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ABSTRACT

This study of youths and high-risk behavior was designed to explore four issues: (1) the status of substance use and other at-risk behaviors among Iowa youth; (2) important trends in youth substance use and non-use behaviors; (3) major factors involved in encouraging non-use and health-promoting behaviors among Iowa youth; and (4) what the findings of the 1993 Iowa Youth Survey suggest for families, schools, and communities. The study consisted of a 121-question anonymous survey which was administered to students in grades 6, 8, 10, and 12, at 72 school districts. The survey addressed the following prevention constructs: "assets," or factors of positive development; "prosocial behavior," which includes helping actions and volunteerism; "deficits," or factors inhibiting healthy development; "patterns of co-occurrence," or associations of one at-risk domain with other at-risk behaviors; "at-risk behaviors"; and "the dynamics of prevention." The findings of this study lead to the conclusion that a community-wide commitment to positive youth development is necessary. Each sector of the community must foster the development of all children and youth, coordinate efforts to reduce deficits in the lives of children, and provide information and treatment services for youths and their families enmeshed in at-risk behaviors. It is recommended that parents and families support and encourage children in positive directions, that educators personalize schools and emphasize positive values, and that youths strive to change norms for drug and alcohol use and violence. Appended is the Item Index for Iowa Youth Survey.

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The 1993 Iowa Youth Survey



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The 1993 Iowa Youth Survey

Normative and Trend Data

Prepared by
Substance Education Program
Office of Educational Services for
Children, Families and Communities

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DEPARTMENT OF EDUCATION
Grimes State Office Building
Des Moines, Iowa 50319-0146

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PREFACE

The Substance Education Program of the Iowa Department of Education began a series of triennial studies of youth substance behaviors, attitudes and knowledge in the fall of 1975. The format of the surveys continued through the 1990 study. The 1993 Iowa Youth Survey established a new format but maintained several items for longitudinal data comparisons.

The new format should provide more information to substantiate a positive youth development approach to the prevention of substance abuse and other high-risk behaviors.

The findings of the 1993 Iowa Youth Survey will be broadly disseminated to Iowa educators, health planners, and agencies that serve youth. The findings will be presented in three separate reporting formats:

- normative **data** and interpretations for 1993 and relevant comparisons with 1984, 1987 and 1990 findings.
- individual reports to school districts of their student responses to all survey items.
- special data analyses and reports on selected topics.

This report deals with normative data on most survey items for the 1993 youth survey. Several comparisons with prior studies are also presented.

Table of Contents

| | Page |
|--|------|
| I Introduction | 1 |
| II. Procedures and Sample Characteristics | 3 |
| A. Selection of District Samples | 3 |
| B. Selection of Student Samples | 4 |
| C. Youth Survey Instrument | 6 |
| III. Substance Use As At-Risk Behavior | 7 |
| A. Introduction | 7 |
| B. Alcohol Use and Nonuse | 9 |
| C. Tobacco Use and Nonuse | 17 |
| D. Marijuana Use and Nonuse | 22 |
| E. Other Drug Use and Nonuse | 25 |
| F. Polysubstance Use and Nonuse | 30 |
| G. Substances Use by Size Categories of Districts | 33 |
| H. Unsafe Motor Vehicle Behaviors | 34 |
| I. Problems and Resources Related to Substance Use | 36 |
| J. Summary of Findings for Substance Use and Nonuse as At-Risk Behaviors | 43 |
| IV. Other At-Risk Behaviors | 45 |
| A. Introduction | 45 |
| B. Violence | 45 |
| C. Gambling | 47 |
| D. Depression and Suicide | 48 |
| E. Summary of Findings for Other At-Risk Behaviors | 51 |
| V. Deficits | 53 |
| A. Introduction | 53 |
| B. Drinking Parties | 53 |
| C. Stress | 53 |
| D. Physical Abuse by an Adult | 56 |
| E. Sexual Abuse by an Adult | 56 |
| F. Parent and Family Substance Abuse Problems | 57 |
| G. Negative Peer Influence | 58 |
| H. Unsafe/Disruptive School Environment | 59 |
| I. Unsafe Neighborhood | 61 |
| J. Poverty | 62 |
| K. Single Parent Family | 62 |
| L. Summary of Deficit Findings | 63 |
| VI. External Assets | 65 |
| A. Introduction | 65 |
| B. Family Support | 66 |
| C. Parents as Social Resources | 66 |
| D. Parent-Child Communications | 67 |
| E. Positive School Climate | 67 |
| F. Parental Standards, Discipline and Monitoring | 69 |
| G. Time at Home | 69 |
| H. Positive Peer Influence | 71 |
| I. Personal Involvement | 72 |
| J. Summary of Findings for External Assets | 73 |

| | Page |
|---|------|
| VII. Internal Assets | 75 |
| A. Introduction | 75 |
| B. Achievement Motivation | 75 |
| C. Educational Aspirations | 76 |
| D. School Performance | 77 |
| E. Homework | 78 |
| F. Cares About People's Feelings | 78 |
| G. Values Sexual Restraint | 79 |
| H. Self-Esteem | 79 |
| I. Prosocial Behavior | 80 |
| J. Summary of Findings for Internal Assets | 81 |
| VIII. Patterns of Co-Occurrence and Other Cross-Tabulations | 83 |
| A. Introduction | 83 |
| B. At-Risk Behaviors | 83 |
| C. Deficits | 86 |
| D. Assets | 88 |
| E. Description of the Non-Using Student | 90 |
| F. Summary of Findings from Cross-Tabulations | 92 |
| IX. Summary and Recommendations | 93 |
| A. Introduction | 93 |
| B. Current Status of Substance Use and Other At-Risk Behaviors Among Iowa Youth | 93 |
| C. Important Trends in Youth Substance Use and Nonuse | 95 |
| D. Major Factors in Promoting Nonuse and Health-Enhancing Behaviors | 95 |
| E. Suggested Actions for Families, Schools, Youth Agencies and Youth | 96 |
| Appendix: Item Index for Iowa Youth Survey Instrument | 99 |

I. Introduction

Substance use continues to present some serious social problems for school persons, law enforcement persons, health professionals and Iowa citizens. Substance use and abuse always presents possible harm to the user's health and the well-being of his or her family. Current data on youth substance behaviors and related personal and social factors are important to appropriately address these social and health problems.

During the 1970s, a number of prevention programs were introduced in Iowa schools and communities in an attempt to reduce the occurrence and severity of the social and health problems related to substance use. In 1987 prevention and intervention efforts were expanded in all Iowa school districts with the implementation of the federal Drug-Free Schools and Communities Act of 1986. The expanded prevention efforts and policy changes have very likely affected youth substance behaviors and related high risk behaviors.

The 1993 Iowa Youth Survey was designed to answer four questions:

- What is the current status of substance use and other at-risk behaviors among Iowa youth?
- What are some important trends in youth substance use and nonuse behaviors?
- What are major factors involved in promoting nonuse and health-promoting behaviors among Iowa youth?
- What actions do the findings of the 1993 Iowa Youth Survey suggest for families, schools, and communities?

