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Virginia Adolescent Resiliency Assessment

**Risk and Resilience:
Positive Youth Development
In Orange County, Virginia**

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TABLE OF CONTENTS

Section	Page
Table of Contents	i
I. Introduction	1
II. Administration of the Orange County V.A.R.A.	4
III. Characteristics of Orange County teens and their families	6
IV. How Orange County teens spend their time	8
V. Personal safety and violence	10
Automobile safety	10
Weapon carrying	10
Violence	10
VI. Mental health issues	12
Depression	12
Suicide	13
Teen worries	15
Coping methods	16
VII. Alcohol, tobacco, and drug use	17
Alcohol use	18
Occurrence of heavy drinking	18
Tobacco use	18
Other drugs	19
VIII. Diet and exercise	21
Exercise	21
Team sports	22
IX. Perception of community, school, and friends	23
Perceptions of school	23
Educational plans	24
Friends	25
Friends and delinquency	26
Community attitudes	27
Community activities	27
X. Parent-teen relations	29
Communicating with parents about problems	29
Decision-making	29
Parental monitoring	29
Perception of Parental Values	30
XI. Sexuality	31
Contraception	32
Communication	32
Perceptions of the reasons teens do and do not engage in sexual intercourse	32
XII. Survey development, reliability, and validity	34
References	36

I. INTRODUCTION

Recent articles on children and teenagers report the all-too-familiar list of problems facing young people today. More people are realizing that no one segment of the community—neither parents nor schools nor religion—can be held solely responsible for the successes or the failures of its youth. Children’s development is shaped by multiple factors working together (Bogenschnieder, Small, & Riley, 1990), not just one factor in isolation. For this reason, it is the community’s responsibility to work as a whole to address the needs of young people and to create the kinds of

support, values, and competencies they need to grow up healthy in today’s world.

Researchers have identified factors at different levels within the community (individual, family, friends, school, work, and community) that have the potential to put young people at risk for developing problems (“risk factors”) and those which help to insulate or protect them from problems (“protective factors”).

FIGURE I-1 depicts the risk and protective factors that occur within several different spheres of teens’ lives.

FIGURE I-1: Risk and Protective Factors for Youth ¹

Protective Factors	Risk Factors
INDIVIDUAL	
Problem solving skills, intellectual ability	Anti-social behavior, hyperactivity
Self-esteem, self-efficacy, personal responsibility	Rebelliousness
Social/interpersonal skills	Social isolation
Religious commitment, involvement in church	Hedonistic values
	Television overexposure
FAMILY	
Close relationship with at least one person	Poor parental monitoring
Family Support	Distant uninvolved, inconsistent parenting
Parents as social resource	Unclear family rules, expectations, rewards
Parent communication	At home alone
FRIENDS	
A close friend	Association with friends engaged in antisocial behavior
A positive influence	Negative peer pressure
Similar age	More than 3-4 years in age difference
SCHOOL	
Achievement motivation	School transitions
Educational aspirations	Academic failure
Good relationships with teachers	Low expectations for students by teachers
Positive school climate	Absenteeism
Involvement in extracurricular activities	Desire to drop out
WORK	
Required helpfulness	Long work hours
Building marketable skills	Meaningless work
COMMUNITY	
Belonging to a supportive community	Low-socio-economic status
Bonding to family, school, and other social institutions	Complacent/permissive laws and norms
Involved in community organizations	Negative media influences
Non-parent adults who have positive involvement with youth	Low neighborhood attachment
High neighborhood monitoring	High mobility
	Low neighborhood monitoring

¹ Chart comes from Pittman and Wright, 1991. The factors are drawn from Benson (1990) and Bogenschneider et al. (1990).

Recognizing the importance of risk and protective factors, Orange County has taken the first step toward understanding their community's impact on teens. Representatives of Orange County have chosen to go straight to the source by asking teens themselves about perceptions of their families, education, values, friends, and community. The information provided in this report should be viewed as a whole. This report should not be used to applaud or blame any individual institution for the attitudes and behaviors of Orange County teens. Rather, the information provided should be used by the whole community to create a healthy environment for teens in the Orange County, by building on identified strengths.

Most adolescents manage the transition into adulthood successfully. The majority of young people emerge with a healthy sense of self, warm relationships with their parents, a capacity to make intelligent and responsible decisions, and with one or more close relationships with friends. However, some teens do encounter serious problems that disrupt not only their lives but also the lives of those around them (Steinberg, 1999).

The young person who approaches adulthood with a sense of confidence and purpose, well developed competencies, and who associates with friends who value achievement (academic, athletic, artistic, or otherwise) and responsible behavior, is at relatively low risk for substance abuse and other problem behaviors. In contrast, the young person who possesses few skills and little hope for the future, who associates with friends who engage in delinquent behaviors, and who spends a large part of his or her day isolated from adults, runs a greater risk for developing problem behaviors. Both the "high risk" and "low risk" adolescents are influenced greatly by the community in which they live. Their sense of self and their behaviors do not develop in isolation. For this reason, it is exceedingly important to understand influences on the adolescent's self-concept, social relations, and activity patterns. This information can help ensure that Orange County is a place that provides opportunities for positive development to all its youth.

<p>This report should not be used to applaud or blame any individual institution for the attitudes and behaviors of Orange County teens. Rather, the information provided should be used to create a healthy environment for Orange County teens by building on identified strengths.</p>

II. ADMINISTRATION OF THE ORANGE COUNTY V.A.R.A.

This report is the result of a joint effort between the Orange County Public Schools, Virginia Cooperative Extension, Virginia Tech's Department of Human Development, and the Orange County Office on Youth.

A 145-item survey, based on a survey process developed by Dr. Stephen Small, University of Wisconsin-Madison/Extension, was adapted to assess teen perceptions of the community and school, aspirations, concerns and attitudes about various aspects of their lives, mental and physical health, and the frequency of engaging in both dangerous and desirable behaviors. Questions from the 1998 Youth Risk Behavior Survey (Center for Disease Control) were also adapted for inclusion.

Ruth Anne Paisley, Director of the Office on Youth, Angela Huebner, Assistant Professor & Extension Specialist in the Department of Human Development at Virginia Tech, and Nikkiah Wyatt, Research Associate, Department of Human Development, Virginia Tech, worked with representatives from Orange County to review and revise the Virginia Adolescent Resiliency Assessment.

To obtain the most complete data, the decision was made to attempt to survey all the Orange County teens, rather than just a sample. All parents in the participating schools were notified about the purpose of V.A.R.A. through a passive consent form, which asked parents to contact the

school if they did not want their children to participate. The survey was conducted in Orange County in November, 2004.

To ensure accurate and honest responses, the surveys were anonymous and confidential. Students were told not to put their names on the surveys or on their computer answer forms, and each student was asked to place his or her answer form in a sealed box. The students were informed that participation in the survey was voluntary and they would not be punished if they did not want to complete the information.

Ninety percent (90%) of the students present the day the surveys were administered chose to participate. A total of 1,517 completed computer answer forms were forwarded to Virginia Tech. The answer forms were examined for obvious patterns, scribbling, too many unanswered questions (>25), etc. before they were submitted for data analysis. About 22% of the answer forms contained invalid responses and were discarded. The majority of these surveys were discarded due to incomplete data. A total of 1,183 surveys were included in the analysis.

Because teens were not obligated to answer every question, some data is missing. Overall, there were few omissions. Missing data, however, means sometimes percentages in the report will not sum to 100. When this occurs, keep in mind the missing percentage points can be attributed to missing data.

We were encouraged to find that, when asked “*How honest were you in answering the questions in this survey?*” 92% of students said they were honest on most questions.

1,517 of Orange County 7th-12th graders participated in the survey. A total of 1,183 surveys were included in the analyses.

III. CHARACTERISTICS OF ORANGE COUNTY TEENS AND THEIR FAMILIES

The 7th through 12th graders in Orange County public schools participated in the V.A.R.A. survey. The results of the V.A.R.A. survey presented here are based on the 1,183 of students who completed usable surveys. Overall, 90% of Orange County students who were present the day of survey administration participated. The 22% of the students not participating in the survey were students who were absent the day of the survey, whose parents did not consent to their teens' participation, who for various reasons turned in invalid response sheets, or those who chose not to participate.

Forty-three percent (43%) of all the students responding to the survey were male, and 57% were female. Twelve percent (12%) reported their ethnicity as "*Black or African-American*," 72% as "*White or Anglo or Caucasian*," 6% as "*Mixed race/biracial*," 5% as "*Other*," nearly 2% as "*Hispanic or Latino*," 2% as "*Native American*," and 1% as "*Asian*."

The percentage of Orange County teens responding to the survey is not equally distributed by grade. Twenty percent (20%) are 7th graders, 20% are 8th graders, 19% are 9th graders, 15% are 10th graders, 15% are 11th graders, and 11% are 12th graders.

The youth reported a number of different living situations. Fifty percent (50%) live with their mother and father (biological or adoptive), 22% live with a blended or step-family, 17% live with a single parent, 4% live with a relative, 4% live with mother half of the time and father half of the time, 1% live with a parent and another adult who is a non-relative, 1% live in a group or foster home, and 1% live alone or with friends.

Fifty-five percent (55%) of Orange County teens reported that their parents are **not** divorced or separated. About 6% reported that their parents are going through a divorce or have been divorced or separated within the last two years. Twenty-seven percent (27%) reported that their parents have been divorced for more than two years, while about 12% reported that their parents had never been married.

