

ASSOCIATIONS BETWEEN SELECTED RISK AND PROTECTIVE FACTORS

Data from 9th Graders in the 2007 Minnesota Student Survey

Parents, teachers, and others who live and work with adolescents, as well as adolescents themselves, know that many risky behaviors tend to cluster together. In other words, adolescents who engage in one risk behavior, such as smoking, are more likely than non-smokers to engage in other risk behaviors, such as using marijuana or skipping school. On the other hand, we often observe that students who have certain protective factors or behaviors in their lives are less likely to engage in risky behavior. For example, students who feel they can talk to their parents about their problems are less likely to smoke than are students who do not feel they can talk to their parents.

The Minnesota Student Survey can help us see whether and how strongly certain risk and protective factors are associated with one another. This report examines such associations between selected risk and protective factors among 9th grade students in Minnesota using the 2007 Minnesota Student Survey data.

What is the Minnesota Student Survey?

The Minnesota Student Survey asks students questions about their activities, opinions and behaviors on a wide range of subjects. Topics covered include tobacco, alcohol and drug use, school climate, physical activity, violence and safety, connections with school and family, general health, and other topics. High school students only are also asked questions about sexual activity, gambling, and specific kinds of illicit drugs. The survey is conducted every three years among 6th, 9th and 12th grade students in Minnesota public schools. In 2007, 76 percent of all 9th grade students in regular public schools in Minnesota participated in the survey. Students who did not participate were enrolled in school districts that did not conduct the survey, were absent from school or class on the survey date, or simply decided not to take the survey. Participation in the survey is voluntary and anonymous.

What do we mean by an “association” between two variables?

An association simply means that two behaviors or factors tend to cluster together or happen together. For example, the Student Survey shows that smoking cigarettes and using marijuana are associated. When we divide 9th grade students who took the 2007 survey into three groups based on frequency of smoking cigarettes in the last 30 days, we find that:

- 4 percent of non-smokers (who did not smoke any cigarettes in past 30 days) reported using marijuana in the previous month;
- 46 percent of moderate smokers (who smoked on 1-19 days of the last 30 days) reported using marijuana in the previous month;
- 67 percent of frequent smokers (who smoked on 20 or more of the past 30 days) reported using marijuana in the previous month.

Does an “association” mean that one factor “causes” another?

Not necessarily. An association only means that two factors tend to occur together. If we know that a student smokes cigarettes, we know the odds are much greater that he or she also uses marijuana. But the Student Survey by itself does not allow us to say that smoking causes marijuana use or leads to marijuana use or contributes to marijuana use. It may well be true that smoking leads to later use of marijuana in some way, but we cannot know this from the Student Survey alone. We would need other kinds of research to support that claim.

How is this report organized?

This report is composed of 24 issue briefs. Each issue brief is designed to stand on its own. Each issue brief focuses on a particular behavior or experience and looks at how that focal subject is associated with a selected set of other behaviors and experiences. The 24 briefs, arranged by topic areas, are as follows:

School

Being Kicked, Bitten or Hit at School
Being Teased, Made Fun Of, or Excluded
Skipping School
Teachers' Respect for Students

Experiences of Abuse

Physical Abuse
Sexual Abuse
Date Violence or Threats
Date Sexual Violence

Violence

Carrying a Weapon
Hitting or Beating Up Another Person

Mental and Emotional Health

Feelings of Sadness
Hurting Yourself on Purpose
Suicide Thoughts or Attempts

Chemical Use

Smoking Cigarettes
Drinking Alcohol
Marijuana Use
Other Drug Use

General Health

Being Overweight
Physical Activity
Eating Fruit and Vegetables
Drinking Pop or Soda

Other Risk Behavior

Gambling
Sexual Activity

Relationships

Communication with parents

To create the set of behaviors and experiences included in each two-page brief, we chose a few of the most interesting questions from the different subject areas covered by the Student Survey. When you look at the tables in each issue brief, you will see that the subject areas are divided into “risk” and “protective” factors. Risk factors are often, though not always, associated with risky behaviors or situations. Protective factors are often, though not always, associated with healthy behaviors or situations.

Why do the brief reports focus only on 9th graders?

We chose 9th grade because this is a critical period in which many unhealthy behaviors have begun to emerge and because 9th grade students are asked more questions and provide a more complete picture than 6th grade students. In addition, some high-risk students have dropped out of regular high schools by 12th grade, and the participation rate for 12th grade students was lower than for the earlier grades.

What are the limitations of the Student Survey?

These reports are based on survey responses from students in regular public schools, charter schools and tribal schools. Students in alternative schools, area learning centers, juvenile correctional facilities and residential treatment programs were not included. In addition, young people who have dropped out of school are not represented, and those who miss lots of school due to illness or truancy may be under-represented. Furthermore, these reports present data based on all 9th grade students. Associations might look different in some cases if subgroups of students, such as males and females, were examined.

Where can I find this and other reports on the Minnesota Student Survey?

On the web, go to <http://www.health.state.mn.us/divs/chs/mss>.