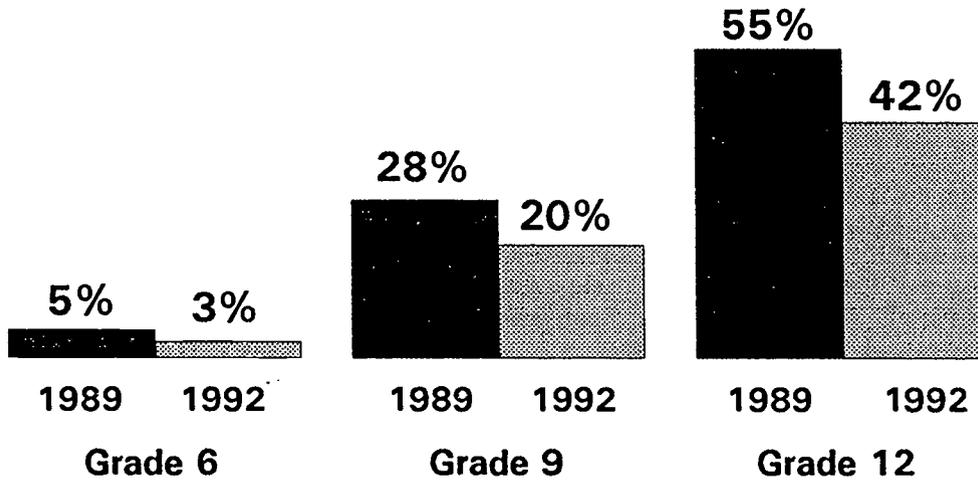
The declines seen in the number of users in 1992 represent fewer students initiating use rather than more students stopping use.

For many school districts (especially small ones) differences between use rates for 1992 and 1989 are not statistically significant. The majority of districts show a decrease in use. For no district is there a statistically significant increase in use.

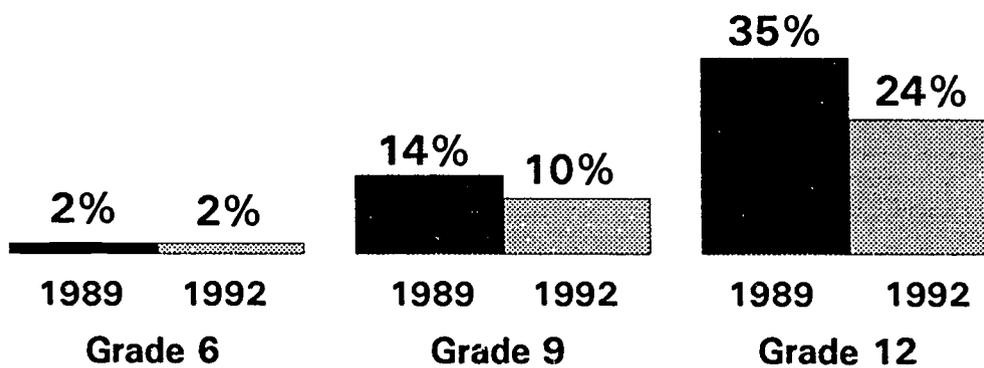
ALCOHOL/OTHER DRUG USE IN PAST YEAR



MONTHLY ALCOHOL/OTHER DRUG USE



WEEKLY ALCOHOL/OTHER DRUG USE



Fewer adolescents initiating alcohol or other drug use at young ages

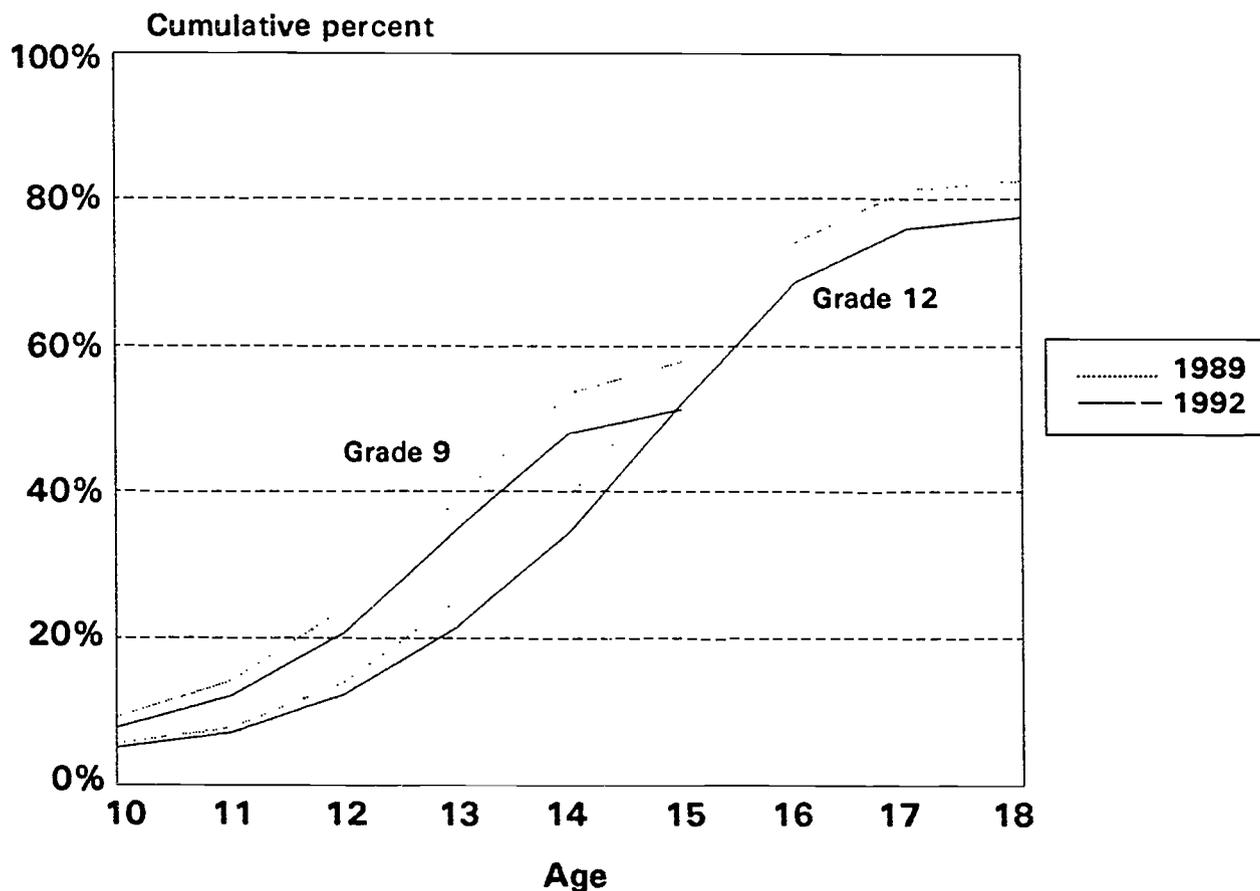
A crucial aspect of the overall decline in alcohol and other drug use among Minnesota's young people is its relationship to age of first use. All the dangers of alcohol and other drug use are of heightened concern with respect to young users because of the possibility of magnified effects on developing minds and bodies.

The 1992 Minnesota Student Survey reveals that fewer students are initiating alcohol or other drug use at young ages. For example, 15% fewer 1992

9th graders had used alcohol or other drugs by age 12 than their counterparts three years earlier. Among 6th graders, most of whom are 11 or 12 years old, 19% fewer reported a history of use in 1992 compared with 1989.

A higher proportion of early onset users is seen in 9th grade compared with 12th grade. Early use is a significant predictor of dropping out of school so fewer early onset users remain in school through their senior year.

AGE OF FIRST USE ALCOHOL OR OTHER DRUGS

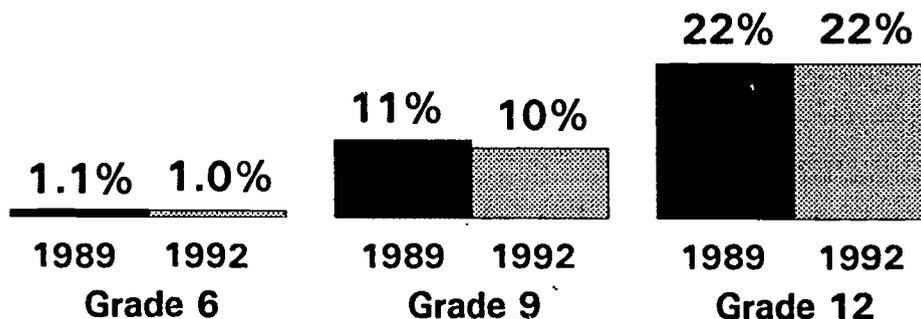


Unlike alcohol and other drug use, current tobacco use shows little change

The trends for tobacco use are not so encouraging as those for alcohol and other drug use. The rates of daily tobacco use are virtually unchanged for all three grades. More than one out of five high school seniors uses tobacco daily.

There is slight cause for optimism, however. The rates for lifetime use and use in the past year show slight declines for 6th and 9th grades. It is too soon to predict whether these decreases will translate into fewer regular tobacco users in the future.

DAILY TOBACCO USE



For some students alcohol/drug use still a serious problem

No decline in number experiencing serious consequences

Despite all the positive changes associated with adolescent alcohol and other drug use, there is still cause for concern. The numbers of young people using are still too high and many are experiencing the harmful consequences of their use. In fact, even though the numbers of users are down in all three grades, the proportions who report three or more serious consequences in each grade are unchanged. This means that among users, the *proportion* getting into obvious trouble is actually on the rise.

Students were asked specifically about six potential consequences of use: increased tolerance to use (using more without feeling the effects), forgetting what they had done while using, becoming violent because of use, being injured while under the influence, missing work or school due to use, and wanting to stop using but being unable to stop.

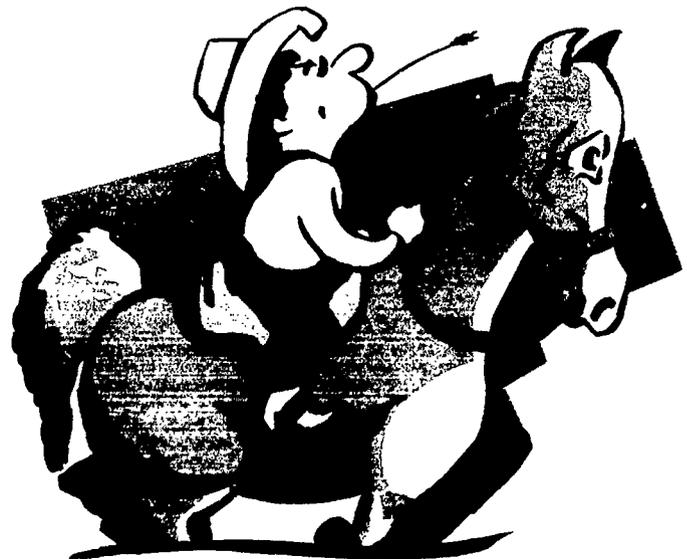
Injection drug use is of extreme concern because it is a primary means of transmission of HIV, the virus that causes AIDS. The number of students who say they have injected drugs is very small (about 1%). However, there is a very slight increase in this rate, particularly among those who say they have shared needles with other drug users.

Much smaller declines in use seen for higher-risk adolescents

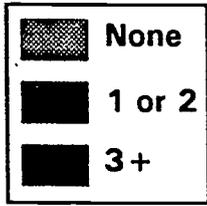
By far, the highest rates of alcohol and other drug use are seen among students who frequently engage in antisocial behaviors. Those who report feeling alienated from their families have the next highest elevations of use. Adolescents with a history of suicide attempt, sexual or physical abuse, depression, anxiety, low self-esteem, or family alcohol/drug problems all show significant elevations in use compared with adolescents without these problems.