Seventy-seven percent (77%) of Orange County teens have mothers who are employed outside of the home either full- or part-time. Eighty-one percent (81%) reported having fathers who are employed outside of the home either full- or part-time. Among the teens who reported information about their parents' level of education, 76% reported that their fathers have at least a high school education, and 82% reported that their mothers have at least a high school education; 18% indicated that they did not know their father's education, and 14% did not know their mother's education; 6% reported that their fathers have less than a high school education, and 4% reported that their mothers have less than a high school education.

Most of the Orange County youth taking the survey reported that they receive C's or better on their report cards (93%).

When surveyed about health care issues, 93% of Orange County teens reported that they had an appointment with a doctor within the past year.

About 83% of the teens reported having had a dentist appointment within the last year. A majority had visited a doctor or dentist (99%

and 94% respectively) for a check-up at least once within the last five years.

IV. HOW ORANGE COUNTY TEENS SPEND THEIR TIME

Each school day, America's 20 million adolescents decide how they will spend at least forty percent of their waking hours when they are not in school. Those without adult supervision during this time stand a significantly greater chance of becoming involved in substance abuse, sexual activity leading to unwanted pregnancy and sexually transmitted diseases, delinquency, and violence than their peers who are engaged in constructive activities (Carnegie Council on Adolescent Development, 1992). Forty-two percent (42%) of Orange County teens reported that they spend at least 1-2 hours per day at home with no adults present.

School

- Participation in extracurricular activities during adolescence is linked to higher educational and occupational attainment in adulthood (Larson & Kleiber, 1993). Fifty-three percent (53%) of Orange County students said they “never” participated in school-based extra-curricular activities. About 22% of Orange County students reported participating in extracurricular activities on a daily basis; the remaining 25% participate on a weekly or monthly basis.
- Sixty-three percent (63%) of Orange County students said they study less than an hour a day or not at all. Thirty-seven percent (37%) of students reported studying 1-2 hours or more on a daily basis.

Family

- Thirty-nine percent (39%) of Orange County students said they “do things for fun with family members (other than watching television)” on a daily basis. Twenty-eight percent (28%) said they did this once or twice a week.

Friends

- Forty-six percent (46%) of Orange County students said they spent at least an hour or more with their friends on a daily basis. Another 29% said they spent time with their friends 1-2 times per week.

Jobs

- Twenty-one percent (21%) of Orange County teens said they work at a job for pay on a daily basis. Seventeen percent (14%) of Orange County teens say they work at least three hours or more per day.

Weekday Activities

- About 29% of Orange County students reported participating in “non-school clubs” once a month or more. Seventy-one percent (71%) reported that they *never* participate.
- About 38% of Orange County students said they participate in school or community based sports activities for at least an hour or more per day.

- Forty-five percent (45%) said they do volunteer work at least once a month or more. Almost 13% report doing volunteer work on a daily basis.
- Fifty-one percent (51%) of the students reported spending time once a month or more “*involved in church or other religious related activities.*”
- Nearly 41% said they watched television at least 3-4 hours a day.
- When asked “What is the one main reason that you do not participate more in organized community or school-based after-school activities?” 21% said, “I do not want to be involved,” 10% said “There are not enough activities, programs or facilities for teens my age,” 8% said “I don’t have transportation,” 8% said “I am working at a job for pay.”

V. PERSONAL SAFETY AND VIOLENCE

Personal safety and violence are areas of particular concern to many community members. These concerns are valid given that the leading causes of death among adolescents include motor vehicle accidents and violent incidences (Center for Disease Control, 1994; Tolmas, 1998; Dahlber, 1998). Recent reports indicate that the majority of youth violence peaks during the after school hours of 3:00 p.m. to 6:00 p.m. during weekdays and in the evenings on nonschool days (Juvenile Justice, 1999).

Automotive Safety

A study sponsored by the National Highway Traffic & Safety Administration examined reasons teen passengers choose not to wear seat belts. Reasons given include discomfort and lack of habit. Teens report that parental influence was a better predictor of seat belt use than peer pressure (Davies, Trout & Womack, 1997).

About 75% of Orange County teens said they wear seatbelts “*most of the time*” or “*always*.” The vast majority of Orange County students (77%) report never riding in a car driven by someone under the influence of alcohol or other drugs.

Weapon Carrying

In a 1993 survey, 8% of school-age youth nationwide reported that they had carried a gun during the 30 days preceding the survey. The main reason given for carrying a gun was self-protection (Elliot, Hamburg, & Williams, 1998).

A large majority (88%) of Orange County students reported that they did **not** carry a weapon during the past 30 days. Twelve percent (12%) reported carrying a weapon

of some sort during the past 30 days.

Violence

Violence has gained recognition as the most important public health and social problem facing the nation today (Tolmas, 1998). Violence refers to the threat or use of physical force with the intention of causing physical injury, damage, or intimidation to another person (Elliot, Hamburg & Williams, 1998). Kingery, McCoy-Simandle and Clayton (1997) report that students perceive violence within the schools as very common. The first annual White House report on school safety, released in 1998, said that although students are less likely to be victims of violence today than in years past, they are more likely to feel unsafe while in their schools. Nationally, the percentage of students reporting the presence of street gangs in their schools increased from 15% to 28% between 1989 and 1995.

Given these findings, we note that 15% of Orange County students report worrying about violence at school “*quite a bit*” or “*very much*” and another 13% reported worrying about gangs in school “*quite a bit*” or “*very much*.” When asked specifically about physical fighting, 34% reported being in a physical fight one or more times during the past year.

Fifty-four percent (54%) of Orange County teens reported picking on other kids by calling names, insulting them, or saying mean things about them in the past year; 12% reported being physically abused by an adult caretaker.

Fifteen (15%) of boys report being slapped or hit by a girlfriend and 9% of girls report this behavior from a boyfriend.

Additionally, 39% of girls and 14% of boys reported experiencing sexual harassment. Finally, the majority (97%) of Orange teens reported they had **not** tried to force someone else to have sex or any type of physical contact without their consent.

VI. MENTAL HEALTH ISSUES

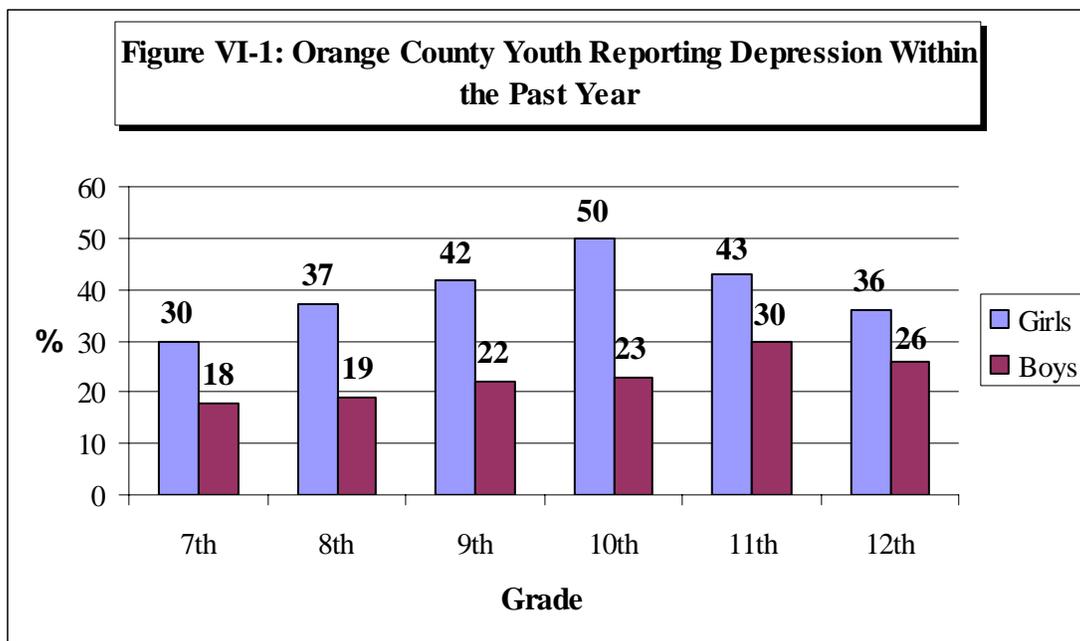
Some Orange County teens say they feel depressed or sad. Thirty-three percent (33%) of Orange County students answered “yes” when asked, “During the past 12 months did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?” Thirty-nine percent (39%) of the girls and 22% of the boys answered “yes” to the same question.

Figure VI-1 shows the difference between boys and girls who responded that they felt depressed. These percentages mean about one out of every three Orange County teens is depressed.

A Virginia Department of Health study (2000) found depression was the leading cause of hospitalization for 10-14 year-

olds and the second leading cause for 15-19 year-olds. Research suggests symptoms of depression are more prevalent for adolescent girls who are experiencing physical changes and school transitions at the same time (Koenig & Gladstone, 1998).

According to other national survey information, about one out of every four teens reports feeling depressed on a regular basis. It is estimated that 70-80% of depressed teens do not receive the treatment they need (Rohde, Lewinsohn, & Seeley, 1991). It is clear many Orange County teens are experiencing feelings associated with depression. For some teens these feelings are symptoms of more serious problems requiring professional help.



Suicide

Not all youth who experience depressive symptoms are at risk for suicide; nevertheless, it is important to recognize that suicide rates among adolescents have more than tripled since the early 1950's. According to national data, although as many as 30% of teens report having thought about suicide, only 5-10% have actually attempted it (Gans, 1990; Resnick, Bearman, Blum, Bauman, Harris, Jones, Tabor, Beuhring, Sieving, Shew, Ireland, Bearinger & Udry, 1997).