The 1993 Iowa Youth Survey represents a significant departure from the previous series of triennial surveys entitled: "Iowa Study of Alcohol and Drug Attitudes and Behaviors Among Youth" (1975-1990). The new survey format was based on the conceptual framework developed by the Search Institute of Minneapolis, Minnesota¹. However, several questions concerning substance use/nonuse behaviors from the previous Iowa surveys were retained in the 1993 Iowa Youth Survey to permit longitudinal data comparisons.

The 1993 Iowa Youth Survey was designed to address six prevention constructs:

ASSETS are factors promoting positive teenage development. They may result from external factors such as positive relationships in families, friendship groups, schools and the community, or they may result from internal factors reflecting the teenager's personal convictions, values and attitudes (Benson, page 7).

PROSOCIAL BEHAVIOR covers a wide range of human actions - helping people in distress, donating time or energy to voluntary service organizations, attempting to reverse political, economic and social injustice or inequality. The common thread among prosocial behaviors is the desire or intent to promote the welfare of others (Benson, page 33).

DEFICITS are factors inhibiting healthy teenage development. They include influences which limit access to external assets, which block development of internal assets, or which ease the way into risky behavioral choices. Deficits are liabilities, none of which necessarily does permanent harm, but each of which makes harm more probable (Benson, page 19).

AT-RISK BEHAVIORS are behaviors which potentially limit psychological, physical or economic well-being during adolescence or adulthood. Engaging in one or even several of these at-risk behaviors during adolescence does not guarantee negative, long-term consequences. But given the possibility of harm, prevention of these risk-taking behaviors is the prudent approach to long-term health and well-being (Benson, page 39).

PATTERNS OF CO-OCCURRENCE reflect the degree to which involvement in one at risk domain is associated with involvement in another. The patterns suggest that effective prevention and intervention programs must address multiple behavioral domains as well as the underlying social and cultural dynamics that give rise to such prevalent risk-taking (Benson, page 49).

¹Benson, Peter L. *The Troubled Journey: A Portrait of 6th - 12th Grade Youth*. Minneapolis, Minnesota: Search Institute, 1990.

DYNAMICS OF PREVENTION illustrates that both deficits and assets are strongly related to at-risk behaviors. A three-pronged approach to *promote* the development of assets, to *prevent* deficits and to *intervene* early in at-risk behaviors is necessary to alter the frequency with which adolescents engage in health-compromising or future-jeopardizing behaviors (Benson, page 65).

The 1993 Iowa Youth Survey instrument included items selected to assess the status of Iowa youth in each of the content areas.

The new survey instrument and the additional data analyses expanded the research capacity to:

- Identify "assets" and "deficits" in Iowa students' lives which influence their ability to make positive choices.
- Examine how these assets and deficits are related to substance use and other at-risk behaviors, and
- Provide recommendations for families, schools, and communities to help all youth develop the assets they need to make positive choices.

Since the Search Institute had used a similar survey instrument with very large Midwestern youth samples, it was not necessary to conduct pilot studies and validation studies with Iowa youth.

The Iowa Youth Survey, a 121-question instrument, was administered in 72 school districts in October and November, 1993. The youth survey was designed to be answered anonymously by students in grades six, eight, 10 and 12. Almost every student could complete the survey in 50 minutes or less.

The Search Institute was contracted to do complete data entry and data processing of all survey forms. The contract also included the preparation of individual district reports (for 72 districts) and the data reports needed for the state-wide study.

II. Procedures and Sample Characteristics

The 1993 Iowa Youth Survey followed many of the same procedures used in the preceding six surveys.

The superintendents of 75 school districts were contacted in May, 1993 to inform them that their districts had been selected to participate in the state's youth survey. The superintendents had the options to participate or to use another youth survey instrument. Three districts chose to not participate and gathered youth data with another instrument.

Participating districts were mailed instructions and survey forms in September, 1993. The instructions asked the district personnel to:

- Randomly select a minimum student sample for each grade level.
- Schedule times and places for group administration of the survey.
- Send parent consent letters home with students.
- Return completed surveys to the Search Institute by December, 1993 for data processing.

Completed youth surveys were coded and electronically scanned by the Search Institute. Data analyses were conducted and individual district reports were prepared by the Search Institute.

In February, 1994 each participant school district was sent a data report for its students. Normative data tables for the state were published and disseminated to all Iowa districts in May, 1994.

A. Selection of District Samples

Two sampling procedures were used in the 1993 Iowa Youth Survey. The first sampling procedure involved the selection of school districts based on their demographic characteristics and geographic representation. The second sampling procedure involved the random selection of student samples within school districts.

A stratified random sampling procedure for Iowa public school districts was prepared for the first youth survey in 1975. The 1975 sampling design represented four demographic categories (urban, semiurban, semirural and rural) of Iowa public school districts. The categories were based on the total (K-12) school enrollment and the general population density of the school district. The original sampling design was altered to address the decline in the numbers of complete, K-12 school districts (in 1975 there were 431 complete districts and in 1993 there were 358 complete districts) and population densities. The original sampling design was also altered to account for school district representation within seven regions instead of the original four regions.

Table 1 describes the distribution of school district samples and the rate of participation in the 1993 study.

| | Urban | Semiurban | Semirural | Rural | Total |
|---|-------|-----------|-----------|-------|-------|
| Total Number of Iowa Districts In Category | 7 | 27 | 51 | 273 | 358 |
| Total Number of Districts in 1993 Study | 5 | 10 | 14 | 43 | 72 |
| Percent of Total Number of Iowa Districts in Categories | 71% | 37% | 24% | 16% | 20% |

B. Selection of Student Samples

School personnel were instructed to select a minimum number of students at random from their total enrollments in grades six, eight, 10 and 12. The minimum samples for each grade level were:

- 110 students in urban districts.
- 52 students in semiurban districts.
- 35 students in semirural districts.
- 21 students in rural districts.

An urban district, therefore, was expected to draw a minimum total sample of 440 students and a rural district drew a minimum total sample of 84 students. Most school districts collected data from considerably more students at each grade level than was required.

Table 2 describes the actual and minimal samples by size categories of schools. Table 3 describes the actual and minimal distribution of student samples by grade level.

A weighting procedure was applied in the data analyses to account for discrepancies between the minimal and actual student samples. Weighting procedures were also applied in previous studies to permit comparisons across studies.

Table 4 describes the gender and grade-level distributions in the 1993 youth sample.

Some sampling biases should be considered in interpreting the results of the 1993 youth survey:

- The study sample included public school districts only. No attempt was made to sample nonpublic school students.
- School districts were permitted to not participate in the survey; 96 percent of the invited districts participated in the present study.
- Students and parents were permitted to not participate in the survey; 99 percent of the school districts met or surpassed their minimum sample size.
- No attempt was made to sample youth who were absent from school or who had "dropped out" of school.