Although declines in regular alcohol and drug use are seen consistently across all groups of students, the declines are much smaller among these "higher-risk" adolescents than among those without similar problems or experiences. In fact, the declines are typically less than half as great as those for other students. The smallest declines are seen among adolescents who feel alienated from their families, who have been sexually abused, or who frequently engage in antisocial behaviors. Among younger students (6th graders), no decline in alcohol/drug use is seen for students who feel alienated from their families or for those who have been sexually abused.

(For more about the overall rates of family problems and emotional or behavior problems see pages 24 to 35.)



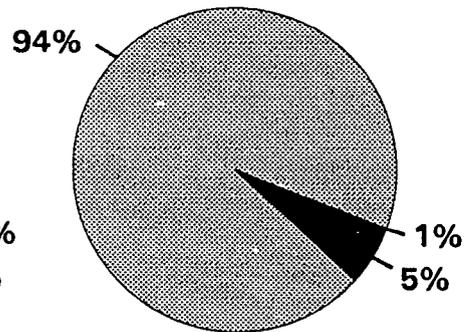
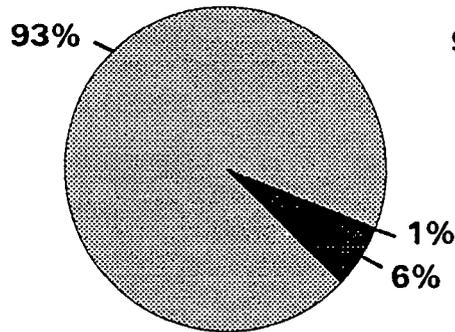
CONSEQUENCES OF USE



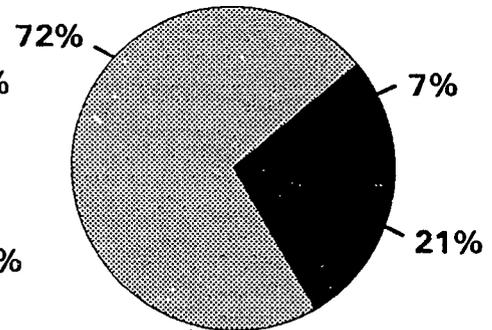
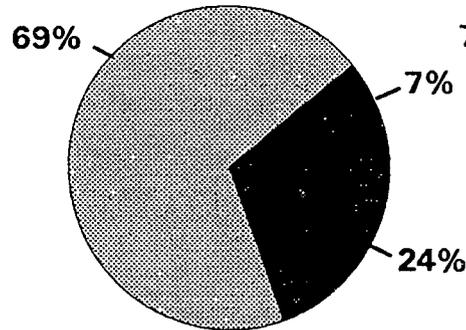
1989

1992

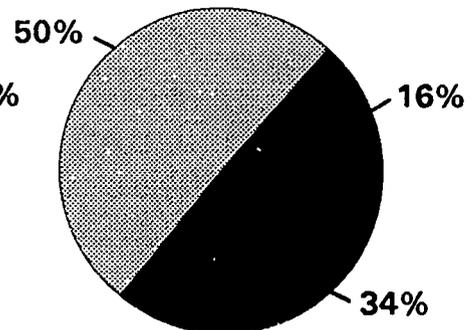
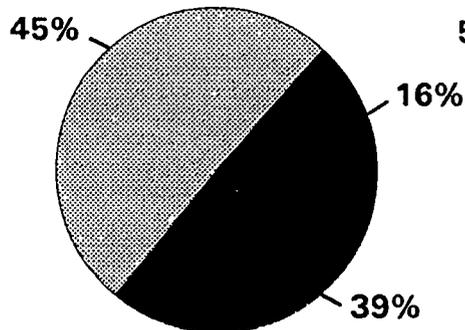
6th Grade



9th Grade



12th Grade



Fewer students are drinking to intoxication

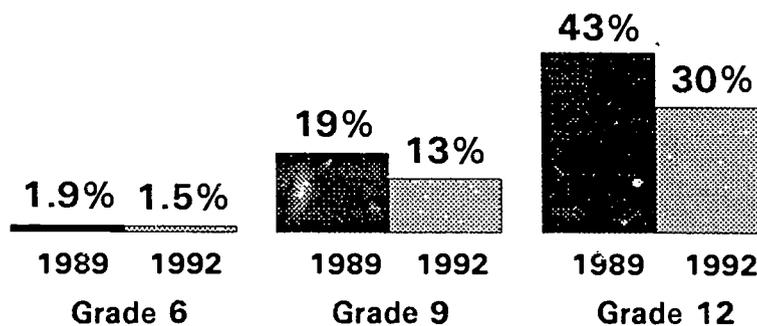
One of the most dangerous patterns of adolescent drinking is the tendency to drink to intoxication. The declines in regular intoxication are even more substantial than the declines in regular drinking. In fact, among high school seniors, the decrease seen here represents a proportional drop of 30% in the number reporting regular intoxication compared with 1989.

This finding is particularly encouraging. It means that not only are fewer students drinking, but

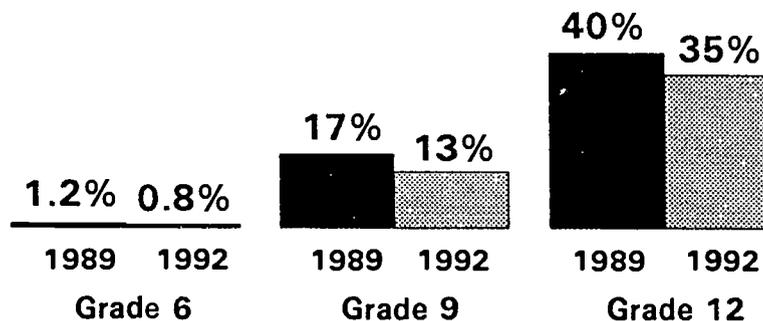
among those who are, fewer are exhibiting extreme drinking behaviors.

At first glance it appears that high quantity use has not declined as much as reports of intoxication. In 1992 35% of seniors say they typically drink as many as 5 drinks when they drink while only 30% report monthly intoxication. High-quantity use has also dropped in frequency, however, with only two thirds of those who say they typically have at least 5 drinks drinking as often as once a month.

ALCOHOL INTOXICATION AT LEAST ONCE A MONTH



HAS 5 OR MORE DRINKS ON TYPICAL OCCASION



Fewer teens drinking and driving or riding with drinking friends

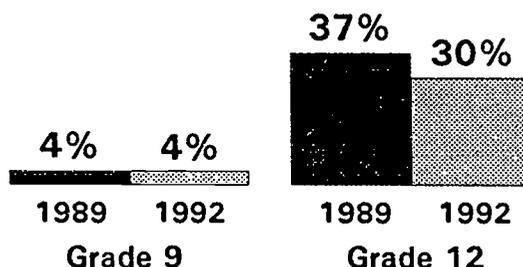
One of the greatest concerns related to teenage drinking is motor vehicle accidents. Because of their inexperience with drinking and with driving, teenagers and young adults are at highest risk for alcohol-related accidents.

Most 9th graders are too young to have a driver's license and few report driving after drinking or using drugs. Among seniors there is a decrease. This high-risk behavior is less common among young women than among young men and the proportional decrease is slightly greater for

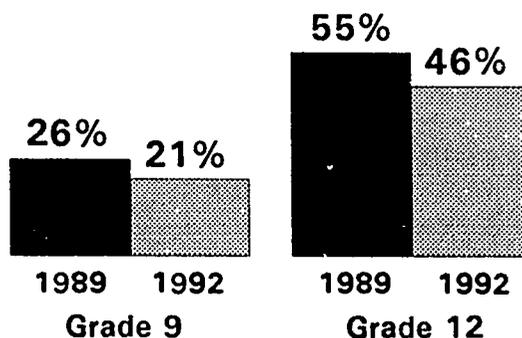
females (24% in 1992 versus 31% in 1989) than for males (36% in 1992 versus 42% in 1989).

Riding with friends who have been drinking or using drugs has also declined among teenagers. In 9th grade females are more likely than males to report riding with drinking or drug-using friends (22% versus 19%). In 12th grade, more males than females report riding with drinking or drug-using friends (47% versus 45%). As with driving, riding with drinking or drug-using friends has declined slightly more among females than among males.

DRIVING AFTER DRINKING/DRUG USE



RIDING WITH FRIENDS AFTER THEY HAVE BEEN DRINKING OR USING DRUGS

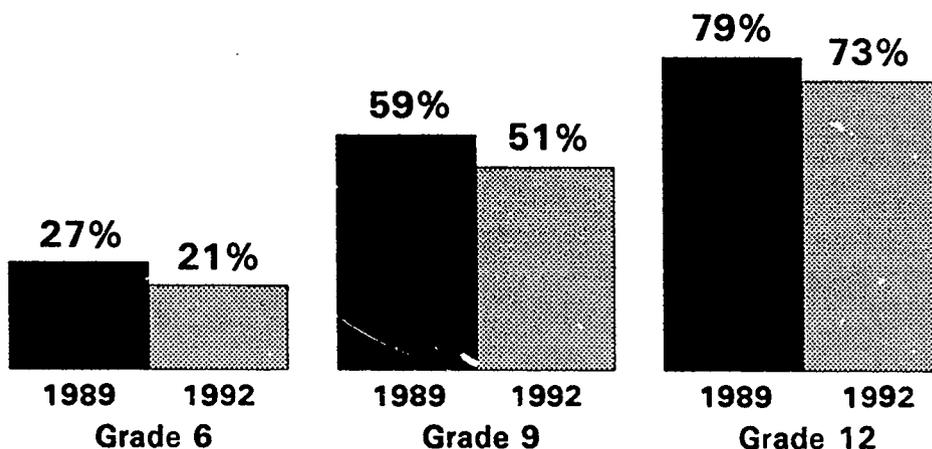


Attitudes about drinking and other drug use have changed

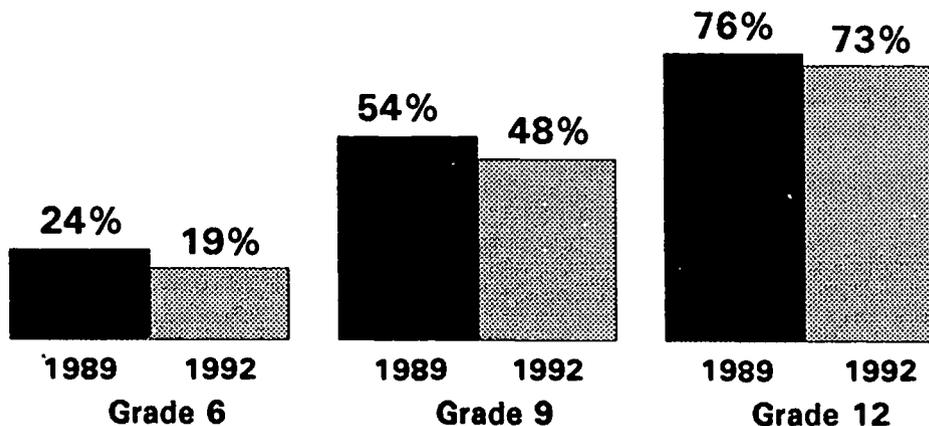
Acceptance of drinking and drug use is waning among adolescents. Fewer students now than three years ago believe that drinking is okay so long as teenagers do not get drunk or drive after drinking. Fewer also now think that adults are exaggerating the dangers of teenage drinking and

other drug use. Males and females in all three grades surveyed exhibit these attitude changes. The greatest proportional change, however, is seen among younger students, which bodes well for the future.