FIGURE VI-2 displays the percentage of Orange County teens by grade and gender that have made a suicide plan. Overall, 17% of Orange County teens said they had made a plan within the past year about how they would attempt suicide.

As this table illustrates, thinking about suicide is fairly common during the teen years. In fact, according to a recent study conducted by the Virginia Department of Health (2000), suicide was the third leading cause of death for young people. The same study also reported that the suicide rates for Virginia youth ages 10-19 have increased 32% since 1975.

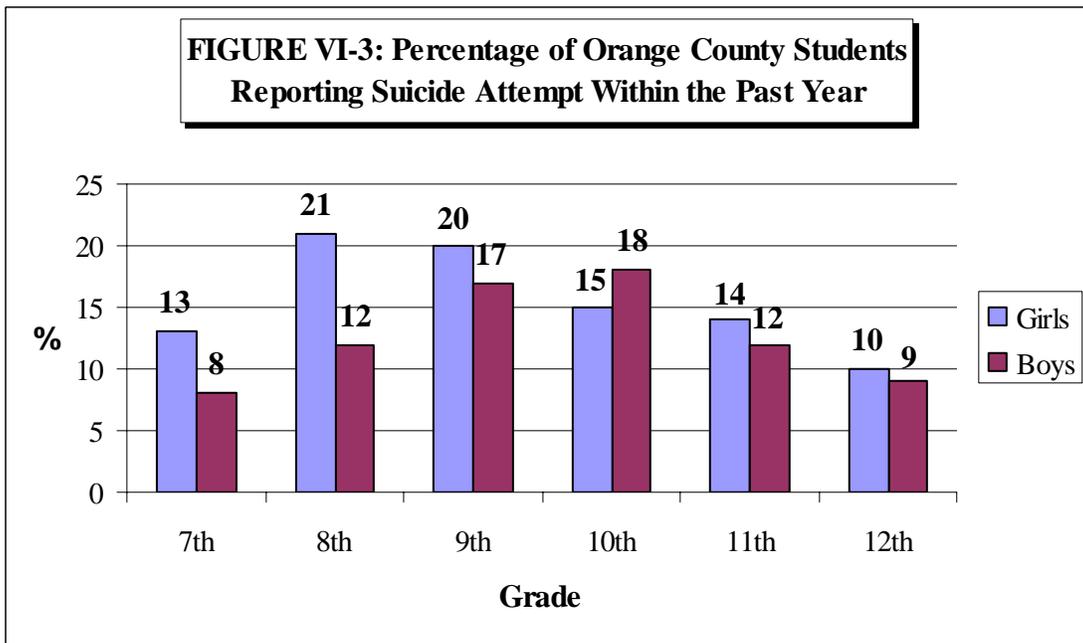
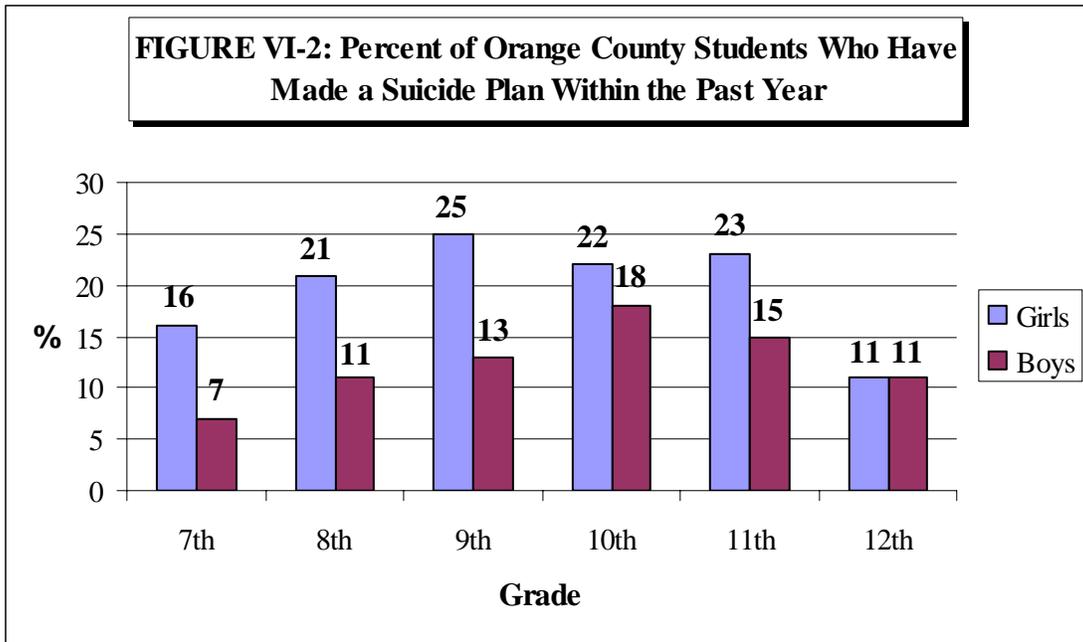
Experts speculate that in adult populations, there are about 6-10 suicide attempts for every suicide actually completed. For teens, there may be between 50-100 attempts for every

completion (Garland & Zigler, 1993). In general, girls are 4-8 times more likely to attempt suicide than boys, but boys who make attempts are more likely to complete suicide (Sliverman & Mans, 1995). This may be because boys tend to use more violent methods such as hanging or shooting while girls are more likely to use slower or less lethal methods such as poison or pills.

When Orange County students were asked how many times in the past year they had actually attempted suicide, 16% of girls and 13% of boys responded that they had attempted suicide in the past year. We don't know what these attempts consisted of or how life threatening they were. Overall, 86% of Orange County teens said they had never attempted to kill themselves.

FIGURE VI-3 illustrates the percentage of Orange County teens by grade and gender that have attempted suicide within the past year. The frequency of attempts is highest for 8th and 9th grade boys and girls and 9th and 10th grade boys.

Taken together, the data show that feelings of depression and sadness as well as the potential for suicide are problems for both girls and boys of Orange County. Knowing and being able to recognize the signs of depression and potential suicide are critical skills for adults working and living with young people.



Teen Worries

What do most Orange County teens worry about? **Figure VI-4** shows what teens said they worry about either “quite a bit” or “very much.” The pattern of worry is similar for boys and girls on some topics. Differences occur on worries

about getting good grades, looks, fitting in, getting a good job, family income, race relations and violence at school. With the exception of getting along with people of other races, girls report worrying more about the listed topics than boys.

Figure VI-4: Percent of Orange County Students Responding That They Worry “Quite a Bit” or “Very Much” About:

TOPIC	All Students	Girls	Boys
Getting good grades	72%	80%	62%
How I look	44%	52%	32%
Getting a good job when I finish my education	43%	45%	41%
That my family has enough money to get by	32%	36%	27%
How my parents get along with each other	24%	14%	23%
That I might get AIDS, HIV or another sexually transmitted disease	20%	21%	18%
Getting along with people of other races	20%	19%	21%
Violence at school	15%	17%	12%
Fitting in	16%	18%	14%
Gangs in my school	13%	15%	11%
Violence in my home	10%	10%	10%

Coping Methods

The way in which teens cope with stress is an important indicator of their overall resilience. Orange County teens were asked how often they used a variety of coping strategies when they were facing difficulties or feeling tense. The effectiveness of any one coping strategy depends on the type of stress. Some

distracting strategies are useful in situations where teens have no control over the outcome. Other, more active problem solving strategies may be useful when teens have some control over the situation. **FIGURE VI-5** illustrates the percentage of students who reported various types of coping strategies.

FIGURE VI-5: Percentage of Orange County Teens Using Various Coping Strategies

STRATEGY	All Students	Girls	Boys
Talk to one of my friends	24%	30%	15%
Listen to music, sleep, avoid people or watch television	26%	23%	29%
Talk to my parents	9%	10%	8%
Get angry and yell at people or swear	9%	7%	11%
Try to see the good in a difficult situation	6%	6%	7%
Try not thinking about it	6%	5%	7%
Eating, drinking, smoking, using drugs or medication	7%	8%	6%
Exercise	6%	5%	8%
Pray/meditate or talk to my religious leader	5%	5%	6%
Talk to teacher or trusted adult	2%	1%	3%

Personal Values

The vast majority of Orange County teens (94%-97%) think it is “*somewhat important*” or “*very important*” to finish high school, get good grades and get a good job. Ninety percent (90%) hold the same opinion about continuing their education

past high school. About sixty-three percent (63%) think it is “*somewhat important*” or “*very important*” to be involved with sports, school events or community-based activities.

VII: ALCOHOL, TOBACCO & DRUG USE AMONG ORANGE COUNTY TEENS

Today's teens are bombarded with mixed messages about using alcohol and other drugs. One minute they hear the simple message "Just say no!" or "Don't drink and drive." The next minute television commercials, magazine ads, or billboards send the message that drinking is "fun," "sexy," "romantic," or "cool." In addition to these messages, adults they know might be using alcohol or pills to relax, to rid themselves of stress, or to socialize.

According to their reports, alcohol is the drug of choice among Orange County teens. Although it is commonly believed that alcohol is less harmful than other drugs, we should remember that more Americans die each year from alcohol and alcohol-related illnesses and accidents than from the use of all illegal drugs combined. In fact, motor vehicle deaths involving alcohol are the leading cause of death for young people ages 15-19.