Table 2
Student Samples by District Size Categories

| | Urban | Semiurban | Semirural | Rural | Total |
|----------------|----------------|----------------|----------------|----------------|--------|
| Actual Sample | 2,440 (17%) | 2,914 (21%) | 2,935 (21%) | 5,212 (41%) | 14,101 |
| Minimum Sample | 2,200 (21%) | 2,288 (22%) | 2,100 (20%) | 3,696 (36%) | 10,284 |

**Table 3
Student Samples by Grade Level**

| | 6th Grade | 8th Grade | 10th Grade | 12th Grade | Total |
|------------------|----------------------|----------------------|-----------------------|-----------------------|--------------|
| Actual Sample | 3,498 (25%) | 3,622 (26%) | 3,612 (26%) | 3,369 (24%) | 14,101 |
| Minimal Sample | 2,571 (25%) | 2,571 (25%) | 2,571 (25%) | 2,571 (25%) | 10,284 |
| Total Enrollment | 37,704 | 38,495 | 36,428 | 32,545 | 145,172 |

**Table 4
Students Completing the Survey by Grade Level and Gender**

| | 6th Grade | 8th Grade | 10th Grade | 12th Grade | Total |
|--------|----------------------|----------------------|-----------------------|-----------------------|----------------|
| Male | 1,757 (50%) | 1,793 (50%) | 1,731 (48%) | 1,703 (51%) | 6,984 (50%) |
| Female | 1,735 (50%) | 1,820 (50%) | 1,880 (52%) | 1,663 (49%) | 7,098 (50%) |
| Totals | 3,492 | 3,613 | 3,611 | 3,366 | 14,082 |

Based on survey items 1 and 2

Note: 19 students did not report their gender.

C. Youth Survey Instrument

The 121-item Iowa Youth Survey was developed for administration to students in grades six, eight, 10 and 12. The instrument was designed to be readable and answerable by students at each of the four grade levels. Students were informed that it would take less than 50 minutes to complete the survey, that they could choose not to respond to some questions, and that their responses would remain confidential.

The survey was organized in seven sections:

- Demographics (five questions).
- Substance Use as At-Risk Behavior (30 questions).
- Other At-Risk Behaviors (11 questions).
- Deficits (19 questions).
- External Assets (24 questions).
- Internal Assets (13 questions).
- Prosocial Behaviors (four questions).

A complete item index for the Iowa Youth Survey instrument is included in the Appendix to this report.

The survey instrument allowed the researchers to develop several indices and subscales as follows:

- Risk of Addiction Scale.
- Substance Use Risk-Taking Index.
- Non-substance Risk-Taking Index.
- Deficit Index.
- Asset Index.

The optically scannable survey instruments were sent directly to Search Institute in Minneapolis, Minnesota. Their staff coordinated the shipping and receiving of the surveys, logging them in, and arrangements with individual districts. Data processing, composing tables and psychometric analysis were also conducted by staff of Search Institute.

The remainder of this report presents findings of the study grouped into seven main sections:

Substance Use as At-Risk Behavior; Other At-Risk Behavior; Deficits; External Assets; Internal Assets; Patterns of Co-occurrence and Other Cross Tabulations; and Summary and Recommendations.

III. Substance Use As At-Risk Behavior

A. Introduction

This section describes findings related to student substance behavior. These findings are based on self-reported use and nonuse during the fall months of 1993.

Substance use data in the 1993 study were comparable to data collected nationally by the Institute for Social Research at the University of Michigan and by PRIDE International in Atlanta, Georgia. Comparison of self-reported use between the four categories of school districts also appears to substantiate the reliability of the substance use/nonuse data.

The first part of this section reports findings related to the use and nonuse of alcohol, tobacco, marijuana, other drugs, and polysubstance use. The last part of this section provides information about the presence of substance abuse symptoms, perceived risks of substance use, sources of substance information, and sources of help for a substance abuse problem.

Substance use is defined as at-risk behavior since it clearly can interfere with the psychological, physical or economic well-being of youth. The Iowa Youth Survey identified seven categories of substance risk behaviors, and associated criterion levels for each behavior were established. Student substance use was considered at-risk behavior if it exceeded the following levels:

| Categories | Criterion Level | Total Sample |
|--------------------------------|--|--------------|
| Frequent Alcohol Use | 2-3 times per month or more frequently | 19% |
| Binge Drinking | Once or more often in the last two weeks | 15% |
| Daily Cigarette Use | 7-25 times per week or more often | 9% |
| Frequent Smokeless Tobacco Use | 1-5 times per month or more often | 8% |
| Frequent Illicit Drug Use | Use of marijuana, cocaine, amphetamines or "other drugs" once or more frequently per month | 6% |
| Drunk Driving | Once or more often per month (includes only those who drive) | 21% |
| Ride with drunk driver | Once or more often per month | 31% |

The percentages of the total youth sample which engaged in the substance risk behaviors is reported above. The most frequent substance risk behaviors were "ride with drunk driver" (31 percent), "drunk driving" (21 percent) and "frequent alcohol use" (19 percent).

The percentage of grade level samples who met or exceeded the criterion levels for each category of substance risk behaviors is reported twice in this section. The appropriate risk behavior data will appear with the findings regarding a particular substance. The data are also summarized in Tables 40 and 41 at the conclusion of this section.

Frequency-of-substance-use categories were also established. The frequency-of-use questions (question 41 alcohol, question 48 marijuana, question 50 cocaine, question 51 amphetamines, and question 52 other drugs) each had eight possible responses, collapsed into four categories:

- Nonuse** included: I never use/drink, AND I have used--, but I don't now
- Casual Use** included: Less than once a month, AND about once a month
- Regular Use** included: 2-3 times a month; AND about once a week
- Heavy Use** included: 2-4 times a week, AND about once or more each day

The frequency of tobacco use (question 45) is reported in tables as follows:

- Never** included: I never smoke tobacco
- Stopped** included: I have smoked, but don't now
- Casual Use** included: 1-6 times a week
- Regular Use** included: 7-25 times a week
- Heavy Use** included: 4-10 times a day, AND more than 10 times each day

The term "ever used" includes any reported frequency of use and the response, "I have used--, but I don't now."

All data appearing in tables are percentages of sample groups responding to each question.

B. Alcohol Use and Nonuse

The onset for alcohol use was addressed by asking students how old they were the first time (if ever) they ever had their own glass of beer, wine, shot of liquor, or a mixed drink of any kind. Student responses for this question are reported in Table 5.

Some observations are appropriate from Table 5. In 1993, approximately 82 percent of the 12th grade sample had tried alcohol. Nearly half of the youth (49-56 percent) had tried alcohol by age 14. A majority (72-73 percent) of 10th and 12th grade students had tried alcohol by age 16.

The patterns for age of onset for alcohol use were similar in three previous studies (1984, 1987, and 1990). However, in 1990 slightly more students at each grade level had never tried alcohol than in the previous studies. The data for 1993 demonstrate a relatively large increase in the percentage of students who reported never using alcohol.

More than 50 percent of the 12th grade students in 1993 had tried alcohol between ages 13 and 16, compared to 53 percent of 12th grade students in 1990, 54 percent of 12th grade students in 1987, and 52 percent of 12th grade students in 1984. Comparable data for 10th grade students indicate a fairly consistent 43-45 percent of 10th grade students initiated their alcohol use between 13 and 16 years of age. Apparently, the age of onset for alcohol use has remained fairly consistent for those students who chose to use alcohol.