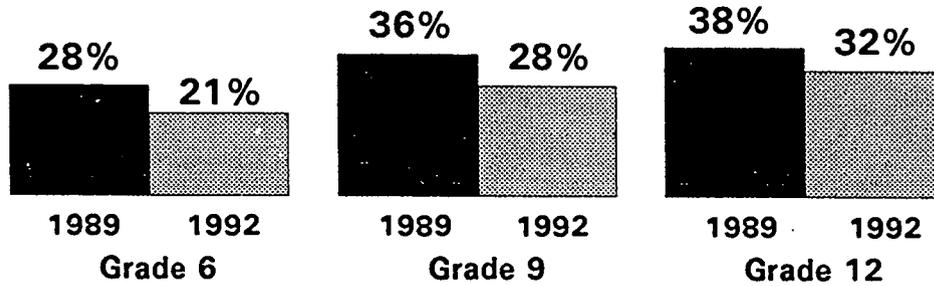
BELIEVES IT'S OKAY FOR TEENS TO DRINK AT PARTIES IF THEY DON'T GET DRUNK



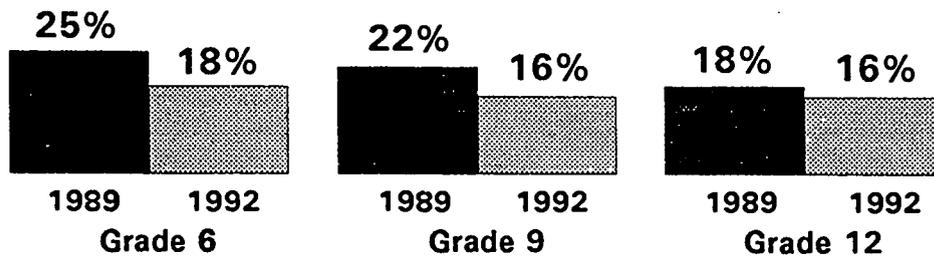
BELIEVES IT'S OKAY FOR TEENS TO DRINK IF THEY DON'T DRIVE



BELIEVES ADULTS EXAGGERATE DANGERS OF TEEN DRINKING



BELIEVES ADULTS EXAGGERATE DANGERS OF DRUGS



Students give more reasons for not using alcohol and other drugs

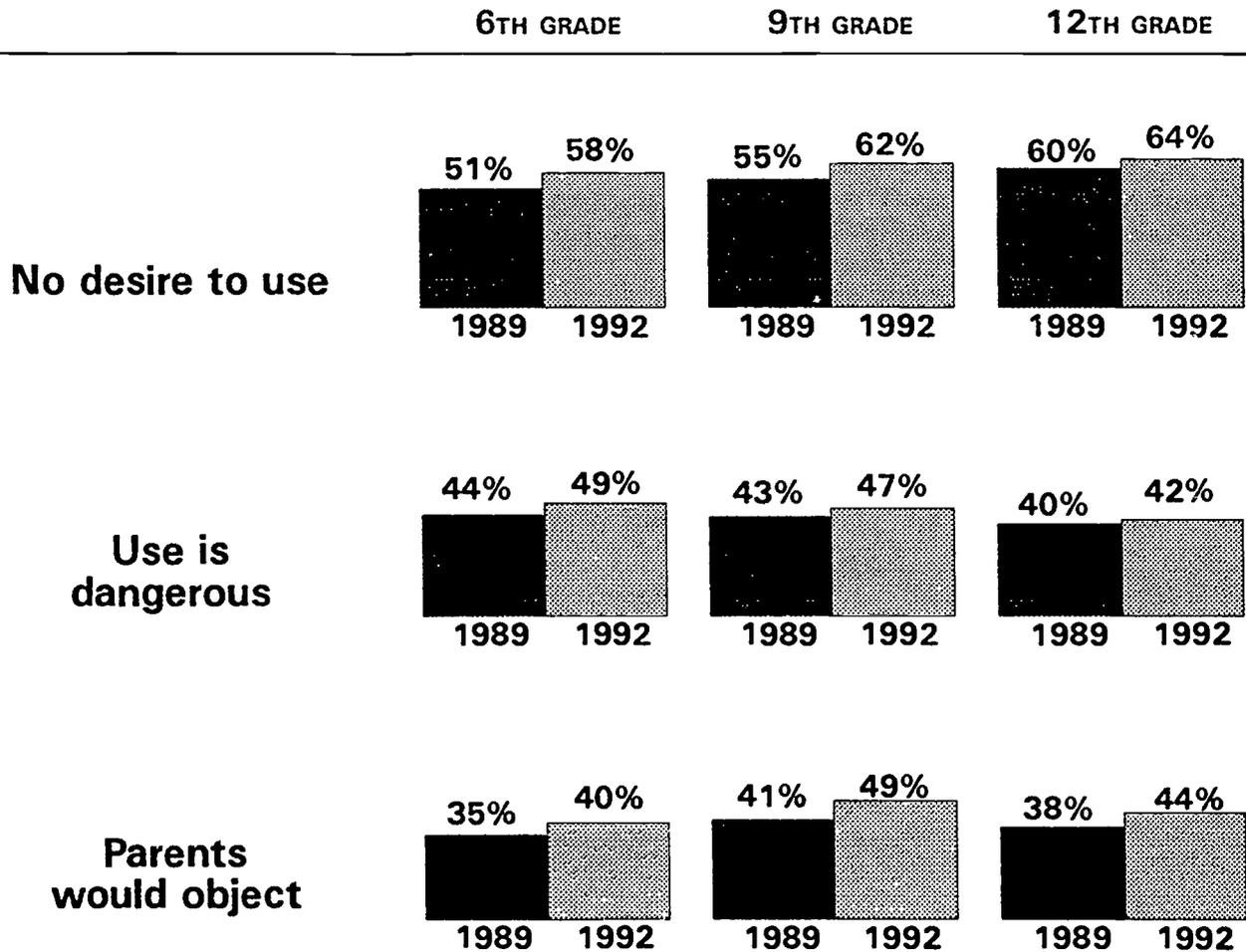
Among students who do not use alcohol and other drugs, the number of reasons they give for not using has increased. The number one reason given is that they have no desire to use; this is especially true of 12th graders. More also cite the dangers associated with use and the fact that use is illegal, reasons that appear more compelling for younger students.

More students, particularly 9th graders, say they don't use because their parents would object. This change may be a positive sign of the impact of parental influence on choices made by young

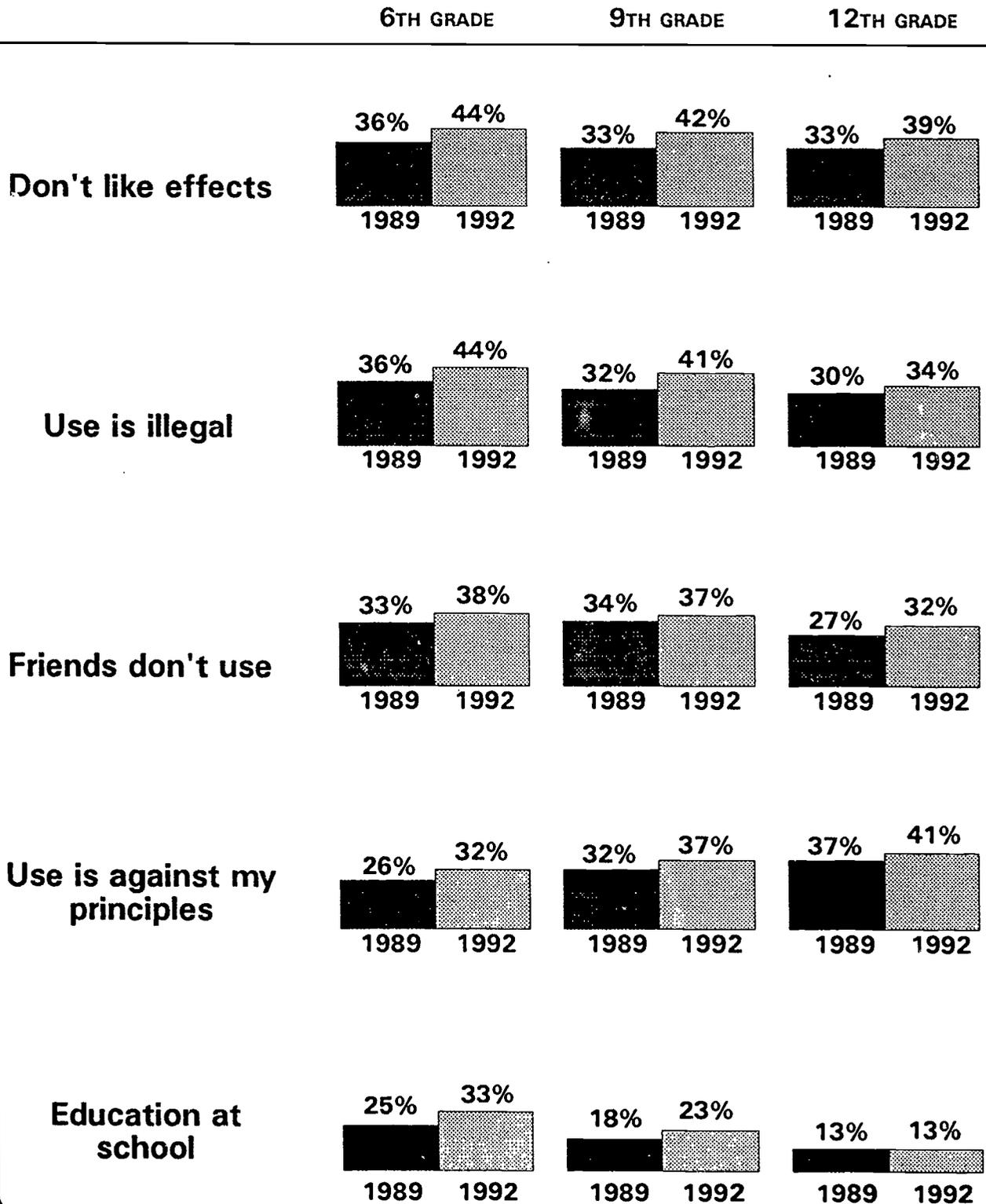
people. Another encouraging sign is the increase in the number of students who say they don't like the effects alcohol and other drugs have on the user. Perhaps media campaigns and other educational efforts that have focused on how unappealing it is to be out of control have been successful in reaching their young audience.

Although more students cite personal reasons for not using, there is also an increase in the number who say they are influenced by the alcohol/drug education they receive at school.

REASONS GIVEN FOR NOT USING BY NONUSERS



REASONS GIVEN FOR NOT USING BY NONUSERS



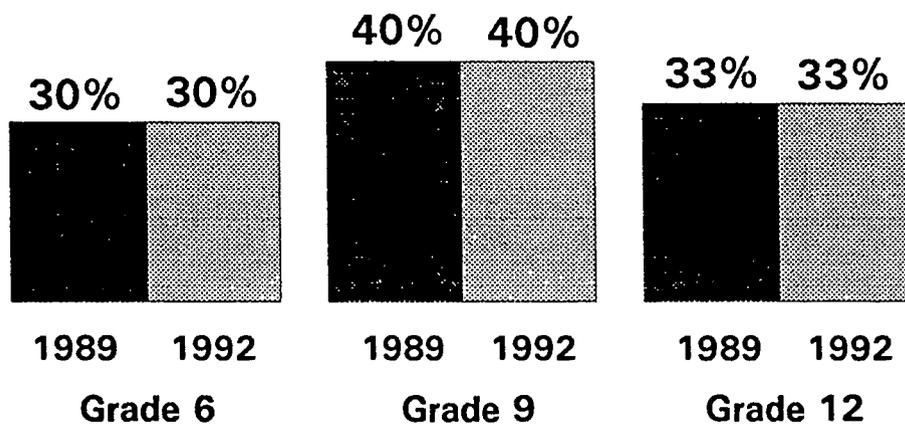
Antisocial behaviors virtually unchanged in three years

The declines in adolescent alcohol and other drug use cannot be attributed to an overall decrease in illegal or irresponsible behavior. Antisocial behaviors show no corresponding reductions over the three-year period.