One Orange County survey item asked, "*During the past 30 days, how many times did you drive a car or other vehicle when you were under the influence of alcohol or other drugs?*" Ninety percent (90%) of teens reported

they had never done this activity; 10% said they had done so at least once.

Another question asked "*During the past 30 days, how many times did you ride in a car or other vehicle driven by someone who was under the influence of alcohol or other drugs?*" Seventy-seven percent (77%) of Orange County students said they had not engaged in this behavior during the past month; 23% said they did this at least once during the past month. Girls and boys appeared to engage in this behavior equally (both 23%). This behavior was reported most frequently by 9th and 11th grade boys and girls (25% and 27%; 32% and 30% respectively), and 9th and 11th graders (26% and 30% respectively each). Note that this question does not reveal with whom the student is riding. Students may be riding with other students who are under the influence, or they may be riding with impaired adults.

Availability of alcohol, tobacco and other drugs is an important factor to consider. According to a national study, 9th graders, 12th graders, and 18-20 year-olds all think it is easy to get alcohol from a sibling, someone else of legal drinking age, or at a party (Waganaar, Toomey, Murray, Short, Wolfson, Jones-Webb, 1996).

Orange County teens were asked how easy it would be for them to obtain various drugs. **FIGURE VII-1** lists the drugs of choice and the percentage of students reporting that it would be “*very easy*” or “*easy*” for them to obtain them:

FIGURE VII-1: Orange County students who reported that it would be “*very easy*” or “*easy*” to get the following substances:

Cigarettes	54%
Alcohol	52%
Marijuana	37%
Illicit drugs	21%

Alcohol Use

Nationally, 80% of all high school students report experimenting with alcohol (Cummings, Pechacek, Shopland, 1994). Thirty-three percent (33%) of Orange County students said they use alcohol at least once a month or more. Thirty percent (30%) of Orange County teens who reported drinking said they had their first drink at age ten or younger, and 30% said they had their first drink between the ages of eleven and fourteen. Orange teens reported getting alcohol from parents (12%) or friends (6%).

Occurrence Of Heavy Drinking

Heavy drinking was defined as having five or more drinks in a row at one time. A “drink” is defined as a glass of wine or beer, a bottle or can of beer, a shot of liquor, or mixed drink. The survey question read “*During the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours?*” **FIGURE VII-2** illustrates heavy drinking by gender and grade level. Nineteen percent (19%) of Orange County youth reported heavy drinking at least once during the past month. The frequency of heavy drinking generally increases between grade levels and boys usually report more of this behavior than

girls. Eighteen percent (18%) of students said they had come to school high on drugs or alcohol at least once.

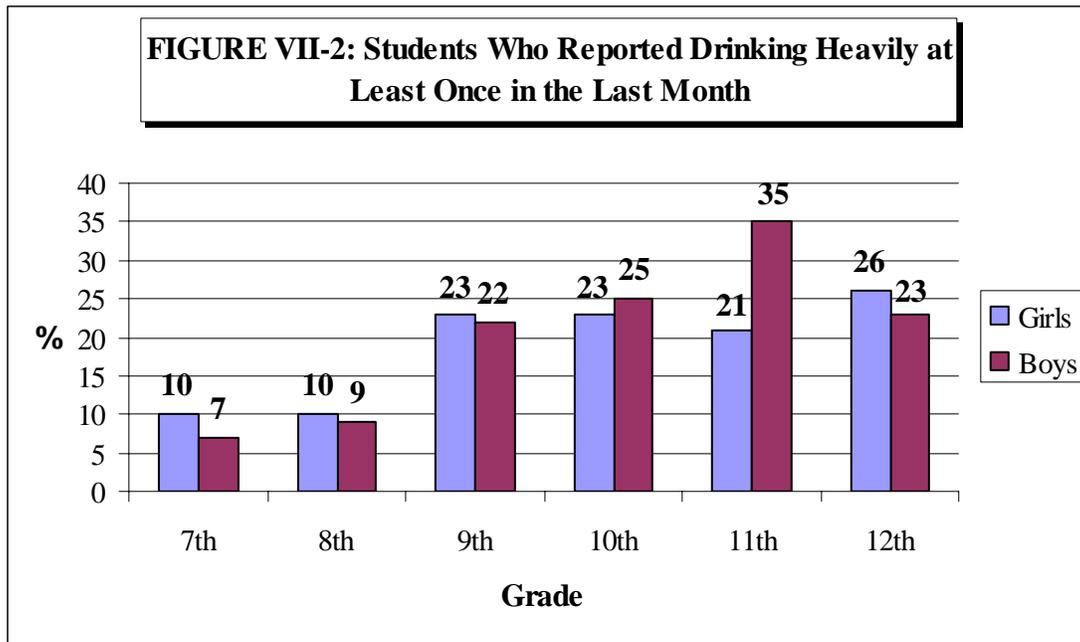
Boys reported this behavior more frequently than girls, but not by much (19% and 17% respectively). Boys in 9th, 10th, 11th and 12th grade were most likely to come to school under the influence of drugs or alcohol (22%, 26%, 34%, and 27% respectively reported doing so at least once). Twenty-eight percent (28%) of 11th grade girls reported coming to school under the influence of substances.

Tobacco Use

Over three million U.S. adolescents are current smokers (Cummings, et al., 1994). Tobacco (smoked or chewed) appears to be the second most commonly used substance by Orange County teens. About 9% of Orange County students report using tobacco products on a daily basis. Sixty percent (60%) of Orange County teens said that they had never tried cigarettes. Of those who smoke, 28% reported having their first cigarette between the ages of eight and ten; 58% said they had their first cigarette between the ages of 11 and 14. About 31% of those who smoke, said they borrowed their cigarettes from friends or had someone else buy them for them.

FIGURE VII-3 shows the percentage of students by grade and gender that smoke cigarettes or use other tobacco products at least once a month or more. This is important information because individuals

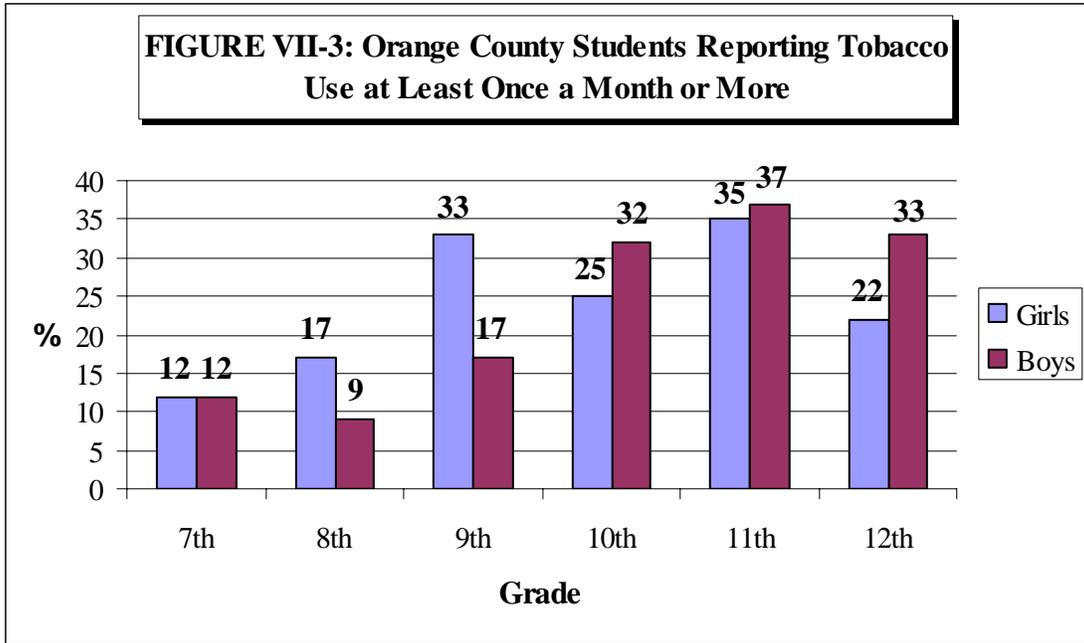
who start smoking during adolescence are more likely to continue smoking into adulthood (Chen & Kandel, 1995). Boys report this behavior more frequently than girls.



Other Drugs

Johnston, Bachman & O’Malley (1997) looked at the percentage of 12th graders who reported *ever* having used various illegal drugs. They found that 80% reported alcohol use, 65% reported cigarette use, 45% reported marijuana use, 18% reported inhalant use, 16% reported stimulant use, 7% reported cocaine use, and 2% reported heroin use.

In the Orange County, 15% of all students said they had smoked marijuana at least once during the past 30 days, 6% said they had used cocaine during the past 30 days, and 14% said they had used inhalants during the past 30 days. Seven percent (7%) said they had used steroids at least once in their lifetime, and 5% said they had used a needle to inject substances.



VIII. DIET & EXERCISE

According to one national study, between 50% and 70% of teenage girls diet (Gralen, Levine, Smolak, & Murnen, 1990). Data from the 1997 Youth Risk Behavior Survey show that, regardless of ethnic background, teenage girls were more likely to identify themselves as overweight than were males (34% and 22% respectively). In addition, the study found that most female adolescents (60%) were attempting to lose weight, with 46% reporting dieting. In Orange County, 54% of boys and 53% of girls report feeling that their weight is “*about right*.” Girls reported feeling that they were “*slightly overweight*” slightly more frequently than boys (28% and 23% respectively).