Table 5
Age of Onset for Alcohol Use by Grade Levels, 1984-1993

| | | 6th Grade | 8th Grade | 10th Grade | 12th Grade |
|-----------|------|-----------|-----------|------------|------------|
| Never | 1984 | 51% | 26% | 11% | 5% |
| Tried | 1987 | 54 | 26 | 11 | 5 |
| Alcohol | 1990 | 57 | 30 | 14 | 8 |
| | 1993 | 78 | 51 | 28 | 18 |
| Tried | 1984 | 49 | 56 | 45 | 35 |
| Alcohol | 1987 | 46 | 55 | 44 | 32 |
| By Age 12 | 1990 | 43 | 53 | 45 | 32 |
| | 1993 | 22 | 35 | 29 | 23 |
| Tried | 1984 | | 74 | 74 | 74 |
| Alcohol | 1987 | | 74 | 74 | 62 |
| By Age 14 | 1990 | | 69 | 70 | 60 |
| | 1993 | | 49 | 56 | 47 |
| Tried | 1984 | | | 89 | 87 |
| Alcohol | 1987 | | | 89 | 87 |
| By Age 16 | 1990 | | | 85 | 85 |
| | 1993 | | | 72 | 73 |
| Tried | 1984 | | | | 95 |
| Alcohol | 1987 | | | | 95 |
| By Age 18 | 1990 | | | | 92 |
| | 1993 | | | | 82 |

Based on survey item number 44

The frequency of alcohol use by grade level is reported in Table 6. The table presents the reported frequencies of alcohol use in the four study years.

Students were asked to identify the frequency of their alcohol use through the question "During an average month, how often do you usually drink any amount of beer, wine, or liquor?"

A few general patterns are apparent from the 1993 data in Table 6. The frequency of alcohol use increased with age. The greatest decreases in the number of nonusers seemed to occur between eighth and 10th grade. A relatively large increase (12 percent) in the number of casual users of alcohol seemed to occur between sixth and eighth grades. The largest increase (12 percent) in the regular use of alcohol was apparent between eighth and 10th grades. The greatest increase (7 percent) in heavy use of alcohol was observed between 10th and 12th grades.

More students in each grade said that they were nonusers of alcohol in 1993 than was true in other study years. This downward trend in alcohol use was apparent in most categories of use and for each grade level, with the exception of heavy use in all four grades.

Table 6
Alcohol Use in an Average Month by Grade, 1984-1993

| | | Total | 6th Grade | 8th Grade | 10th Grade | 12th Grade |
|---------|------|-------|-----------|-----------|------------|------------|
| Nonuse | 1984 | 48% | 80% | 58% | 34% | 22% |
| | 1987 | 51 | 83 | 61 | 38 | 23 |
| | 1990 | 57 | 88 | 66 | 42 | 30 |
| | 1993 | 62 | 91 | 71 | 49 | 37 |
| Casual | 1984 | 25 | 15 | 30 | 32 | 24 |
| | 1987 | 24 | 13 | 26 | 27 | 24 |
| | 1990 | 22 | 8 | 22 | 29 | 30 |
| | 1993 | 19 | 7 | 19 | 26 | 24 |
| Regular | 1984 | 21 | 4 | 10 | 28 | 40 |
| | 1987 | 20 | 3 | 11 | 26 | 38 |
| | 1990 | 17 | 3 | 10 | 24 | 30 |
| | 1993 | 14 | 1 | 8 | 20 | 27 |
| Heavy | 1984 | 6 | 1 | 2 | 6 | 14 |
| | 1987 | 6 | 1 | 2 | 7 | 12 |
| | 1990 | 4 | 1 | 2 | 5 | 9 |
| | 1993 | 5 | 1 | 2 | 5 | 12 |

Based on survey item number 41

Figure A illustrates an increase in the number of nonusers of alcohol in 1993 as compared to 1984, 1987, and 1990. The graph also demonstrates a decline in the number of casual and regular users of alcohol. Heavy use of alcohol has remained fairly consistent at 4-6 percent of the student samples.

Comparisons of male and female frequency of alcohol use are reported in Table 7. The 1993 data indicate that male and female students were very similar in the frequency of alcohol use. Female students were less likely to be heavy alcohol users and more likely to be abstainers than were male students. Both male and female students were less likely to use alcohol in 1993 than they were in the previous studies. Male and female students were very similar in comparisons of their casual and regular use in 1993.