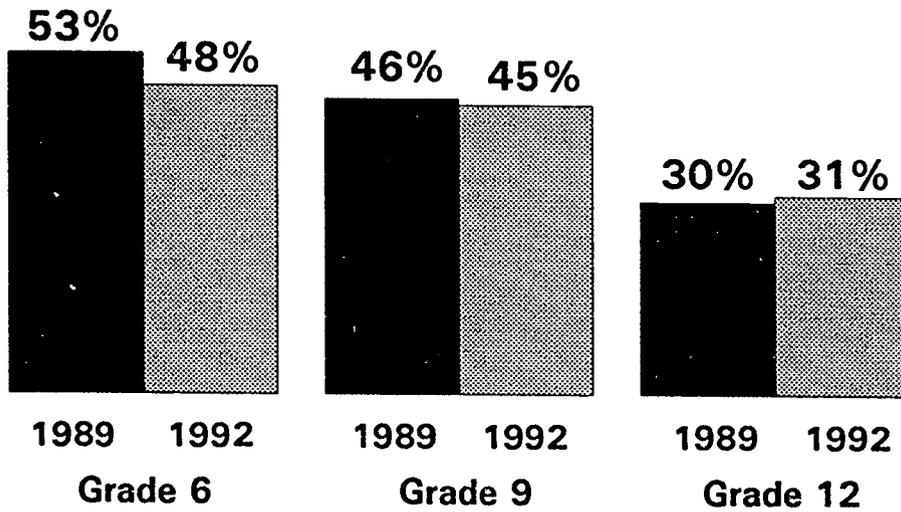
The survey asks about physical fights, vandalism, and shoplifting in the previous year. The numbers reporting these behaviors in 1992 are virtually the same as in 1989 across all three grades, except for a decrease in fighting among 6th graders.

The survey asks students how many times they engaged in these behaviors. The graphs illustrate the rates for those who engaged in the behavior at least once in the past year. An examination of more frequent acts also shows little change. The young people who report frequent antisocial behavior are those at highest risk for alcohol and other drug problems; adolescents with this profile also show relatively small declines in use.

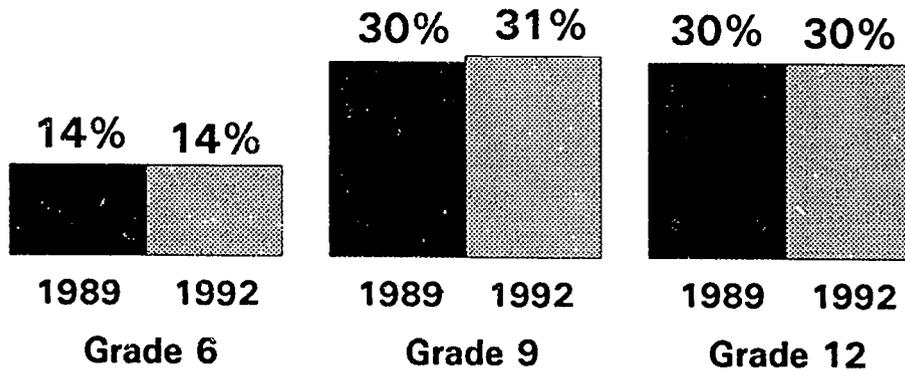
VANDALISM



PHYSICAL FIGHTS



SHOPLIFTING



Serious emotional distress and low self-esteem show slight increases

Emotional distress

The most serious levels of emotional distress defined by the Minnesota Student Survey have increased slightly. Although the increases are small, they are consistent for all three grades surveyed.

Levels of emotional distress in the previous month were measured by responses to a series of six questions about general mood, stress, sadness, discouragement or hopelessness, nervousness, and satisfaction with personal life. Each question had five possible answers ranging from no problem at all to virtually constant distress. Students who answered almost all the questions with one of the two most serious responses are classified as having a serious problem.

Although the definition of serious emotional distress used for the Minnesota Student Survey can be debated, the important point is that the same definition is applied in both 1989 and 1992 making the comparisons valid. The increase in serious problems, though slight, warrants concern.

Emotional distress among adolescents is correlated with alcohol and other drug use. The increase in emotional distress while substance use is declining is particularly notable. Many people might have predicted a decrease in emotional problems since depression and anxiety can result from use. This did not happen with Minnesota students. These survey results make it clear that prevention of alcohol and drug use will not by itself address the emotional health problems that confront today's young people.

Low self-esteem

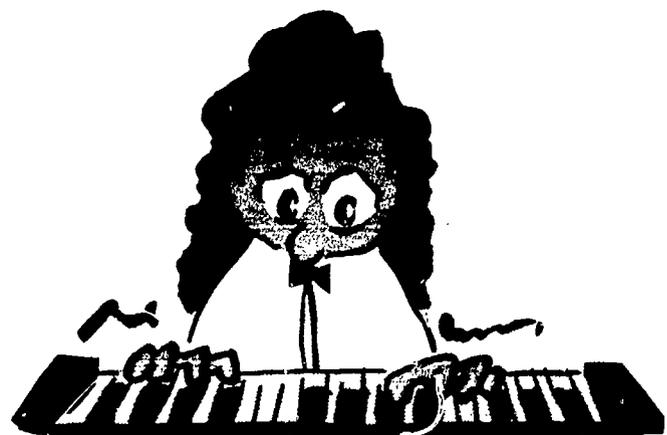
Serious low self-esteem defined for the Minnesota Student Survey shows the same pattern as seen for emotional distress. There is a consistent though small increase in such problems for all three grades surveyed.

In the Minnesota Student Survey self-esteem is measured by level of agreement with a series of seven statements:

- I usually feel good about myself.
- I am able to do things as well as most other people my age.
- On the whole, I'm satisfied with myself.
- I feel I do not have much to be proud of.
- Sometimes I think I'm no good.
- I feel that I can't do anything right.
- I feel that my life is not very useful.

Students choose from responses: disagree, mostly disagree, mostly agree, and agree. To be classified as having a serious problem with low self-esteem, students have to give answers to all questions that reflect a negative opinion of themselves.

Low self-esteem is correlated with alcohol and other drug use. The results seen in the 1992 survey challenge the assumption that decreases in substance use will result in fewer young people with problems with self-esteem. Since the rates for self-esteem problems have been more stable over time than those for substance use, it can be argued that low self-esteem is more likely to lead to substance use than substance use is to produce low self-esteem.



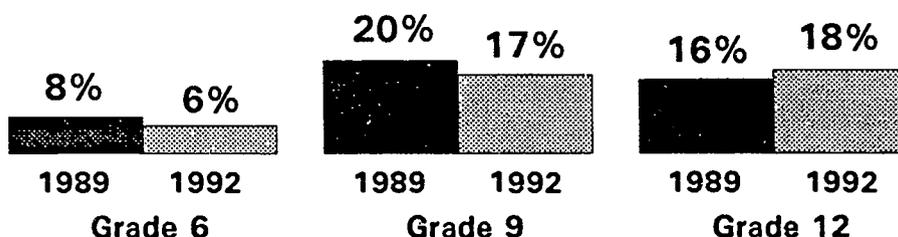
Suicide attempts show a slight decline among younger students

The number of students who report a suicide attempt any time in their lives has dropped for grades 6 and 9 but increased for grade 12. Past year attempts are down for all three grades, however. Rates for attempts in the previous year have declined the most for 9th graders (from 8.2% in 1989 to 6.1% in 1992), followed by 6th graders (from 4.1% to 2.8%); 12th graders showed only a very slight decline (from 3.6% to 3.4%).

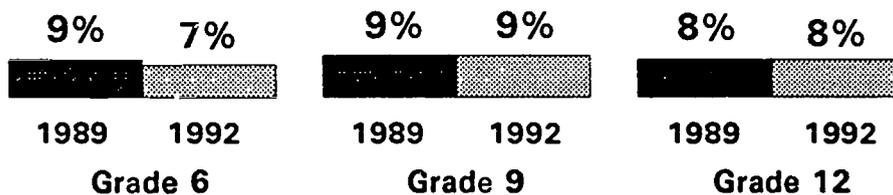
Adolescents who report a suicide attempt are among those at highest risk for alcohol and other drug use. Suicidal behavior is highly correlated with sexual and physical abuse and serious family problems.

SUICIDE ATTEMPT EVER

FEMALES



MALES



Concern with weight and unhealthy weight control is down among females

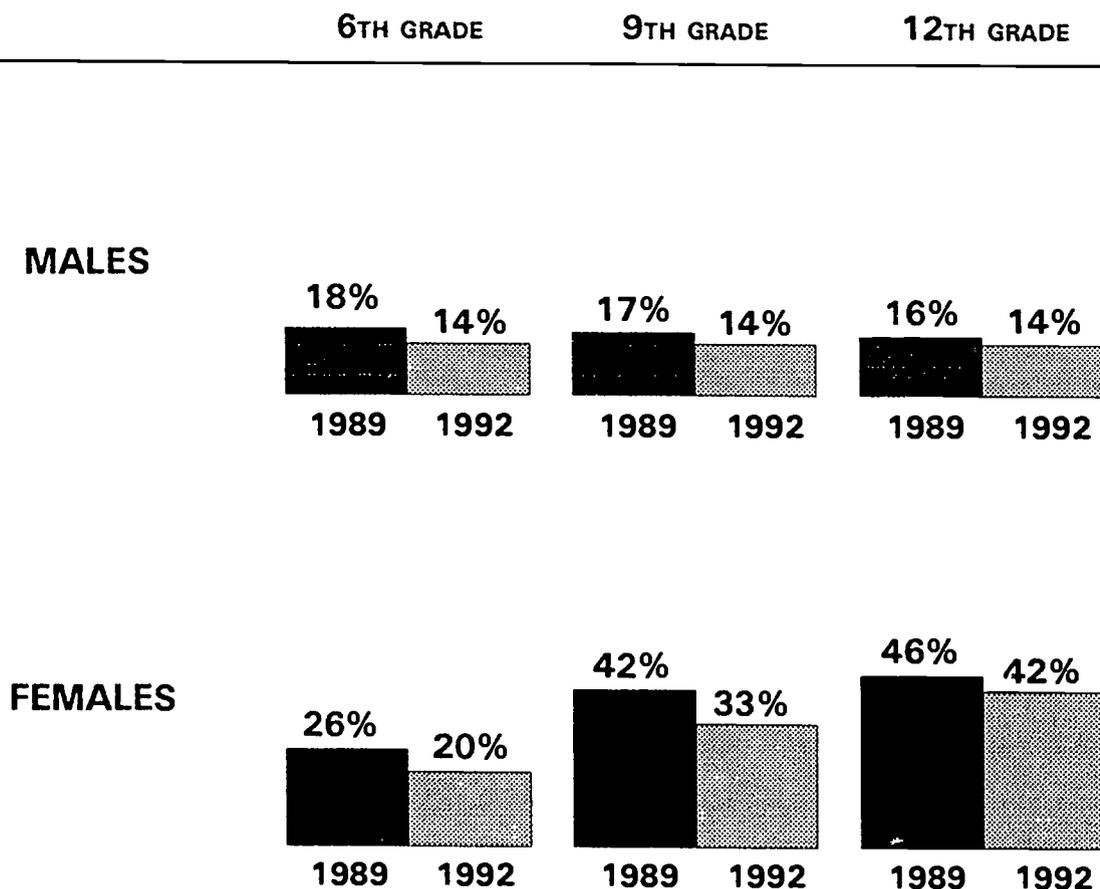
Many more females than males in all three grades surveyed believe themselves to be overweight. Many more females also take specific measures, often unhealthy ones, to control their weight. Fortunately, some improvements, even dramatic improvements, have occurred in just three years.