Parents, educators, and others who care for teens need to be aware of body image issues and dieting behavior among teens. Although unhealthy eating and unnecessary dieting may be prevalent among teenagers, the incidence of the two most severe eating disorders, anorexia nervosa and bulimia nervosa, are rather small (Fisher, Golden, Katzman, Kriepe, Rees, Schebendach, Sigman, Ammerman, & Hoberman, 1995). Anorexia and bulimia are far more common in girls than in boys (Steinberg, 1999).

FIGURE VIII-1 shows the weight loss methods of choice for Orange County teens that report dieting.

WEIGHT LOSS BEHAVIOR	Girls	Boys
Exercising	62%	53%
Eating less	48%	27%
Fasting, Use diet pills, powders, or liquids, vomiting or laxative use	18%	11%

Exercise

Research suggests children and adolescents who develop habits of exercising regularly may continue those habits into adulthood, reducing some health risks (e.g. osteoporosis, obesity, degenerative heart disease, etc.). Physical fitness is also connected with mental health and well being at all ages (The President's Council on Physical Fitness and Sports Report, 1997).

Fifty-seven percent (57%) of Orange County teens reported “*exercising or participating in physical activity for at least 20 minutes*” three or more days a week. We noted that 46% of those who exercised three times a week or more reported feeling satisfied with their weight or said that they are trying to stay at their current weight.

Team Sports

Fifty-six percent (56%) of Orange County teens reported involvement in at least one team sport during the past year. Fifty-four

percent (54%) of girls were involved in sports, and 59% of boys were involved.

IX. PERCEPTION OF COMMUNITY, SCHOOL, AND FRIENDS

Young people do not grow up in isolation; they grow up in environments. Their families influence children first and foremost, but friends, school, work, and the communities in which they live are also major influences. Adolescents are especially influenced by their communities because they are beginning to spend less time with their families and more time with their friends, in school, church, and other community contexts (Brown, 1990). For this reason, it is important to understand teens' perceptions about these influences.

A majority of Orange County teens (66%) said there were not enough “*fun things for kids my age to do*” in the communities. This perception steadily increased with age, ranging from 50% for 7th graders to 77% for seniors in high school.

Perceptions of School

Udry and his colleagues (1997) found that feeling connected to school (close to school and the people there, as well as

feeling fairly treated) is the only school environment issue that acts as a protective factor for teens.

We asked Orange County teens questions designed to determine how connected they felt to their school. **FIGURE IX-1** shows how teens responded to questions about their investment in their school.

About 49% of Orange County students say they “*often attend school events such as football games, dances, or concerts.*” While Orange County students generally (80%) report feeling encouraged by their teachers, 38% of the students report that they do not enjoy school. Many might gain from enhanced school efforts to help teens feel connected to their school through activities. Thirty percent (30%) of Orange County students report feeling a lack of respect from teachers; thus, it may be helpful to work toward improving teacher-student relationships. About 71% of Orange County students report being satisfied with their education.

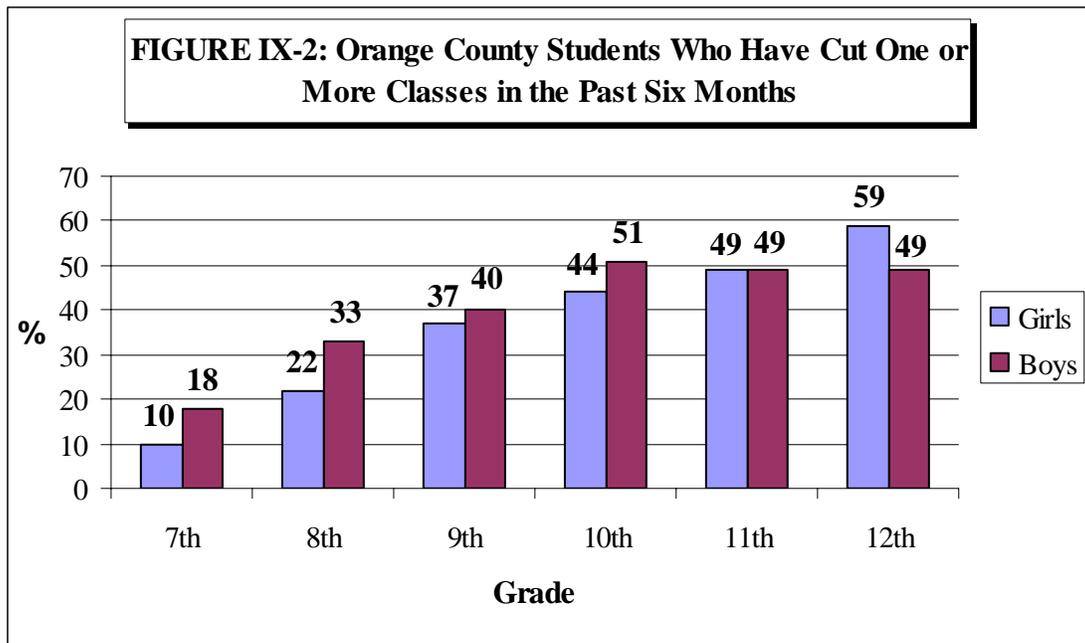
FIGURE IX-1: Orange County teens who said they “agree” or “strongly agree” with the following statements:

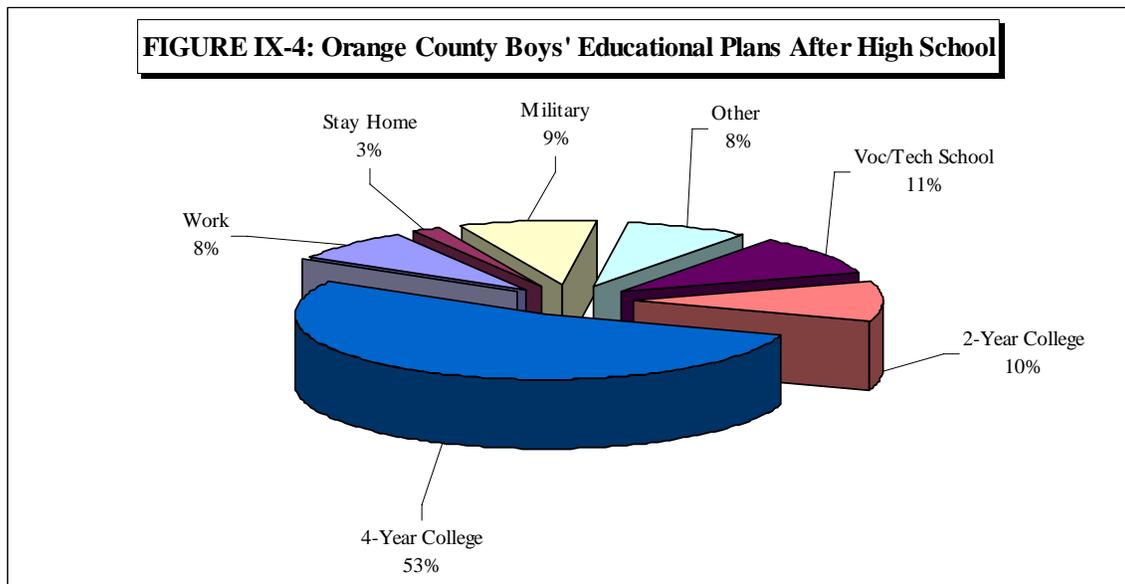
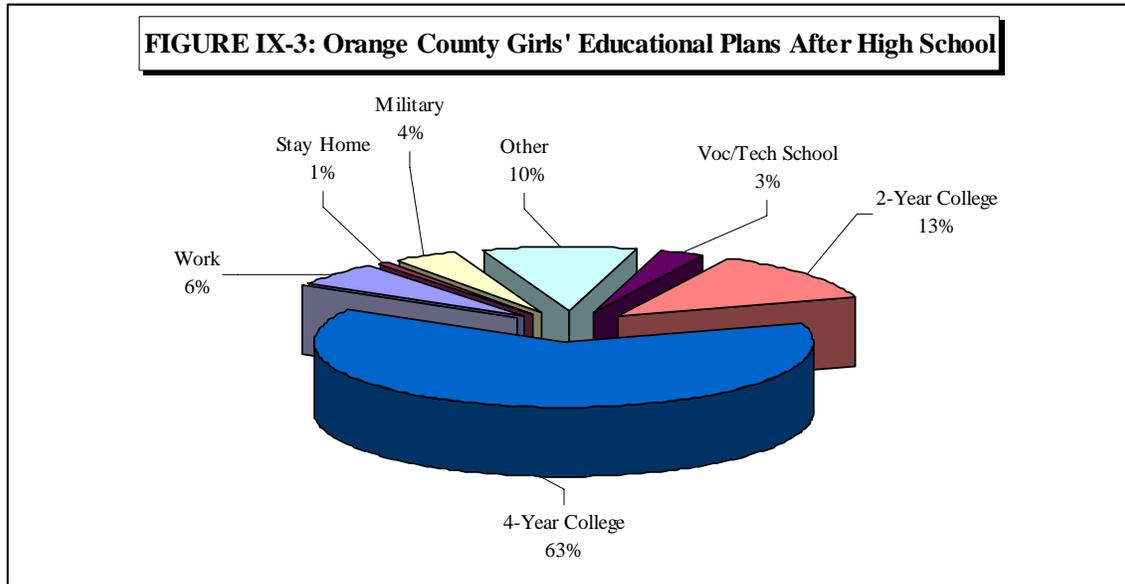
Teachers in my school encourage me to do and be the best I can.	80%
I believe I am getting a good, high quality education at my school.	71%
Teachers in my school respect and listen to me.	70%
I enjoy going to school.	62%

Educational Plans

Figure IX-2 shows the percentage of students who have cut one or more classes in the past month. Reports of cutting class generally increased in the older teens. **Figures IX-3** and **IX-4** show Orange County girls’ and boys’ educational plans after high school graduation. The majority

of teens reported some plans for continued education after high school. Attending a four-year college was by far the most common choice for both girls and boys (63% and 53% respectively). Attending a two-year college was the next most common choice for girls (13%) and boys (10%).