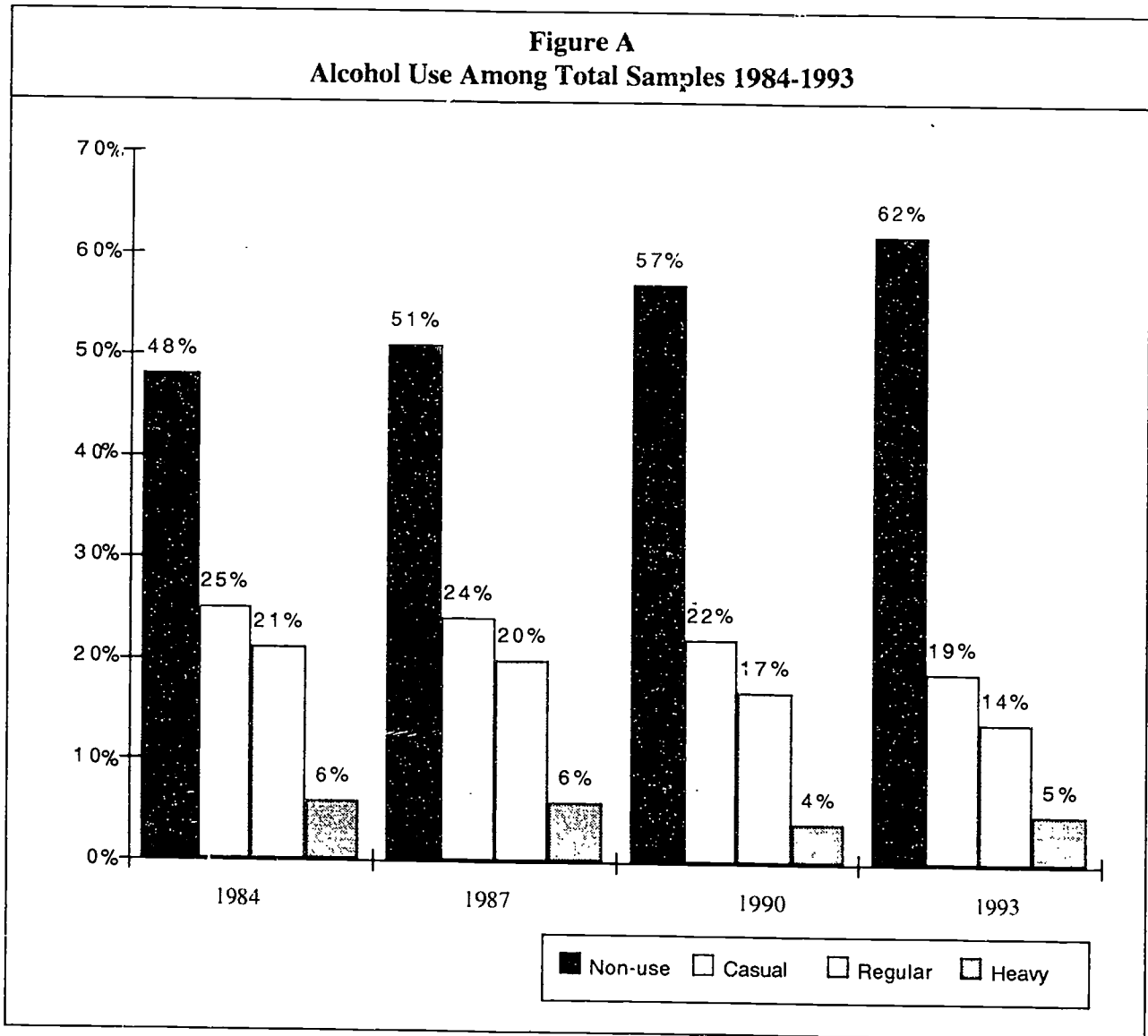


Table 7
Alcohol Use Monthly by Gender

| | | Never Used | Ever Used | Casual | Regular | Heavy |
|--------|------|------------|-----------|--------|---------|-------|
| Male | 1984 | 34% | 66% | 26% | 21% | 8% |
| | 1987 | 38 | 62 | 23 | 20 | 7 |
| | 1990 | 42 | 58 | 21 | 17 | 5 |
| | 1993 | 55 | 45 | 18 | 15 | 7 |
| Female | 1984 | 39 | 61 | 25 | 21 | 4 |
| | 1987 | 41 | 59 | 24 | 20 | 4 |
| | 1990 | 45 | 55 | 24 | 16 | 3 |
| | 1993 | 58 | 42 | 20 | 14 | 3 |

Tables 8 and 9 present data for student response to the question, "When you drink alcoholic beverages, how many drinks do you usually consume on any one occasion?" This was the fourth time the question was asked in the youth studies. It was chosen to indicate alcohol consumption "norms" among age groups and genders. The norms are reported as follows:

- Abstain:** I do not drink.
- Light:** Less than one drink.
- Moderate:** 1 or 2 drinks.
- Heavy:** 3 or 4 drinks.
- Very Heavy:** 5 or 6 and more than 6 drinks.

A general trend toward more alcohol consumption per drinking occasion was apparent in grades six through 12 (Table 8). Abstinence and light drinking were the "norms" for sixth and eighth grades. Among 10th grade students, 15 percent were moderate drinkers, 12 percent were heavy drinkers, and 20 percent were very heavy drinkers. Among 12th grade students, 14 percent were moderate drinkers, 16 percent were heavy drinkers, and 33 percent were very heavy drinkers. The drinking norms were very similar within each of the categories of school districts.

Comparisons between the various studies indicate a decline in 1993 in the number of light, moderate, and heavy drinkers. Very heavy drinking remained stable at 20-25 percent of 10th grade and at 31-34 percent of 12th grade samples.

Table 8
Alcohol Consumed Per Occasion, by Grade and by Year

| | | Total | 6th | 8th | 10th | 12th |
|------------|------|-------|-----|-----|------|------|
| Abstain | 1984 | 39% | 69% | 48% | 27% | 18% |
| | 1987 | 42 | 73 | 49 | 31 | 17 |
| | 1990 | 47 | 77 | 55 | 34 | 24 |
| | 1993 | 57 | 87 | 65 | 43 | 31 |
| Light | 1984 | 16 | 19 | 24 | 14 | 7 |
| | 1987 | 14 | 17 | 22 | 12 | 7 |
| | 1990 | 13 | 14 | 20 | 11 | 7 |
| | 1993 | 9 | 7 | 13 | 10 | 6 |
| Moderate | 1984 | 15 | 8 | 16 | 20 | 15 |
| | 1987 | 14 | 7 | 15 | 15 | 18 |
| | 1990 | 14 | 6 | 13 | 18 | 18 |
| | 1993 | 11 | 4 | 12 | 15 | 14 |
| Heavy | 1984 | 14 | 2 | 7 | 18 | 28 |
| | 1987 | 13 | 1 | 8 | 18 | 24 |
| | 1990 | 11 | 1 | 6 | 16 | 20 |
| | 1993 | 8 | 1 | 5 | 12 | 16 |
| Very Heavy | 1984 | 16 | 2 | 6 | 22 | 32 |
| | 1987 | 17 | 1 | 6 | 25 | 34 |
| | 1990 | 15 | 1 | 6 | 20 | 31 |
| | 1993 | 15 | 1 | 5 | 20 | 33 |

Based on survey item number 42.

Male and female consumption norms are reported in Table 9. Male and female consumption norms appear to be very similar for abstinence, light and moderate consumption. Females more frequently report themselves to be moderate and heavy alcohol users than do males. By contrast, males were much more likely to report themselves to be very heavy consumers of alcohol than were females.

Drinking norms were estimated by cross-tabulating the number of drinks consumed per occasion with the reported frequency of alcohol use. The data in Table 10 represent only the data for the sub-sample of students who reported themselves to be alcohol users (n=4512).

Among casual alcohol users, 70 percent reported consuming two or less drinks and 30 percent reported consuming three or more drinks per occasion.

Among regular alcohol users, 22 percent reported consuming two or less drinks and 77 percent reported consuming three or more drinks per occasion.

Among heavy alcohol users, five percent reported consuming two or less drinks and 95 percent reported consuming three or more drinks per occasion.

In general, it takes three or more drinks for teens to feel and act intoxicated. The data indicate that 30 percent of casual users, 77 percent of regular users, and 95 percent of heavy users were drinking to intoxication.

| | | Abstain | Light | Moderate | Heavy | Very Heavy |
|--------|------|---------|-------|----------|-------|------------|
| Male | 1984 | 37% | 16% | 14% | 12% | 21% |
| | 1987 | 44 | 15 | 13 | 9 | 19 |
| | 1990 | 46 | 14 | 13 | 8 | 18 |
| | 1993 | 55 | 9 | 10 | 7 | 19 |
| Female | 1984 | 41 | 16 | 16 | 15 | 12 |
| | 1987 | 47 | 15 | 14 | 14 | 11 |
| | 1990 | 48 | 13 | 15 | 13 | 11 |
| | 1993 | 58 | 9 | 12 | 10 | 10 |

| | Non-Use | Casual | Regular | Heavy |
|-------------|---------|--------|---------|-------|
| 0 | 91% | 2% | *% | *% |
| 1 | 4 | 31 | 3 | 1 |
| 1-2 | 2 | 37 | 19 | 4 |
| 3-4 | 1 | 16 | 27 | 16 |
| 5-6 | * | 6 | 20 | 17 |
| More than 6 | 1 | 8 | 30 | 62 |

Based on survey items 41 and 42

Note: *Indicates a percentage greater than zero, less than 0.50

A new question was added to the 1993 survey related to binge drinking. Question 43 asked students to respond to the following: "Think back over the last two weeks - How many times have you had five or more drinks in a row?" Student responses are reported in Table 11.

The data indicate that binge drinking increases with each grade level. The greatest increases in the occurrence of binge drinking seemed to take place between eighth and 10th grade (11 percent) and between 10th and 12th grade (11 percent). Males were somewhat more likely to binge drink than were females.

Question 65 asked students, "In the past year, how often (if ever) did you use alcohol or other drugs at school or on school property?" Table 12 presents data for student responses to the question.

Between three and 19 percent of the youth sample admitted to using alcohol or other drugs at school or on school property. Males were slightly more likely to engage in this behavior than were females.

Question 57 asked students, "In the past year, how many times have you drunk alcohol (wine, beer, or liquor) at home with your parents or other adult family members (such as having wine with a meal)?" Student responses are reported in Table 13.