Declines in the numbers of females believing they are overweight and exercising to control their weight are modest. In contrast, declines for more dangerous forms of attempted weight control are more dramatic. Approximately one quarter fewer

females in each grade are fasting, purging, or taking diet pills than three years ago.

Although weight control behaviors show a clearly positive trend, the same cannot be said for preoccupation with weight. Worry about weight is still largely a female concern. In 1992 (as in 1989) 6th grade females were twice as likely as males to worry about their weight; 9th and 12th grade females were three times as likely as their male counterparts to worry about their weight.

SELF-PERCEPTION OF BEING OVERWEIGHT



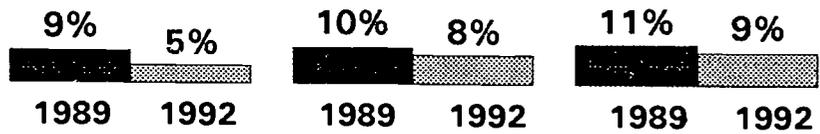
FASTS, TAKES DIET PILLS, OR PURGES TO CONTROL WEIGHT

6TH GRADE

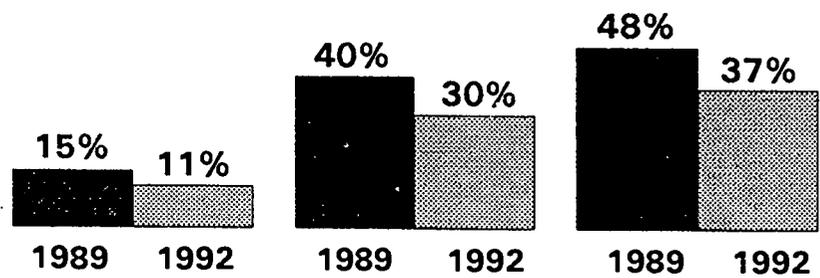
9TH GRADE

12TH GRADE

MALES



FEMALES



More adolescents are expressing negative feelings about family interactions

The survey asks students how much they feel their parents care about them, and how much their family understands them, cares about their feelings, respects their privacy and has fun together. They choose from answers: not at all, a little, some, quite a bit, and very much.

Most students express very positive feelings about their families. However, the small proportion with seriously negative perceptions has increased among 9th and 12th grade students.

Alienation from the family is significantly correlated with alcohol and other drug use among

adolescents. Among the environmental risk factors examined, it is the strongest predictor of regular use. Declines in use in 1992 are also smallest for these students with use among 6th graders alienated from their families actually showing a slight increase.

Small increases are also seen for all three grades in the proportions of students who don't believe that their friends or school and church personnel care very much about them. These students, too, are at increased risk for alcohol and other drug use.



Rates of family violence are virtually unchanged

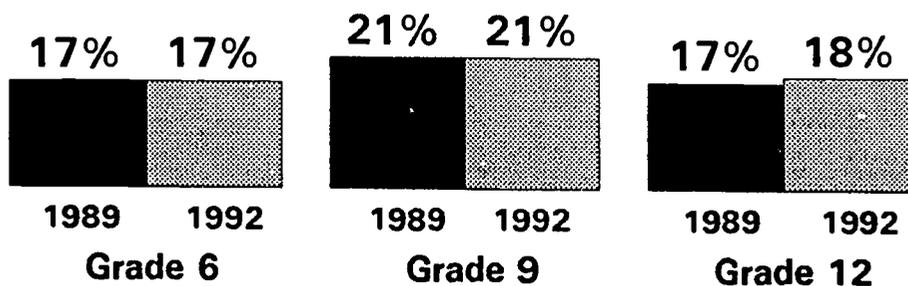
The numbers of students who have been physically abused within the family or who have witnessed abuse involving other family members are almost the same for 1992 as for 1989. In 1992 physical abuse was reported by 12.1% of 6th graders, 14.3% of 9th graders and 11.8% of 12th graders. Witnessing physical abuse within the family was reported by 12.6% of 6th graders, 15.9% of 9th graders, and 14.4% of 12th graders. The totals seen on the graph for physical abuse victim or witness are lower than the sum of the numbers reported here because some students have experienced both.

Young people who experience family violence are more likely to use alcohol and other drugs. Although use did decline for those students in 1992, it did not drop nearly as much as it did for other students.

Rates of family violence are extremely difficult to interpret unless the questions involved are explicitly noted. The questions selected for the Minnesota Survey are fairly conservative: "Has any adult in your household ever hit you so hard or so often that you had marks or were afraid of that person?" "Has anyone in your family ever hit anyone else so hard or so often . . .?"

As with family alcohol and drug problems these questions address any history of family violence. As such they are not accurate measures of recent behaviors. To measure social change, questions would have to inquire only about recent instances of abuse. However, the questions were included in the survey primarily to assess risk for students, since a history of family violence is highly correlated with other problems. Recency of abuse would be important for measuring family change but not for measuring the possible impact on a child.

VICTIM OR WITNESS OF FAMILY VIOLENCE



Family alcohol and drug problems show only slight decline

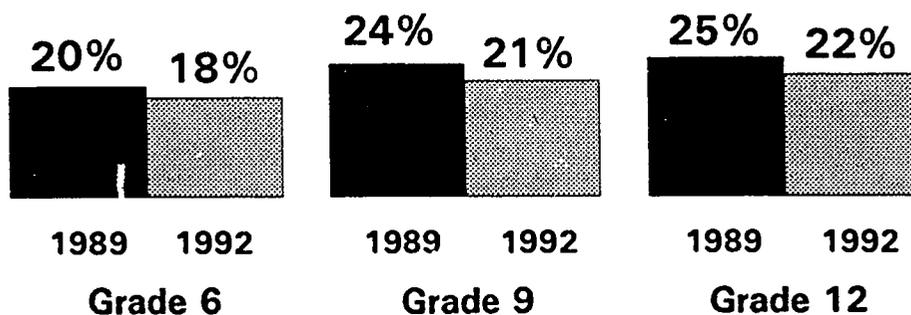
Fewer adolescents reported alcohol and other drug problems among family members in 1992 than in 1989. Family drug problems dropped only about 1% so a reduction in family alcohol problems accounts for most of the decrease. Family alcohol problems are cited more than twice as often as family drug problems (roughly 18% to 8%).

The survey asked, "Has alcohol use by any family member repeatedly caused family, health, job or legal problems?" A second question asks about drug use. The totals seen on the graph for either alcohol or drug problems are lower than the sum of family alcohol problems and family drug prob-

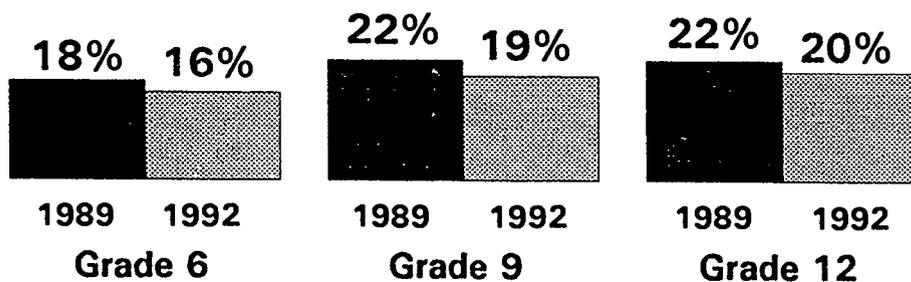
lems because some students report both. Since the questions address a history of problems they cannot detect changes in the level of current problems. The small declines seen here do not rule out the possibility of greater declines in recent family problems.

The family alcohol and drug problem questions were included primarily to determine the risks faced by students rather than to serve as a comparison of the rates of family problems over time. Students who report family substance use problems are more likely than other students to be regular users themselves.

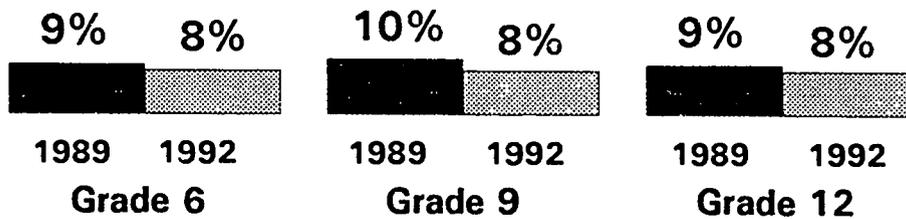
FAMILY ALCOHOL AND/OR DRUG PROBLEMS



FAMILY ALCOHOL PROBLEM



FAMILY DRUG PROBLEM



Sexual abuse shows a slight increase

Sexual abuse rates are up slightly for 12th graders and 9th grade males. They have declined only for 6th grade females. As in 1989 females are much more likely than males to indicate a history of sexual abuse.

As with questions about physical abuse, the wording of questions about sexual abuse is essential to their interpretation. Students were not asked to make judgments about what constitutes abuse. Instead they were asked, "Has any adult or older person outside the family ever touched you sexually against your wishes or forced you to touch them sexually?" A yes answer is considered extrafamilial sexual abuse in this report. Another question asked, "Has any older or stronger member of your family ever touched you sexually or had you touch them sexually?" A yes answer is considered intrafamilial sexual abuse.

Intrafamilial sexual abuse

Intrafamilial sexual abuse rates are unchanged for 6th grade males (1.5%), up slightly for 9th grade males (1.3% to 1.7%) and 12th grade males (1.2% to 1.9%). For 6th grade females they are down slightly (3.6% to 3.3%), for 9th grade females unchanged (6.7%), and for 12th grade females up slightly (6.5% to 6.9%).

Extrafamilial sexual abuse

Extrafamilial sexual abuse rates are unchanged for 6th grade males (2.3%), up slightly for 9th grade males (2.7% to 3.2%) and for 12th grade males (2.7% to 3.3%). For 6th grade females they are down (7.8% to 6.7%), for 9th grade females up slightly (13.0% to 13.5%) and for 12th grade females up even more (13.6% to 15.8%).

Interpreting sexual abuse rates

Like the questions about family alcohol and drug problems and physical abuse, these questions count lifetime experiences. Thus recent societal changes, if indeed any have taken place, would not necessarily be reflected here, although the slight decline seen for 6th grade females would be consistent with this possibility. It is also possible that the increase seen among older students simply means that more victims are remaining in school rather than that more have been abused. The totals seen on the graph for either intrafamilial or extrafamilial sexual abuse are lower than the sum of the numbers reported here because some students have experienced both.

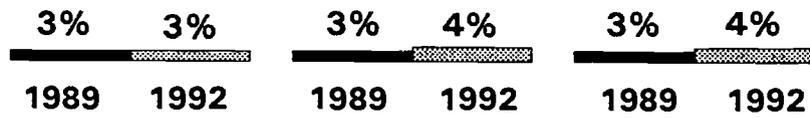
VICTIM OF SEXUAL ABUSE

6TH GRADE

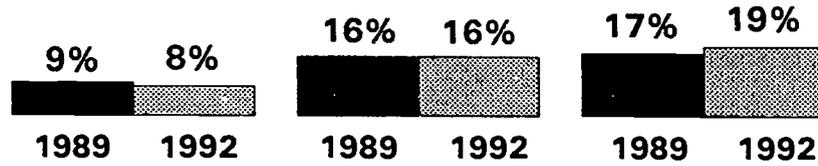
9TH GRADE

12TH GRADE

MALES



FEMALES



Students' concerns reflect the changing world around them

Students were asked about a variety of problems that might concern them. Several of these clearly illustrate how attuned young people are to their environment.

Racial discrimination

One of the largest differences for any survey question between 1989 and 1992 is the response to the question about racial discrimination. The number of students who cite this as a major worry has more than doubled in a three-year period.