Friends

Because friends are so influential, we want to understand how teens perceive their friends (Brown, 1990). Despite friends' influence on daily decisions, research shows teens are still more likely to go to adults than to friends for advice about decisions with long-term affects, such as college choice and career decisions

(Kandel, 1986; Sebald & White, 1980). Having at least one good friend has consistently been shown to be a protective factor for teens (Bogenscheider et al., 1991). Eighty-nine percent (89%) of Orange County students said they “*have at least one good friend they can count on.*”

FIGURE IX-5: Orange County Teens' Perceptions of Friends' Values				
Among the friends that you spend time with, how important is it to:	Not at all important	Not really important	Somewhat important	Very important
Finish high school	4%	5%	21%	70%
Continue education past high school	6%	8%	38%	48%
Be involved with extracurricular activities	14%	18%	32%	36%
Get a good job	5%	8%	25%	62%

Friends and Delinquency

We know conformity to peers increases from middle childhood to middle adolescence and peers can be especially influential in situations involving problem behavior (Clasen & Brown, 1985). Whether the teens' peers encourage or discourage misconduct varies according to what "crowd" the student belongs (Clasen & Brown, 1985).

With this research in mind, we asked Orange County teens several questions about peer pressure. We found 33% of Orange County teens said they were at

least "*sometimes*" afraid of doing things their friends wouldn't approve of, but 80% said they "*rarely*" or "*never*" let their friends talk them into doing things they really don't want to do.

FIGURE IX-6 illustrates Orange County teens' reports of their own delinquent actions separately by gender. As you can see, boys usually reported greater participation in delinquent activities than did girls.

FIGURE IX-6: Orange County Teens reporting their delinquent behavior one or more times during the past six months		
BEHAVIOR	7 th through 12 th grade	
	Girls	Boys
Cheated on a class test	61%	54%
Cut class	35%	39%
Took something without paying for it	23%	25%
Purposely damaged property	19%	31%
Got in trouble with police	17%	27%
Drove a car w/o owner's permission	13%	17%
Run away from home	15%	15%
Broke into a car or building	10%	14%
Use a fake ID	8%	12%

Community Attitudes

Although friends and family are important, teens' attitudes and behaviors are also shaped by their community's values.

When we asked Orange County students about their perceptions of community values related to dropping out of school and teen pregnancy, 63% said "*dropping out of high school is not acceptable behavior in the opinion of most people in our community.*" Another 32% said that dropping out "*is not encouraged, but is acceptable in the opinion of most people in our community.*" When asked about teen pregnancy, 58% of Orange County teens said that it "*is not acceptable behavior in the opinion of most people in our community,*" 38% reported they thought it was "*not encouraged, but is acceptable behavior in the opinion of most people in our community,*" and only 4% said that it was "*encouraged by most everyone in our community.*"

The presence of at least one caring adult (in addition to parents/guardians) has consistently been shown as a protective factor for youth (Walker & White, 1998). Many Orange County teens (64%)

reported having at least one non-parent adult they could go to if they were having a serious personal problem.

Neighborhood monitoring is another protective factor. Neighborhood monitoring is the idea that non-parent adults are paying attention to what young people are doing, and that they would not hesitate to inform parents about teens' actions. In the Orange County, 73% of students "*somewhat agreed*" or "*strongly agreed*" with the statement that "*If I were to do something wrong, adults in my town, school, or community would probably tell my parents or guardians.*"

Community Activities

As mentioned before, 58% of Orange County teens report **not** working at a job for pay. About 23% said they spent over three hours a day at home alone (5% said they spend *seven* or more hours each day at home alone). Only about 35% of Orange County teens said they participated in school- or community-based sports for an hour or more each day, and only 7% said they participated in a school-related, non-sport activity for an hour or more each

day. Most teens (71%) said they **never** participated in non-school related clubs, such as 4-H or Scouts. In addition, 45% of teens reported doing volunteer work more than once a month.

Only 10% of Orange County teens said they strongly agreed there were enough fun things in the community for kids their age, and another 21% said they agreed somewhat. This means the majority of

teens (69%) feel there are **not** enough fun activities for them in the community. Dissatisfaction with availability of activities seems to increase with age: 32% of 7th graders and 57% of 12th graders said they strongly disagreed. These findings have strong implications for increasing emphasis on or developing appealing and accessible after-school programs for Orange County teens, especially as they increase in grade level, as well as age.

X. PARENT-TEEN RELATIONS

Many parents talk about the challenges and joys they encounter raising teenagers. Researchers and clinicians, too, are interested in the topic, and many have written about the complicated relationship between parents and teens. Parents often wonder if teens give as much thought to the relationship as they do. In Orange County, the majority of students (76-92%) reported their parents were good parents, they cared, and they respected the teens “most of the time” or “always”.

Orange County teens also have some concerns about their families. Forty-eight percent (48%) say they worry at least some about their family’s level of income; 36% say they worry at least some about how well their parents get along with each other; and 16% say they worry at least some about violence in the home.

Communicating with Parents About Personal Problems

The majority of Orange County teens report that they communicate with their parents about some important topics. Many of the students reported talking to their parents “sometimes,” “often” or “very often” about issues like teachers or classes (73%); their career or educational plans past high school (75%); and things they enjoy (76%).

There seem to be some “taboo” topics, however, such as drugs and sex. About each of those topics, 55-60% of teens said they “never” or “rarely” talk to their parents. Forty-four percent (44%) of Orange County teens said they “never” or “rarely” talk to their parents about personal problems or concerns, and 43% said the same about dating.

Decision-making

Research shows teenagers who are the most competent and responsible and who have the highest self-esteem are more likely to have parents who allow them to express their opinions, involve them in making decisions and rules, and explain the reasons behind family rules and discipline (Demo, Small, Savins-Williams, 1987). By involving youth in making decisions, parents teach their teens how to make important and wise decisions under their watchful supervision.

The survey question, “In general, how are most important decisions made between you and your parent(s) or other adult you live with (for example, what time you need to be home at night or where you can go with your friends)?” reveals four different patterns of decision making between parents and teens. The majority of teens (64%) reported having some discussion with their parents about decisions. Nineteen percent (19%) said their parents tell them “exactly what to do”; 12% said, “They trust me to decide for myself”; and 3% said, “They don’t care what I do, so I decide for myself.” We were encouraged that over half of Orange County teens reported having some input in decision-making.

Parental Monitoring

Recent research suggests parents’ supervision and awareness of a teen’s behavior and whereabouts (known as *parental monitoring*) can be an important factor in preventing adolescent problem behavior. Those researchers found higher levels of parental monitoring are related to lower rates of sexual activity and to lower levels of alcohol and drug use (Pettit,

Bates, Dodge, & Meece, 1999, Rodgers, 1999).

We included questions in the survey designed to assess teens’ perceptions of how well they were monitored by their parents. Teens were asked to say how often they talked with parents about their plans, if they are required to call home if

they will be late, and how well parents get to know their friends and friends’ parents.

FIGURE X-1 shows the students’ perceptions of how parents monitor their behavior in various important aspects of their lives.

FIGURE X-1: Orange County Teens Reporting Their Parents Monitor Their Behavior “a lot of the time” or “always” in the Following Ways:	
My parent(s) know where I am after school.	88%
I am expected to call my parent(s) to let them know if I am going to be late.	86%
When I go out at night, my parent(s) know where I am.	84%
My parent(s) know who my friends are.	73%
My parent(s) monitor my television/computer/internet use.	58%
My parent(s) know the parents of my friends.	52%

Orange County teens generally seem to perceive a great deal of monitoring by their parents, and we know this can provide a powerful protective factor in the lives of these teens. With regard to knowing their friends’ parents, television, and especially Internet use, Orange County teens seem to perceive less monitoring. Considering the availability of inappropriate information on the Internet, it may be important for Orange County parents to pay closer attention to teens’ computer use. One option for parents may be choosing to keep computers in family rooms rather than in teens’ bedrooms.

We must emphasize that, in this case, teens’ perceptions may be more important than their parents’ actual behavior. It is also significant to point out that effective parental monitoring of teenagers does not mean that parents must always be present, nor does it suggest that parents should be overly intrusive in the lives of their kids. Rather, parental monitoring implies that

parents show an active interest in the lives of their children, enforce family rules, and raise issues that concern them.

Perception of Parental Values

When asked about their perception of parental values related to drinking alcohol underage, 80% of Orange County students “strongly agreed” or “agreed” that “My parents think it is wrong for teens to drink alcohol before they are 21 years old”. When asked about their perception of parental values related to premarital sex, 75% of Orange County students “strongly agreed” or “agreed” that “my parents think it is wrong for teens my age to have sexual intercourse if they are not married”. The vast majority of Orange County teens (92%-97%) believe their parents think it is “somewhat important” or “very important” to finish high school, get good grades, go to college and get a good job; 67% reported that parents think it is “somewhat important” or “very important” to be involved with sports, school events, or community or school-based activities.