Approximately 14-42 percent of students reported drinking alcoholic beverages at home with their parents or other adult family members. The data provide some indication of the positive sanctions that adult family members provide youth regarding alcohol use. Apparently 37 percent of 10th grade and 42 percent of 12th grade students are permitted or encouraged to use alcoholic beverages in their homes.

Frequent alcohol use and binge drinking were considered to be substance risk behaviors. The percentages of grade-level samples who met or exceeded the criterion level for each risk behavior were as follows:

| | Total | 6th Grade | 8th Grade | 10th Grade | 12th Grade |
|----------------------|-------|-----------|-----------|------------|------------|
| Frequent alcohol use | 19% | 2% | 10% | 25% | 39% |
| Binge drinking | 15 | 3 | 9 | 10 | 31 |

Both alcohol risk behaviors increased in frequency with each increase in grade level.

The following statements summarize some of the more relevant findings concerning alcohol use and nonuse:

- Very few (18 percent) of 12th grade students had not tried alcohol.
- Nearly one-half (50 percent) of Iowa youth have tried alcohol by age 14.
- Approximately 72 percent of 10th and 12th grade students had tried alcohol by age 16.
- More students reported themselves to be nonusers of alcohol in 1993 than did students in prior studies.
- Casual and regular use of alcohol among student groups declined in 1993.

| | Total | 6th | 8th | 10th | 12th | Male | Female |
|-----------------|-------|-----|-----|------|------|------|--------|
| Never | 85% | 97% | 91% | 80% | 69% | 81% | 88% |
| Once | 6 | 1 | 4 | 8 | 11 | 6 | 6 |
| Twice | 4 | 1 | 2 | 6 | 9 | 5 | 3 |
| More than twice | 5 | 1 | 3 | 6 | 11 | 8 | 3 |

Based on survey item number 43

Table 12
Alcohol or Other Drug Use at School in the Last Year
by Grade and by Gender

| | Total | 6th | 8th | 10th | 12th | Male | Female |
|-----------------|-------|-----|-----|------|------|------|--------|
| Never | 89% | 97% | 93% | 84% | 81% | 87% | 91% |
| 1-2 Times | 6 | 2 | 4 | 9 | 10 | 7 | 6 |
| 3-5 Times | 2 | * | 1 | 3 | 3 | 2 | 2 |
| 6 or More Times | 3 | * | 2 | 4 | 5 | 4 | 2 |

Based on survey item number 65

Table 13
Drinking at Home with Parents or Family in the Last Year
by Grade and by Gender

| | Total | 6th | 8th | 10th | 12th | Male | Female |
|------------------|-------|-----|-----|------|------|------|--------|
| Never | 70% | 86% | 73% | 63% | 58% | 69% | 71% |
| 1-2 Times | 16 | 9 | 16 | 20 | 21 | 15 | 17 |
| 3-5 Times | 6 | 3 | 6 | 7 | 9 | 6 | 6 |
| 6-9 Times | 3 | 1 | 2 | 3 | 4 | 3 | 2 |
| 10-19 Times | 2 | * | 2 | 2 | 3 | 2 | 1 |
| 20 or More Times | 3 | 1 | 2 | 4 | 6 | 5 | 2 |

Based on survey item number 57

Note: *indicates a percentage greater than zero, less than 0.50

C. Tobacco Use and Nonuse

The age at which students first tried tobacco is reported in Table 14. Students responded to the question, "How old were you when you first tried tobacco?"

The data in Table 14 indicate many students have tried tobacco. The number of students who tried tobacco appeared to increase with age, with approximately 38 percent of the students trying tobacco by age 14. Approximately 52 percent of 10th and 12th grade students had tried tobacco by age 16.

Comparisons between 1984, 1987, 1990 and 1993 data sets indicate the continuation of a downward trend in the use of tobacco in 1993. Fewer students in 1993 began their tobacco use by age 12, by age 14, by age 16 and by age 18 as compared to previous study years.

The frequency of tobacco use is reported in Table 15. These data reflect student responses to the question, "During an average week, how often do you usually smoke tobacco ... cigarettes, pipes, cigars?"

In 1993, approximately three percent of sixth grade, 11 percent of eighth grade, 19 percent of 10th grade and 26 percent of 12th grade students reported themselves to be smokers. The largest increase in the use of tobacco seemed to occur between sixth and eighth grade. The largest smoker group appeared to be "heavy" users at 12th grade.

Comparisons of 1984, 1987, 1990 and 1993 data indicated very little change in the tobacco use patterns of students. Data for total samples (Figure B) illustrates that casual use had stabilized at approximately five percent and that regular use and heavy use had stabilized at three percent and six percent respectively.

The data in Table 16 represent comparisons between male and female tobacco use patterns. The data suggest that males and females were very similar in their tobacco use patterns.

The use of smokeless tobacco among Iowa youth is reported in Table 17. The question was phrased, "Do you use 'smokeless tobacco' (snuff, chewing tobacco, plug)?"

The data indicate an increase in smokeless tobacco use in 1993 as compared to 1987 and 1990. The increase in use was most apparent in grades 8, 10 and 12. The range for smokeless tobacco use was from one percent in sixth grade to 13 percent in 12th grade.

The 1993 data indicated that only one percent of females used smokeless tobacco as compared to 27 percent of male students.

Daily cigarette use and frequent smokeless tobacco use were considered substance risk behaviors. The percentages of grade level samples who met or exceeded the criterion levels for each tobacco risk behaviors were as follows:

| | Total | 6th Grade | 8th Grade | 10th Grade | 12th Grade |
|-----------------------------------|-------|--------------|--------------|---------------|---------------|
| Daily Cigarette Use | 9% | 1% | 5% | 12% | 18% |
| Frequent Smokeless Tobacco Use | 8 | 1 | 6 | 10 | 13 |

The incidence of each tobacco risk behavior increased with each increase in grade level.

Table 14
Age of Onset for Tobacco Use

| | | 6th Grade | 8th Grade | 10th Grade | 12th Grade |
|-------------------------------|------|--------------|--------------|---------------|---------------|
| Never Tried | 1984 | 75% | 58% | 42% | 32% |
| | 1987 | 82 | 59 | 43 | 34 |
| | 1990 | 88 | 67 | 47 | 36 |
| | 1993 | 89 | 67 | 49 | 39 |
| Tried Tobacco By Age 12 | 1984 | 25 | 35 | 38 | 34 |
| | 1987 | 18 | 33 | 36 | 32 |
| | 1990 | 12 | 27 | 30 | 29 |
| | 1993 | 11 | 27 | 27 | 25 |
| Tried Tobacco By Age 14 | 1984 | -- | 42 | 52 | 50 |
| | 1987 | -- | 41 | 49 | 47 |
| | 1990 | -- | 33 | 45 | 44 |
| | 1993 | -- | 33 | 42 | 39 |
| Tried Tobacco By Age 16 | 1984 | -- | -- | 58 | 62 |
| | 1987 | -- | -- | 57 | 60 |
| | 1990 | -- | -- | 53 | 58 |
| | 1993 | -- | -- | 51 | 54 |
| Tried Tobacco By Age 18 | 1984 | -- | -- | -- | 68 |
| | 1987 | -- | -- | -- | 66 |
| | 1990 | -- | -- | -- | 64 |
| | 1993 | -- | -- | -- | 61 |

Based on survey item number 46.