This large increase is even more notable when it is taken into account that the 1992 survey results were in before the acquittal of four white policemen (on all counts but one) in the beating of a black motorist in Los Angeles. The videotaped beating received widespread media coverage as did the four-day upheaval that followed the verdict. Increases seen for white students parallel those seen for students of color, but many more students of color report such concerns overall.

Getting a good job

Students' survey responses also reflect rising unemployment and the worsening state of the economy over the past three years. Even the youngest students surveyed recognize their anx-

ieties about the future. The number worrying about getting a good job when they are out of school has increased for 6th graders from 35% to 40%, for 9th graders from 44% to 49% and for 12th graders from 55% to 58%. Overall, the validity of the students' responses is clearly reflected by their responsiveness and reactions to the changing world around them.

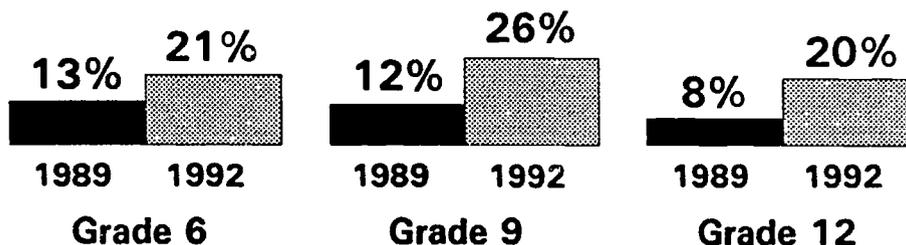
Nuclear war

With the disintegration of the former Union of Soviet Socialist Republics and agreements between the two superpowers on nuclear arms reductions, fears expressed by Minnesota students have decreased. The number citing nuclear war among their major worries shows a clear reduction from three years ago: for 6th graders down from 35% to 26%, for 9th graders down from 27% to 17%, and for 12th graders down from 20% to 12%.

Other worries

Differences in other areas of concern are much smaller, but some are notable all the same. More students in each grade worry about doing well in school. Fewer in grades 6 and 9 worry about how they look and about fighting in their families (both these are unchanged for 12th graders).

WORRIES ABOUT RACIAL DISCRIMINATION



Attitudes about persons with HIV

Another striking change is reflected in students' attitudes about persons with HIV, the virus associated with AIDS. The survey asks students: "Would you sit next to a student with HIV/AIDS in your school lunchroom?" The proportion who say that they would has increased by half in grades 6 and 9 and by one third in grade 12. This is a remarkable change in attitudes in just three years and clearly attests to the effects of ongoing education in this area.

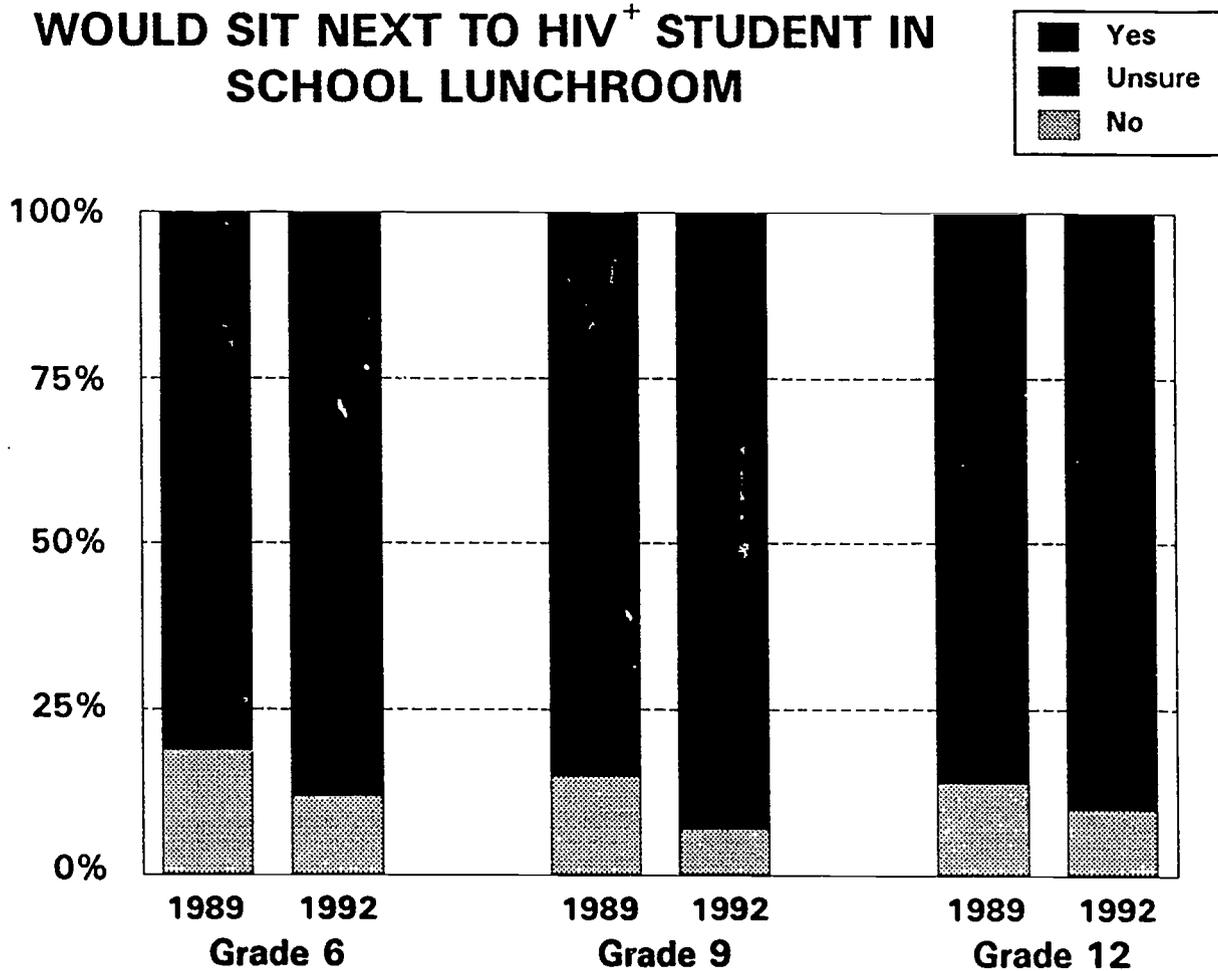
Gender differences

What hasn't changed, however, is the female-male difference in attitudes toward persons with HIV/AIDS. Females are much more likely than males to say they would sit next to a student with this condition. Since the 1989 survey showed no

gender differences in understanding the transmission routes for this virus (and most students had correct information), the difference reflects something other than a knowledge base. The most likely explanation is male homophobia. Because gay males have much higher rates of HIV than the general population, it is likely that the greater reluctance seen among males to associate with an HIV-infected person reflects fear of associating with a gay male rather than fear of contracting the virus.

There is also other evidence that females are more altruistic overall, however. They worry about racial discrimination more than males. They also are much less likely than males to engage in antisocial behaviors. These female attributes deserve greater attention. Although much attention has been given to the recent increases in violence and hate crimes in our society, rarely is it emphasized that the most serious of these acts are almost exclusively a male domain.

WOULD SIT NEXT TO HIV⁺ STUDENT IN SCHOOL LUNCHROOM



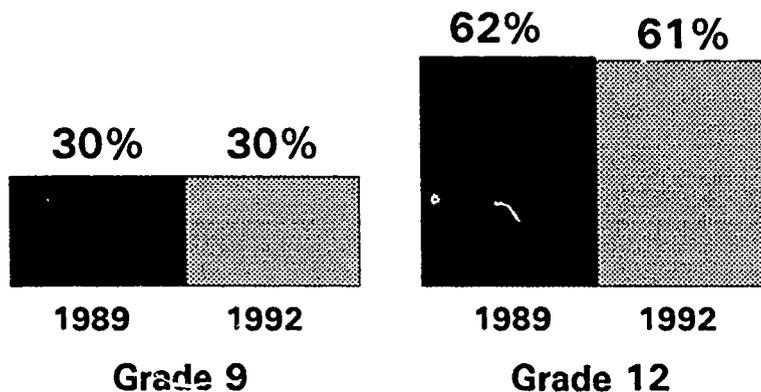
Sexual activity among adolescents still common

The numbers of adolescents who have initiated sexual activity by 9th and 12th grades have not changed much. Only a slight decrease is seen from 30.3% to 29.7% for 9th graders and from 61.8% to 60.7% for 12th graders. The age of first sexual encounter also shows the same pattern in 1992 as seen in 1989. The apparently lower age of onset for 12th graders than for 9th graders reflects the higher dropout rate for adolescents who initiate sexual activity at young ages.

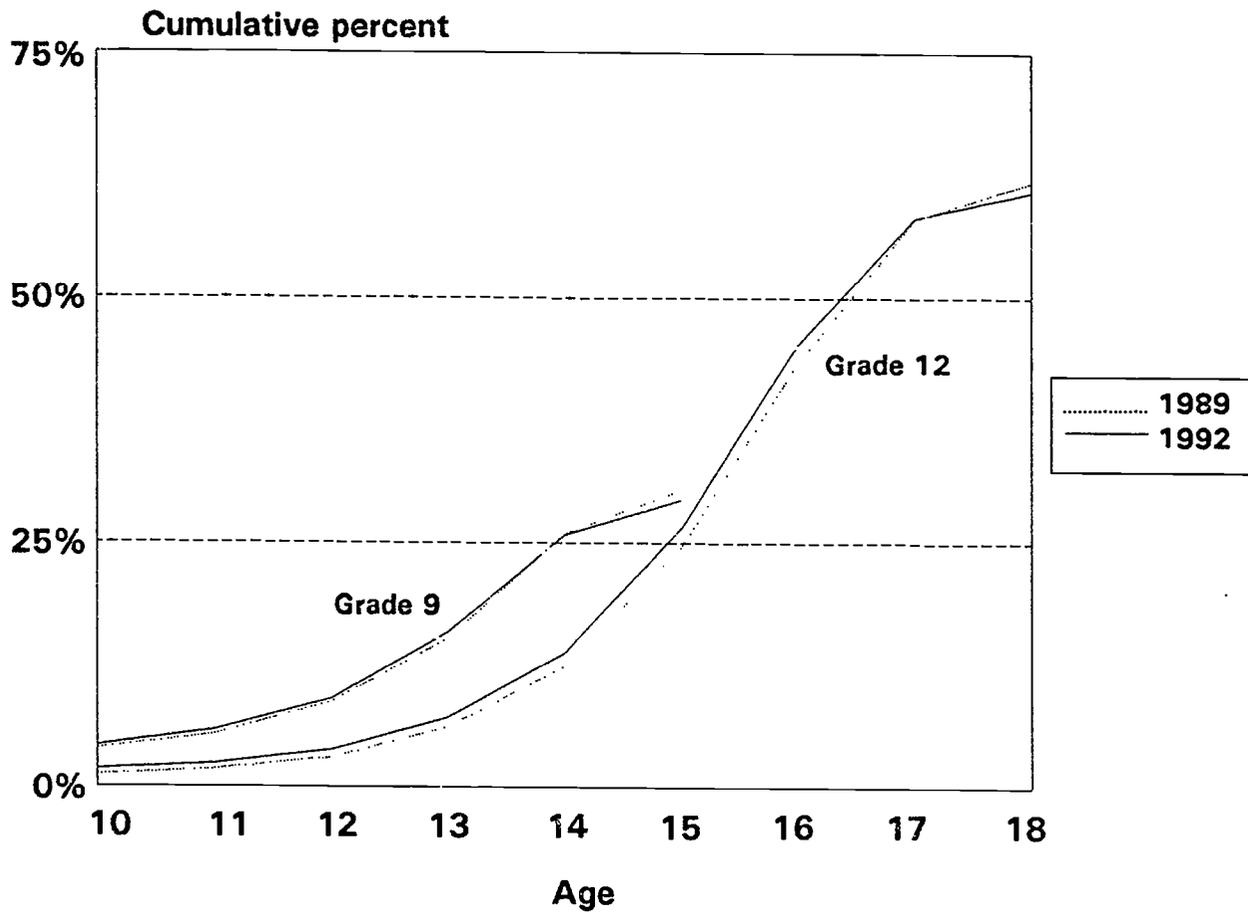
Early initiation of sexual activity is highly correlated with sexual and physical abuse experiences.