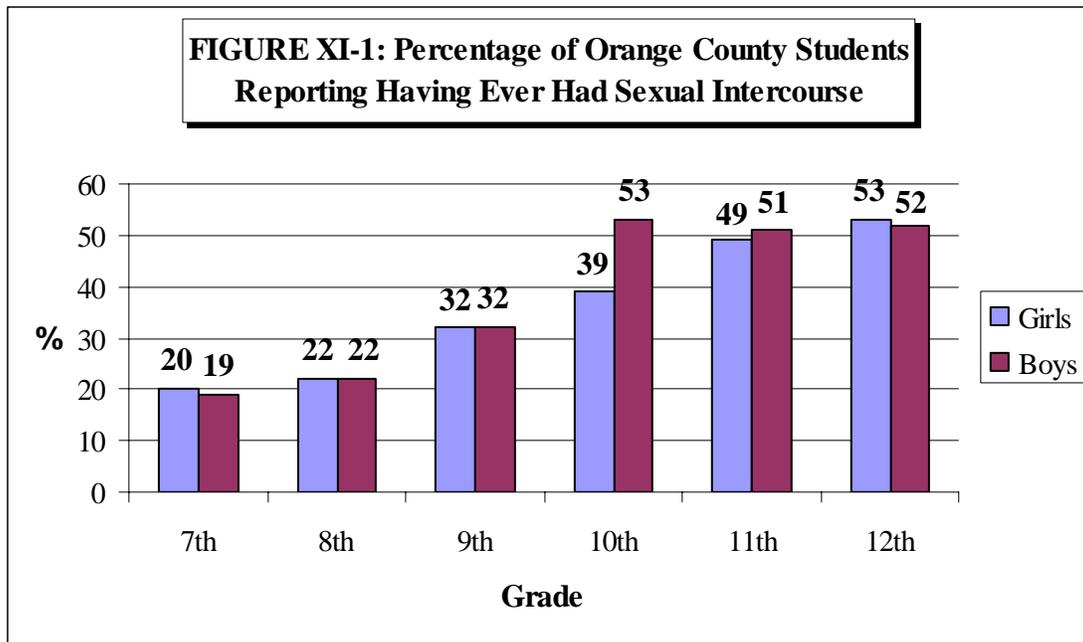
XI. SEXUALITY

The United States has the highest teen pregnancy, childbirth, and abortion rates of any industrialized Western nation. Studies suggest that about one-third of all boys and one-quarter of all girls have had sexual intercourse by age fifteen (Miller & Moore, 1990). Age at first intercourse varies widely by ethnicity and region.

In Orange County, 35% of students said they had had sexual intercourse. “Sexual intercourse” was not defined. **FIGURE XI-1** shows the percentage of students by gender and grade that said they had had sexual intercourse. In general, the percentage of teens reporting

intercourse increases with increasing grade level. Reports range from 19% of 7th grade boys to 53% of 12th grade girls. Forty-two percent (42%) of those Orange County teens that said they were sexually active reported having had only one sexual partner. Twenty-four percent (24%) of sexually active Orange County teens said they had had between three and five partners; 16% specified six or more.

Of those teens that reported having had sex, 28% had their first experience at or before age 12; 56% said they had their first experience between ages 13 and 15; 16% said their first experience was at 16 or older.



Contraception

In national studies of late adolescent boys, 40% reported using either no contraception or an ineffective method (e.g. withdrawing before ejaculating) the first time they had sex (Miller & Moore, 1990). Nearly one-sixth of all 15- to 19-year-old sexually active girls reported never having used any contraception at all (Chilman, 1990; Hayes, 1987).

One of every four sexually active teens in the U.S. contracts a sexually transmitted disease before high school graduation (Gans, 1990). Early, unplanned pregnancy or parenthood affects the future life prospects of the young parents, and it can also put the baby at higher risk for both short and long-term health and social problems.

Of those Orange County teens that are currently sexually active (defined as having had sex within the past 30 days), 43% said they did not use a condom during their last sexual encounter; 42% said they “never” or “rarely” use other forms of birth control.

Communication

Research on parent-teen communication about sexuality has produced mixed results. Some studies have found that young people who talk with their parents about sexuality and their values regarding it are less likely to be sexually active, especially if the values parents convey discourage early sexual activity. Most people would agree that open parent-teen communication about sexuality is desirable. In fact, most parents and teens say that they would like to talk more openly and more frequently about sexuality. Do most Orange County teens talk to their parents about sexuality? About 40% of teens in this community

said they talked to their parents at least some about sex and/or birth control during the past year. Sixty percent (60%) said these conversations “rarely” or “never” occurred.

Perceptions Of The Reasons Teens Do And Do Not Engage In Sexual Intercourse

What teens think about why their peers abstain from or participate in sexual intercourse can give us insight into understanding why some teens are sexually active while others are not. Moreover, if we wish to design programs that prevent or delay the occurrence of sexual intercourse or help teens make responsible decisions about sex, it is critical for us to understand the consequences and benefits teens associate with it.

FIGURES XI-2 and **XI-3** list the perceptions Orange County teens have about why teens do and do not have sexual intercourse. Teens were asked to pick one statement from nine choices that best describes what they thought was the “one main reason why teens do not have sexual intercourse.” Teens were also asked to describe the “one main reason why teens do have sexual intercourse.” It is important to emphasize that teens were only allowed to pick one choice from the statements presented in the figure. These responses are separated by those teens who are sexually active and those who are not.

In Orange County, the responses from sexually active and sexually non-active teens were similar. Fear of pregnancy was the most commonly cited reason both sexually active and non-sexually active teens for not engaging in sex. A large percentage of both ranked curiosity and pleasure as the main reason why teens engage in sexual intercourse.

FIGURE XI-2: What Do You Think Is The One Main Reason Why Teens Your Age Do Not Have Sexual Intercourse?

STATEMENT	Not sexually active (N=914)	Sexually Active (N=224)
They or their partner might get pregnant	29%	27%
They want to wait until they are ready	23%	22%
They don't want to get AIDS, HIV, or another sexually transmitted disease	13%	12%
They think it is morally wrong or it is against their religion to have sex outside of marriage	12%	13%
Their parent(s) don't approve	7%	5%
They are afraid they will get caught	7%	15%
They don't need it to make them happy	6%	3%
They are not in love with anyone yet	4%	3%
Their friends don't approve	.5%	0%

FIGURE XII-3: What Do You Think Is The One Main Reason Why Teens Your Age Have Sexual Intercourse?

STATEMENT	Not sexually active (N=914)	Sexually Active (N=224)
It gives them pleasure	31%	37%
They want to see what it is like	27%	19%
They want to fit in with their friends	11%	7%
It helps them to keep a boy/girlfriend	11%	6%
It makes them feel loved	6%	7%
It's part of a mature, loving relationship	4%	16%
There is nothing else to do	5%	3%
It makes them feel like an adult	3%	4%
They are forced or pressured	1%	2%
They want to have a baby	.3%	1%

XII. SURVEY DEVELOPMENT, RELIABILITY, AND VALIDITY

Many people wonder how accurate the V.A.R.A. survey is. There is no simple scale of accuracy, and no way to say for sure how “true” the information we gathered is. Instead, we will define *reliability* and *validity* (research measures of accuracy), describe what we did to make the data as accurate as possible, and explain the strengths and weaknesses the survey process we used in Orange County.

When people ask about a survey, “Does it measure what we intended to measure?” they are asking whether or not the survey is *valid*. In other words, if we ask “Are you happy?” does that accurately measure happiness? We consider whether the question is specific, easy to understand, and whether what is described is easily quantifiable. *Reliability* refers to the consistency of a survey. If a survey is reliable, the same students will give similar responses to the same questions if tested multiple times. A study must be reliable to be valid. Whenever possible, we used well-established questions that had previously demonstrated reliability and validity in the V.A.R.A. survey.

With any self-report survey, there is the possibility that a small percentage of those surveyed will not take the survey seriously. This usually accounts for less than one to two percent of the total. Fortunately, most teenagers who do not take the survey seriously are not subtle with their responses. They typically exaggerate their responses so much that their surveys are easy to identify and remove.

All self-report surveys are susceptible to some bias in reporting. For instance, there

might be a slight under reporting of socially undesirable behaviors (e.g. illegal drug use) and a slight over reporting of behaviors that participants perceive as socially desirable (e.g. sexual activity for early adolescent males) (Harrel, 1985). Studies indicate that such under reporting is small—ranging from two to ten percent—depending on how the survey is administered and how the questions are asked.

In addition, because our memories are imperfect, there is a tendency for people to be somewhat less accurate on more specific questions. For example, most students can accurately remember if they have ever smoked marijuana. However, they may answer less accurately to a more specific question, such as, “How many times have you smoked marijuana in the past year?” This is mostly a result of problems in remembering details, rather than a lack of honesty.

Many people think that the survey questions alone are what make the answers reliable and valid. However, the survey conditions—how it is administered—are critical to determining the accuracy of the data. We address the key components of survey conditions by making sure students know their answers are confidential and anonymous (this helps ensure honesty), and by making sure that those who administer the survey to the students are knowledgeable about it, believe it is important, and let the students know the survey’s importance and that the information will be used to benefit Orange County teens (this helps ensure it is taken seriously) (Nurco, 1985).