Table 15
Tobacco Use by Grade Level in 1984-93

| | | Total | 6th Grade | 8th Grade | 10th Grade | 12th Grade |
|---------|------|-------|--------------|--------------|---------------|---------------|
| Never | 1984 | 74% | 87% | 77% | 68% | 65% |
| | 1987 | 72 | 89 | 75 | 64 | 61 |
| | 1990 | 72 | 89 | 72 | 64 | 62 |
| | 1993 | 72 | 93 | 75 | 63 | 57 |
| Stopped | 1984 | 16 | 10 | 17 | 19 | 18 |
| | 1987 | 14 | 8 | 15 | 18 | 17 |
| | 1990 | 17 | 9 | 18 | 21 | 18 |
| | 1993 | 14 | 5 | 15 | 18 | 17 |
| Casual | 1984 | 5 | 2 | 4 | 6 | 6 |
| | 1987 | 5 | 2 | 5 | 6 | 7 |
| | 1990 | 5 | 1 | 5 | 6 | 7 |
| | 1993 | 5 | 1 | 6 | 7 | 8 |
| Regular | 1984 | 2 | .5 | 1 | 2 | 2 |
| | 1987 | 2 | .5 | 2 | 3 | 4 |
| | 1990 | 2 | -- | 2 | 2 | 2 |
| | 1993 | 3 | -- | 2 | 4 | 4 |
| Heavy | 1984 | 4 | -- | 1 | 6 | 9 |
| | 1987 | 7 | -- | 3 | 10 | 12 |
| | 1990 | 6 | -- | 3 | 8 | 12 |
| | 1993 | 6 | 1 | 3 | 8 | 14 |

Based on survey item number 45.

Figure B
Smoking Tobacco Use Among Total Samples 1984-1993

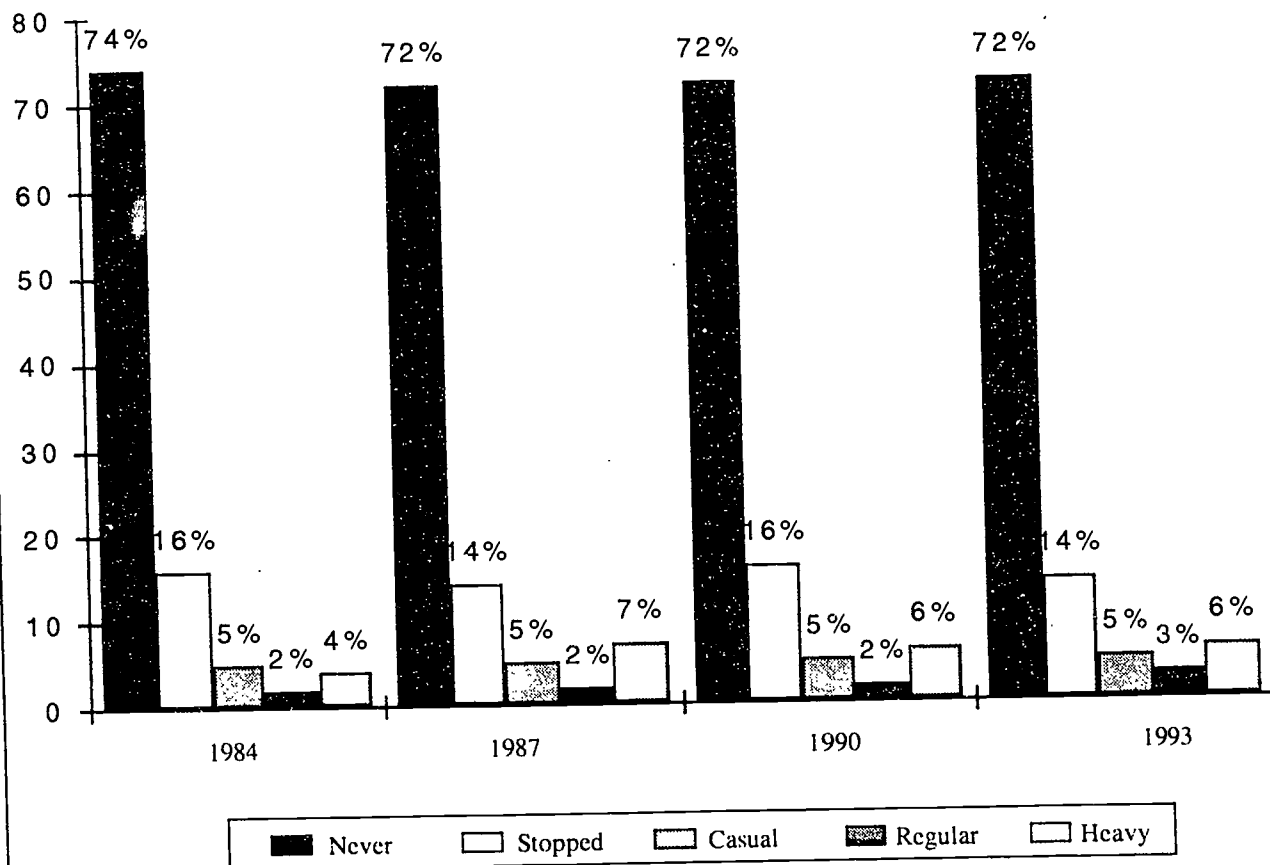


Table 16
Tobacco Use by Gender

| | | Never | Stopped | Casual | Regular | Heavy |
|--------|------|-------|---------|--------|---------|-------|
| Male | 1984 | 73% | 17% | 5% | 2% | 4% |
| | 1987 | 76 | 14 | 5 | 2 | 5 |
| | 1990 | 71 | 17 | 5 | 2 | 6 |
| | 1993 | 70 | 13 | 6 | 3 | 8 |
| Female | 1984 | 74 | 16 | 5 | 2 | 4 |
| | 1987 | 75 | 13 | 5 | 2 | 5 |
| | 1990 | 72 | 16 | 5 | 1 | 5 |
| | 1993 | 73 | 14 | 5 | 3 | 5 |

Table 17
Smokeless Tobacco Use by Grade in 1984-93

| | | 6th Grade | 8th Grade | 10th Grade | 12th Grade |
|----------|-------|--------------|--------------|---------------|---------------|
| Never | 1984 | 84% | 77% | 72% | 73% |
| | 1987 | 91 | 82 | 76 | 79 |
| | 1990 | 94 | 87 | 81 | 79 |
| | 1993 | 95 | 88 | 79 | 77 |
| Stopped | 1984 | 12 | 15 | 17 | 16 |
| | 1987 | 8 | 13 | 16 | 14 |
| | 1990 | 5 | 10 | 12 | 13 |
| | 1993 | 3 | 6 | 10 | 10 |
| 1-6/week | 1984 | 3 | 6 | 6 | 5 |
| | 1987 | 1 | 3 | 4 | 3 |
| | 1990 | 0 | 2 | 4 | 4 |
| | *1993 | 1 | 5 | 6 | 7 |
| Daily | 1984 | 1 | 2 | 5 | 7 |
| | 1987 | 0 | 1 | 3 | 4 |
| | 1990 | 0 | 1 | 3 | 4 |
| | 1993 | 0 | 1 | 4 | 6 |

* Response options were modified in 1993 study.
Based on survey item number 46.