Adolescents who report being sexually or physically abused are twice as likely to be sexually active by 9th grade as adolescents who do not report abuse. Abuse victimization appears to be a more significant factor in early sexual activity for females than for males. Female 9th graders with an abuse history are 2.7 times more likely than nonvictims to be sexually active, whereas male 9th graders with an abuse history are 1.8 times more likely than nonvictims to be sexually active. Early sexually activity is also significantly correlated with low self-esteem, emotional distress, and antisocial behavior.

SEXUALLY ACTIVE



AGE OF FIRST SEXUAL INTERCOURSE



Students taking more precautions against pregnancy and disease

Although the rate of sexual activity for adolescents is essentially unchanged, there are dramatic changes in the numbers of sexually active students who take precautions against pregnancy and sexually transmitted diseases.

For both males and females in 9th and 12th grades there is an increase in the number who say they always use contraception during sexual intercourse. (Students in grade 6 do not complete the section in the Minnesota Student Survey about sexual activity.)

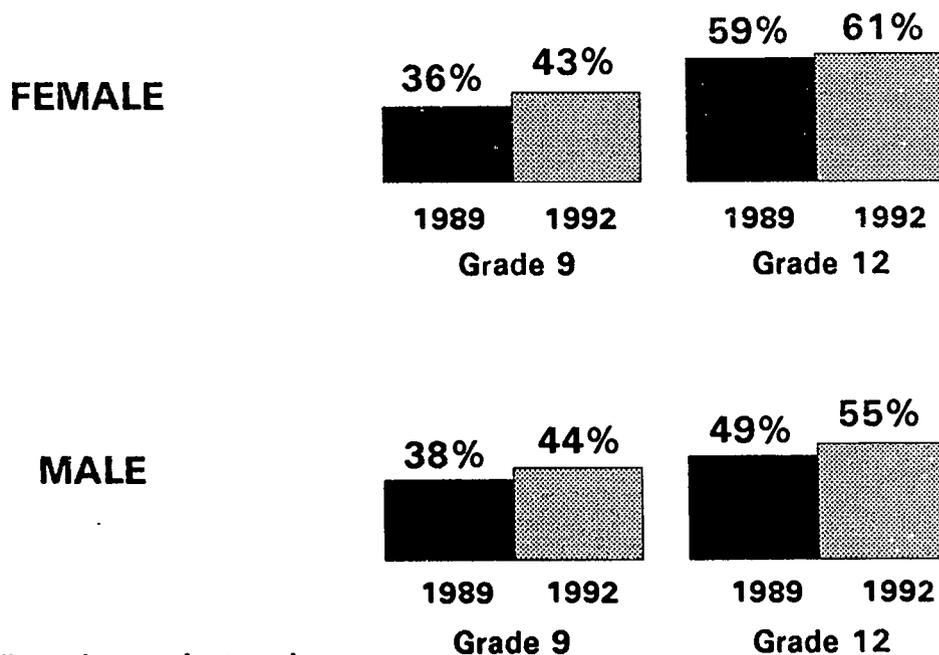
The increase in condom use is even greater than the increase in contraception for both females and males in both grades. Condom use has been heavily publicized in HIV/AIDS prevention efforts. In fact, it is possible that the increase in contraception merely reflects this increase in condom

use rather than increased attention specifically to pregnancy prevention.

One apparent contradiction in the survey results is that more 9th graders say they use condoms than contraception during sex. The disparity is much greater for males than for females. One possible explanation is that these adolescents do not consider condom use contraception. Another explanation is same-sex partners.

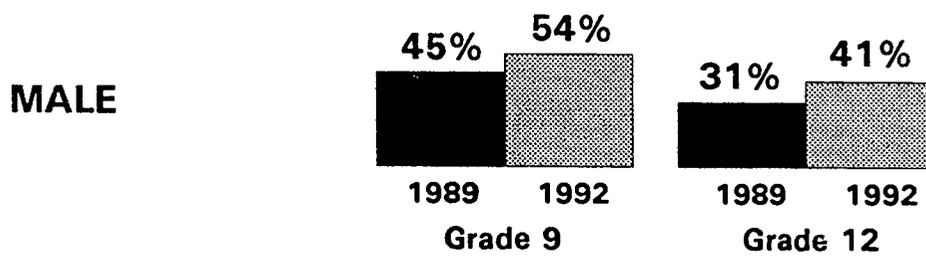
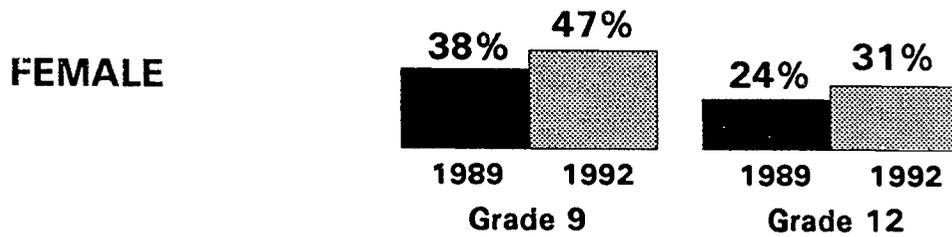
The largest difference seen with respect to sexual activity is the increase in the number of sexually active students who say that they have discussed the risk of HIV/AIDS with a sexual partner before having sex. Overall, 2½ times more students in 1992 than three years earlier are taking this important precaution, at least with some of their partners.

ALWAYS USES BIRTH CONTROL*

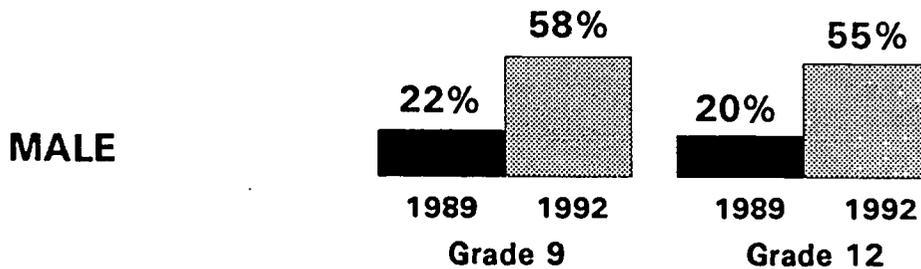
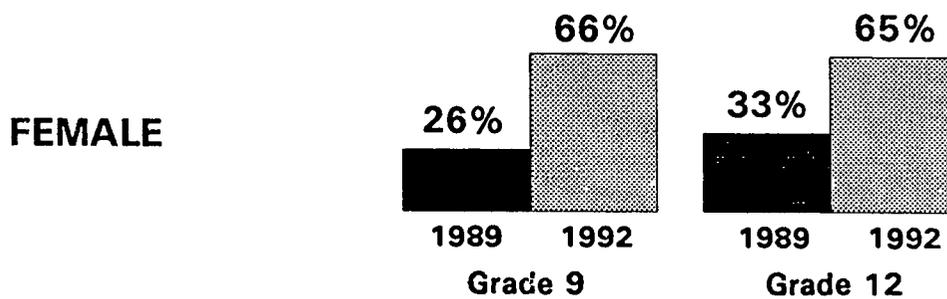


*Sexually active students only

ALWAYS USES A CONDOM*



HAS TALKED WITH A PARTNER ABOUT HIV/AIDS*



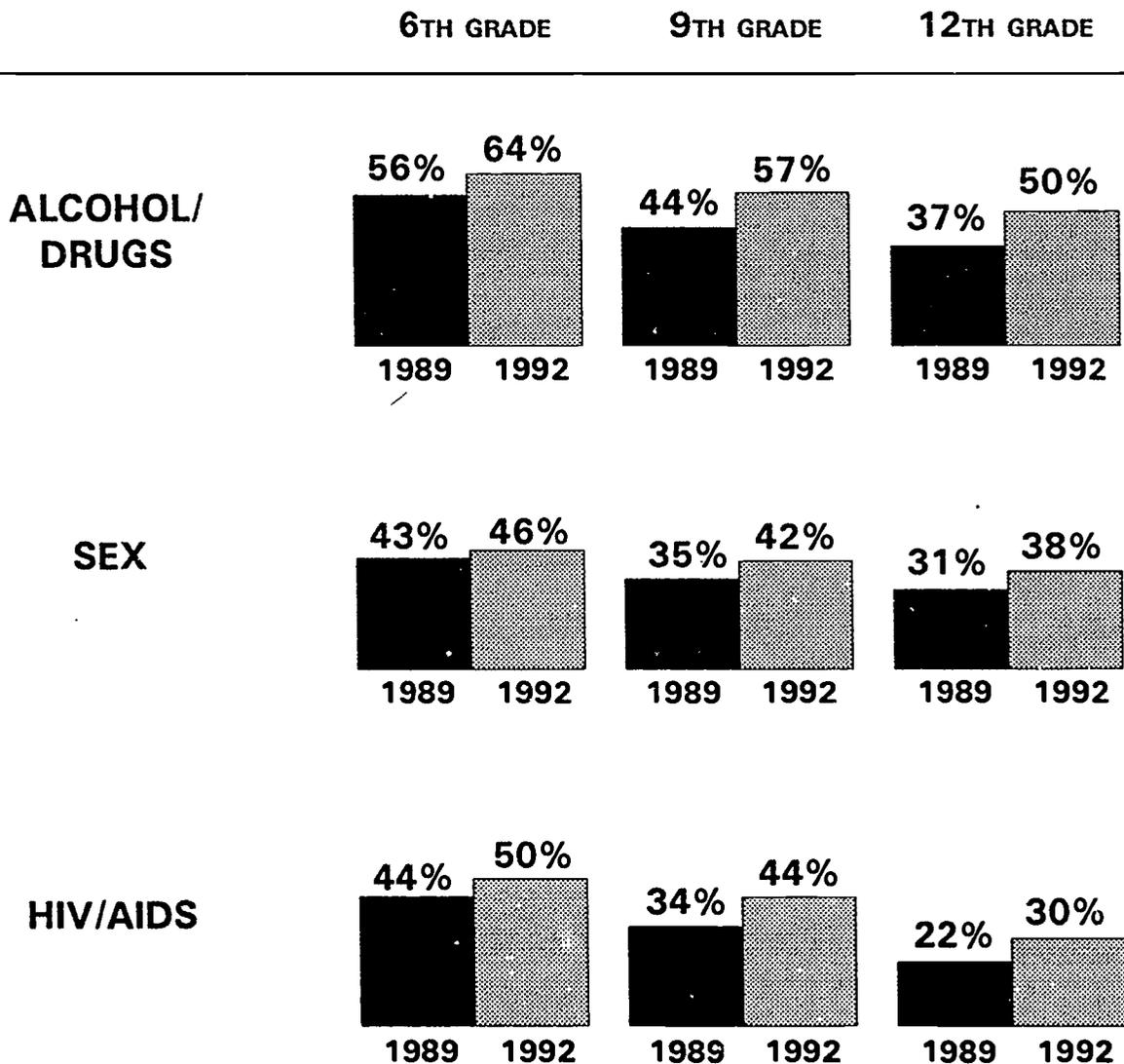
*Sexually active students only

What accounts for the positive changes?

Significant reductions in the risk behaviors of students have taken place over a short period of three years. Alcohol and other drug use is down. Although the rate of sexual activity is unchanged, many more students are taking important precautions. What has happened in the past three years?