Another question often asked about surveys of this kind is how these students' responses represent students' responses in general. The responses from this survey only represent the responses of students who are enrolled in Orange County public middle and high schools (not those who have dropped out or who are enrolled in private schools) and who attended school on the day the survey was given. We know that, in general, students who are absent more often or who skip school (Johnson and O'Malley, 1985) or those who drop out of school (Ellickson, Saner, & McGuigan, 1997; Hadar, Barak, Hadar, & Ring, 1997) are more likely to use illegal drugs, drink alcohol, smoke, and to engage in dangerous and problematic activities, so these findings may show slightly less than actual levels of these kinds of problem behaviors in all Orange

County teens. Also, some researchers have found that people *underestimate* how much they use drugs (McAllister & Makkai, 1992; Morral, McCaffrey & Iguchi, 2000), so we may see some of that effect in these results.

In addition to the safeguards mentioned above, this survey also includes an honesty question. In Orange County, 75% of the teens that responded to the survey said they were "honest on all questions," and an additional 17% said they were "honest on all but a few questions." Though these are still the teens' perceptions, the responses to these questions lead us to believe that nearly all teens that responded took the survey seriously, and the data are accurate reflections of their perceptions.

REFERENCES

- Benson, P. (1990). *The troubled journey: A portrait of 6th-12th grade youth*. Lutheran Brotherhood, Minnesota.
- Bogenschneider, K., Small, S., & Riley, D. (1990). *An ecological, risk-focused approach for addressing youth at-risk issues*. Presented during the National Extension Youth at Risk Summit, Washington, DC
- Brown, B. (1990). Peer groups. In S. Feldman & G. Elliot (Eds.) *At the threshold: The developing adolescent* (p. 171-196). Cambridge, MA: Harvard University Press.
- Brown, B., Lohr, J., & McClenahan, E. (1986). Early adolescents' perceptions of peer pressure. *Journal of Early Adolescence*, 6, 1-24.
- Carnegie Council on Adolescent Development (1992). *A matter of time: Risk and opportunity for after-school hours*. Washington, DC: Carnegie Council of Adolescent Development.
- Centers for Disease Control. (1998). Youth Risk Behavior Surveillance Survey, 1-44.
- Chen, K., & Kandel, D. (1995). The natural history of drug use from adolescence to mid-thirties in a general population sample. *American Journal of Public Health*, 85, 41-47.
- Chilman, C. (1990). Promoting healthy adolescent sexuality. *Family Relations*, 39, 123-131.
- Clasen, D. & Brown, B. (1985). The multidimensionality of peer pressure in adolescence. *Journal of Youth and Adolescence*, 14, 451-568.
- Cummings, K., Pechacek, T., & Shopland, D. (1994). The illegal sale of cigarettes to U.S. minors: Estimates by state. *American Journal of Public Health*, 84, 300-302.
- Dahlberg, L.L. (1998). Youth violence in the United States: Major trends, risk factors, and prevention approaches. *American Journal of Preventive Medicine*, 14, 259-272.
- Davies, B., Trout, N., Womack, K. (1997). *Characteristics and Conditions of Teenage Safety Belt Use*. National Highway Traffic Safety Administration. Washington, DC
- Demo, D., Small, S., & Savins-Williams. (1987). Family relations and the self-esteem of adolescents and their parents. *Journal of Marriage and the Family*, 49, 705-715.
- Ellickson, P., Saner, H., & McGuigan, K. (1997). Profiles of violent youth: Substance use and other concurrent problems. *American Journal of Public Health*, 87(6), 985-991.
- Elliot, D., Hamburg, B., & Williams, K. (1998). *Violence in the American Schools*. Cambridge: Cambridge University Press.
- Fisher, M., Golden, N., Katzman, D., Kriepe, B., Rees, J., Schebendach, J., Sigman, G., Ammerman, S., & Hoberman, H. (1995). Eating disorders in adolescents: A background paper. *Journal of Adolescent Health*, 16, 420-437.

- Gans, J. (1990). *America's Adolescents: How healthy are they?* Chicago: American Medical Association.
- Garland, A.F. & Zigler, E. (1993). Adolescent suicide prevention: Current research and social policy implications. *American Psychologist*, 48(2), 169-182.
- Gralen, S., Levine, M., Smolak, L., & Murnen, S.K. (1990). Dieting and disordered early and middle adolescence: Do the influences remain the same? *International Journal of Eating Disorders*, 9(5), 501-512.
- Hadar, U., Barak, Y., Hadar, O., & Ring, A. (1996). Patterns of psychoactive drug use by detached youths. *New trends in Experimental & Clinical Psychiatry*, 12(4), 261-264.
- Harrel, A.V. (1985). Validation of self-report: The research record. In B. Rouse, N. Kozel, & L. Richards (Eds.) *Self-report methods of estimating drug use: Meeting current challenges to validity*. Rockville, MD: National Institute of Drug Abuse.
- Hayes, C. (Ed.) (1987). *Risking the future: Adolescent sexuality pregnancy and childbearing* (Vol. 1). Washington, DC: National Academy Press.
- Johnston, L., Bachman, J., & O'Malley, P. (1997). *Monitoring the Future*. Ann Arbor, MI: Institute of Social Research.
- Johnson, L. & O'Malley, P. (1985). In B. Rouse, N. Kozel, & L. Richards (Eds.) *Self-report methods in estimating drug use: Meeting current challenges to validity*. Rockville, MD: National Institute for Drug Abuse.
- Juvenile Justice (1999). *Violence After School*. 1999 National Report Series: Juvenile Justice Bulletin. U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.
- Kandel, D.B. (1986). Processes of peer influences in adolescence. In R.K. Silbereisen et al (Eds.), *Development as action in context*. Berlin: Springer Bass Publishers.
- Kingery, P., McCoy-Simandle, L., & Clayton, R. (1997). Risk factors for adolescent violence. *School Psychology*, 18, 49-60.
- Koenig, L., & Gladstone, T. (1998). Pubertal development and school transition: Joint influences on depressive symptoms in middle and late adolescents. *Behavior Modifications*, 22(3), 335-357.
- Larson, R., & Kleiber, D. (1993). Daily experiences of adolescents. In Tolan & Cohler (Eds.) *Handbook of clinical research and practice with adolescents: Wiley series on personality processes*. (pp. 125-145). New York, NY: John Wiley & Sons.
- McAllister, I., & Makkai, T. (1992). Correcting for the underreporting of drug use in opinion surveys. *International Journal of the Addictions*, 26(9), 945-961.
- Miller, B. & Moore, K. (1990). Adolescent substance sexual behavior, pregnancy, and parenting: Research through the 1980s. *Journal of Marriage and the Family*, 52, 1025-1044.
- Morril, A., McCaffrey, D., & Iguchi, M. (2000). Hardcore drug users claim to be occasional users: Drug frequency underreporting. *Drug and Alcohol Dependence*, 57(3), 193-202.
- Nurco, D. (1985). A discussion of validity. In B. Rouse, N. Kozel, & L. Richards (Eds.) *Self-report methods of estimating drug use: Meeting current challenges of validity*. Rockville, MD: National Institute on Drug Abuse

- Pettit, G., Bates, J., Dodge, K. Meece, D. (1999). The impact of after-school peer contact on early adolescent externalizing problems is moderated by parental monitoring, perceived neighborhood safety, and prior adjustment. *Child Development*, 70(30), 768-778.
- Pittman, K., & Wright, M. (1991). *A Rationale for Enhancing the Role of Non-School Voluntary Sector in Youth Development*. Center for Youth Development and Policy Research, Washington, DC.
- The President's Council on Physical Fitness and Sports Report (1997). *Physical Activity & Sports in the Lives of Girls*. U.S. Department of Health and Human Services.
- Resnick, M., Bearman, P., Blum, R., Bauman, K., Harris, K., Jones, J., Tabor, J., Beuhring, T., Sieving, R., Shew, M., Ireland, M., Bearinger, L., & Udry, R. (1997). Protecting adolescents from harm: Findings from the National Longitudinal Study of Adolescent Health. *Journal of the American Medical Association*, 278, 823-832.
- Rodgers, K. (1999). Parenting processes related to sexual risk-taking behaviors of adolescent males and females. *Journal of Marriage and Family Therapy*, 61(1), 99-109.
- Rohde, P., Lewinsohn, P., & Seeley, J. (1991). Comorbidity of unipolar depression: II: Comorbidity with other mental disorders in adolescents and adults. *Journal of Abnormal Psychology*, 100(2), 214-222.
- Sebald, H. & White, B. (1980). Teenagers' divided reference groups: Uneven alignment with parents and peers. *Adolescence*, 15, 979-984.
- Silverman, M., & Maris, R. (1995). Suicide prevention: Toward the year 2000 (p. 22-35). New York: Guilford Press.
- Steinberg, L. (1999). *Adolescence* (5th edition). New York: Knopf.
- Tolmas, H. (1998). Violence among youth: A major epidemic in America. *International Journal of Adolescent Medicine and Health*, 10(4), 243-259.
- Virginia Department of Health (2000). *A Study of Suicide in the Commonwealth*. Senate document no. 16. Commonwealth of Virginia, Richmond, 2000.
- Walker, J. & White, L. (1998). Caring adults support the healthy development of youth. *The Center: Today's 4-H Connects Youth to the World*, Winter, 14-19.
- Waganaar, A., Toomey, T., Murray, D., Short, B., Wolfson, M., & Jones-Webb, R. (1996). Sources of alcohol for underage drinkers. *Journal of Health Education*, 29(3), 325-333.
- White House Report on School Safety (1998). *The First Annual Report on School Safety*. White House Education Press Releases and Statements.