One factor is an increase in the number of students who cite parents as a primary source of information about three key areas: alcohol and drugs, sex, and HIV/AIDS. The biggest increases are seen for alcohol/drug information.

PARENTS AS PRIMARY SOURCE OF INFORMATION ABOUT...



Prevention efforts are probably a major contributing factor

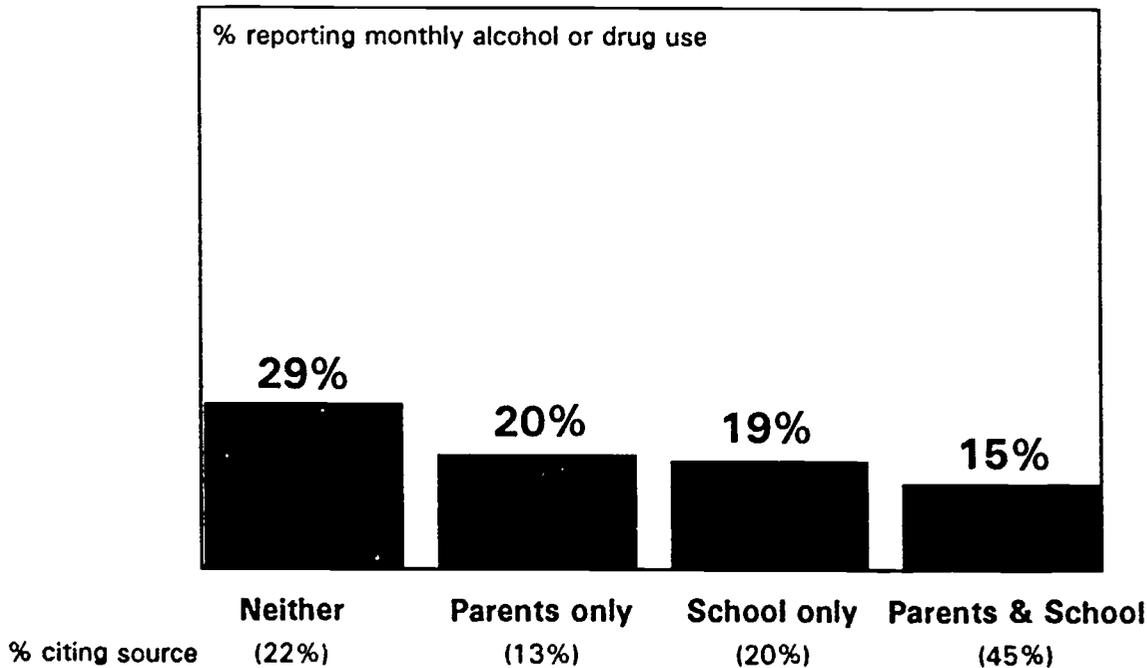
Evaluating the effects of prevention efforts is difficult. Prevention efforts do not occur in a social vacuum. School prevention programs are frequently accompanied by parental involvement. Collaboration between schools and community agencies is occurring with greater frequency. Community efforts also often involve local media campaigns. On television and radio in recent years more and more public service messages address alcohol and drug use and HIV/AIDS. And, as the survey shows, more parents are providing information to their adolescents, either with assistance from other sources or on their own.

While it is possible that other factors account for the changes in adolescent behavior, there is strong evidence that education provided by par-

ents and by schools alone and in combination makes a great difference. Students who cite either parents or school as a primary source of information about alcohol and other drugs are much less likely than other students to initiate use or to be involved in regular use. Students who get information from both parents and school are even less likely to use alcohol and other drugs.

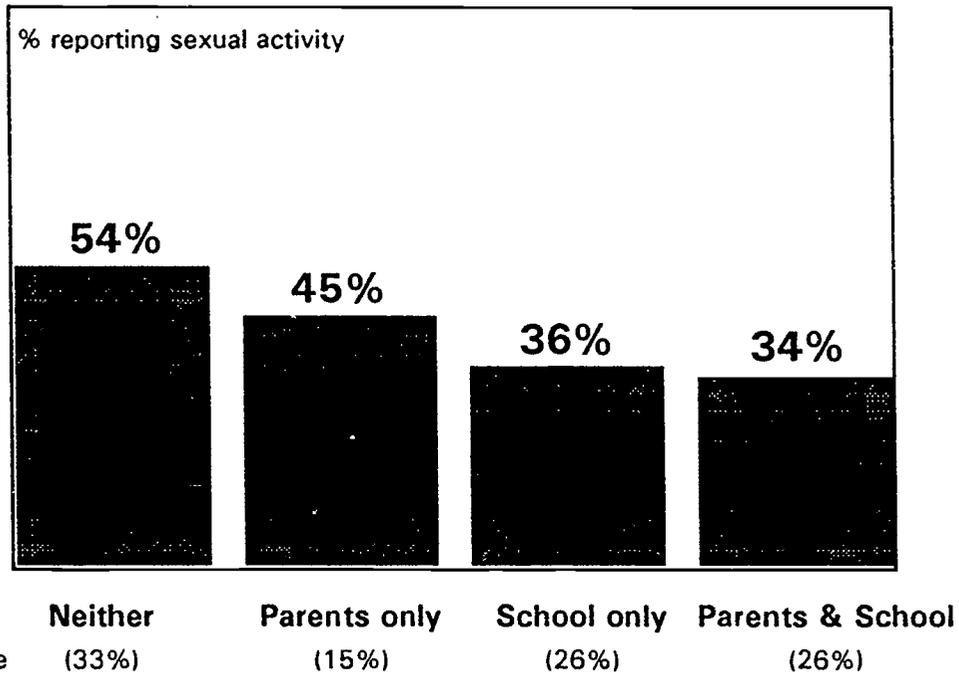
With sexual activity, parental information is important but school educational efforts seem to have even greater impact. The adolescents who say they get information about sex from their parents are less likely than those who don't to report sexual activity. Those who cite school as a primary source are even less likely to be sexually active.

MONTHLY ALCOHOL OR DRUG USE RELATED TO PRIMARY SOURCE OF ALCOHOL/DRUG EDUCATION*



*Grades 6, 9 & 12 combined

SEXUAL ACTIVITY RELATED TO PRIMARY SOURCE OF SEX EDUCATION*



*Grades 9 & 12 combined



Recommendations

An essential component of a plan to move forward is the accurate assessment of the positive signs and the troublesome aspects of the current situation. The Minnesota Student Survey, administered in 1989 and 1992, provides information necessary to recognizing and building on our successes.

Consistent messages defining healthy and responsible behavior and collaborative efforts to promote such messages must be sustained and expanded.

One of the constants in adolescent descriptions of their behavior is the significant association between information from parents and teachers and the avoidance of high-risk behaviors. More students in 1992 said they were getting information from their parents about high-risk behaviors. These students were less likely to be engaged in risk behaviors.

Sex education in the schools is controversial; to a lesser degree so is alcohol and other drug education. Some people believe that such efforts actually increase sexual activity and alcohol and other drug use among young people by implicitly condoning such behavior. The results of the surveys do not bear out this concern. To the contrary, young people who cite their schools and parents as primary sources of information about sex are among the least likely to be sexually active. The same relationship is seen for alcohol and other drug use.

Abstinence from sexual activity and alcohol or other drug use are ideal goals for young people and school-based prevention efforts promote these ideals. Continued efforts may show even better results in future years. Not all students achieve these ideals, however. With respect to these young people, it is important to acknowledge successful efforts in reducing the most hazardous and potentially fatal aspects of their risk behaviors. While sexual activity among adolescents has not decreased, there are significant increases in the numbers of sexually active students who now take precautions against pregnancy and sexually transmitted diseases. Alcohol and other drug use is still common as well. However, fewer students drink to intoxication or mix driving with alcohol and other drugs.

Prevention efforts need to take into account multiple risk behaviors and predictors of risk behaviors.

A consistent finding from the surveys is the strong association among problem behaviors. Many of the same adolescents are involved in antisocial behavior, alcohol and other drug use, early sexual activity, and suicide attempts. Young people at risk for any one of these are at risk for the others as well.

Many of the adolescents who engage in these behaviors have had painful experiences or witnessed painful events in their own families. Many feel alienated from family members, friends, and other persons. Many experience depression, anxiety, and low self-esteem. We need to pay attention to adolescents who suffer in silence as well as those who act out their rage and frustrations.

Comprehensive efforts to assist young persons and their families need to be developed, sustained, and promoted.

Early recognition and response to adolescents in distress are essential to their academic success as well as to their emotional and social development. Services must be sensitive to the needs of individuals, families, communities, and cultures. Services must be available and accessible especially for those young persons who cannot turn to their parents for help. Because family and environmental problems interfere with learning, schools will need to continue their active role in targeting services to ensure that all students can attain their academic potential.

Technical aspects of the survey

Defining the sample

Since more districts participated in the Minnesota Student Survey the second time around, it wouldn't work simply to compare all the students who took the survey in 1992 with those who took it in 1989. So the first step for this comparison report was to limit the surveys to those from districts which participated both times. The statewide student population is still well represented: 334 districts were involved both years (81% of the total).

An accurate comparison involves more than just including certain districts, however. Within these districts not all students completed the survey. The Department of Education permitted a few large districts to sample their student populations provided that steps were taken to ensure that the sample was representative of all students. In addition, some districts had different participation rates for the two years because of difficulties in scheduling the survey.

Why does district sampling matter? Because when these districts are combined with the rest of the districts, their numbers are underrepresented as compared with their actual enrollments. The only way to correct for less-than-total participation is sample weighting. The weighting procedure is conducted independently for each grade within each survey year. Besides correcting for disproportional representation created by district sampling, weighting also adjusts for differences in district participation rates between the two survey years.

Weighting district samples

The ratio of the total survey sample to the total combined enrollment for participating districts is divided by the ratio of the district survey sample to the district actual enrollment. This individual district weight is then multiplied by the number of surveys completed to determine the proportional representation of each district.

Understanding the mathematical calculations involved in district sample weighting is not important. The key point of this discussion is that every possible step was taken to ensure the most accurate and meaningful comparison of student survey results from one year to another. The comparisons are not perfect, of course. Students move in and out of school districts. With an anonymous survey it is impossible to say how many of the same students took the survey in both years. Despite such limitations the Minnesota Student Survey provides the most accurate and comprehensive information available about adolescents in the state while respecting their privacy.

Do students tell the truth?

One question that comes up often about the student survey is whether students' responses are honest and accurate. To some extent the question reflects a particular distrust of adolescents since the same challenge to the honesty and motivation of adults is rarely heard when adult poll results are released.

Researchers use a variety of data analysis techniques to examine the accuracy of anonymous surveys. Surveys with numerous inconsistencies or improbable answers are discarded. Fewer than 3% of the surveys in this sample were excluded because of dubious validity.

The vast majority of students exhibit patterns of responses to questions that are consistent and reasonable. In addition, as results have demonstrated, percentages for many answers are identical or almost identical for 1989 and 1992. Such similarities could occur only if the results represented the actual situation; it's implausible that these patterns could be duplicated three years later by chance. This combination of individual response patterns, plausible relationships between answers, consistency over time, and consistency with other studies all attest to the credibility of student responses.

SURVEY FACTS AT A GLANCE

Survey grades: 6, 9 and 12

Survey years: 1989 and 1992

334 school districts participated both years (81% of total)

**Comparison sample: 85,322 students from 1989
 96,116 students from 1992**

Fewer than 3% of surveys excluded due to dubious accuracy

District weighting adjusts for sampling and differences in participation rates

Weighting formula (calculated for each grade in each district each year):

District Weighted Sample = $\frac{\text{District Enrollment}}{\text{Total Enrollment}^*} \times \text{Total Sample}$

*** for participating districts**

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