D. Marijuana Use and Nonuse

Students were asked to respond to the question, "How old were you when you first tried marijuana (pot, grass, hash)?" Their responses to this question are reported in Table 18.

The data in Table 18 document that very few students had tried marijuana. Most youth who have tried marijuana did so between ages 13 and 16. Approximately 24 percent of 12th grade students in 1993 had tried marijuana by age 18. This compares with 28 percent of 12th grade students in 1990; 40 percent of 12th grade students in 1987; and 35 percent of 12th grade students in 1984.

The data in Table 18 indicate a consistent pattern of increased numbers of students who had never tried marijuana between 1984 and 1993. When the four study years (1984, 1987, 1990 and 1993) are compared, an overall downward trend in marijuana use is apparent.

Frequency of marijuana use by grade level samples is reported in Table 19. Students responded to the question, "During an average month, how often do you usually use any amount of marijuana (pot, grass, hash)?"

An overview of Table 19 indicates that two percent to 13 percent of the 1993 sample were currently using marijuana. Marijuana use increased with each increase in grade level. The largest increase (two percent) in the number of casual, regular and heavy users seemed to occur between eighth and 10th grades.

Table 18
Age of First Use of Marijuana by Grade in 1984-93

| | | 6th Grade | 8th Grade | 10th Grade | 12th Grade |
|------------------------------|------|--------------|--------------|---------------|---------------|
| Never Tried Marijuana | 1984 | 97% | 91% | 79% | 65% |
| | 1987 | 96 | 89 | 71 | 60 |
| | 1990 | 98 | 93 | 80 | 72 |
| | 1993 | 98 | 93 | 83 | 76 |
| Tried Marijuana By Age 12 | 1984 | 3 | 6 | 6 | 5 |
| | 1987 | 4 | 7 | 8 | 6 |
| | 1990 | 2 | 5 | 4 | 4 |
| | 1993 | 2 | 4 | 4 | 3 |
| Tried Marijuana By Age 14 | 1984 | | 9 | 15 | 15 |
| | 1987 | | 11 | 21 | 15 |
| | 1990 | | 7 | 14 | 20 |
| | 1993 | | 7 | 9 | 8 |
| Tried Marijuana By Age 16 | 1984 | | | 21 | 29 |
| | 1987 | | | 29 | 33 |
| | 1990 | | | 20 | 24 |
| | 1993 | | | 17 | 18 |
| Tried Marijuana By Age 18 | 1984 | | | | 35 |
| | 1987 | | | | 40 |
| | 1990 | | | | 28 |
| | 1993 | | | | 24 |

Based on survey item number 49.

Table 19
Marijuana Use in an Average Month by Grade in 1984-93

| | | Total | 6th Grade | 8th Grade | 10th Grade | 12th Grade |
|---------|------|-------|-----------|-----------|------------|------------|
| Nonuse | 1984 | 92% | 99% | 96% | 89% | 85% |
| | 1987 | 91 | 99 | 95 | 87 | 83 |
| | 1990 | 94 | 99 | 97 | 91 | 89 |
| | 1993 | 93 | 98 | 96 | 91 | 87 |
| Casual | 1984 | 4 | * | 2 | 5 | 7 |
| | 1987 | 5 | .5 | 3 | 6 | 9 |
| | 1990 | 3 | * | 2 | 4 | 5 |
| | 1993 | 3 | * | 2 | 4 | 5 |
| Regular | 1984 | 3 | * | 1 | 3 | 5 |
| | 1987 | 2 | * | 1 | 4 | 3 |
| | 1990 | 2 | * | 1 | 2 | 2 |
| | 1993 | 2 | * | 1 | 3 | 4 |
| Heavy | 1984 | 2 | * | 1 | 3 | 4 |
| | 1987 | 3 | * | 2 | 4 | 5 |
| | 1990 | 2 | * | * | 3 | 3 |
| | 1993 | 2 | * | 1 | 3 | 4 |

Note: * Indicates a percentage greater than zero, less than 0.50

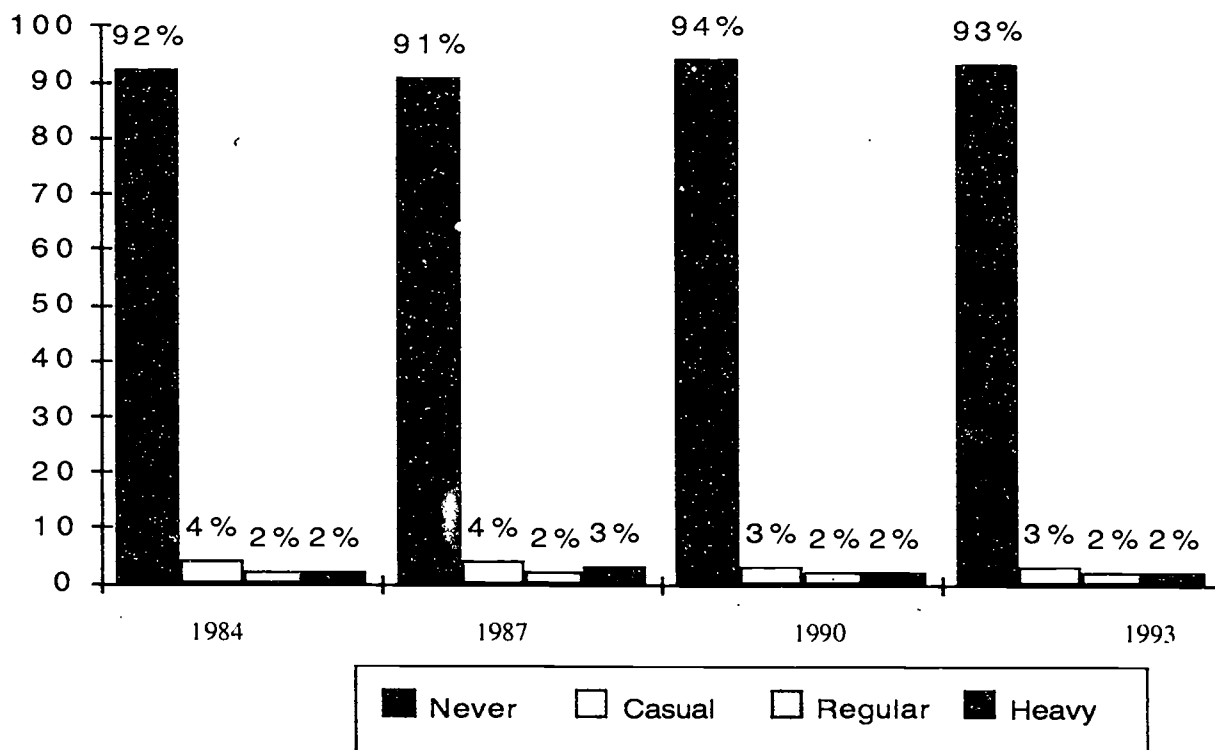
Based on survey item number 48

A comparison of data from 1984, 1987, 1990 and 1993 disclosed a relatively constant and low frequency of marijuana use among grade-levels samples. For example, the ranges for marijuana use in sixth grade was 1-2 percent, in eighth grade 3-5 percent, in 10th grade 9-13 percent and in 12th grade 11-17 percent.

Figure C depicts the general trends in marijuana use among total samples in the four study years. The graph portrays the stabilization of youth marijuana use patterns at very low percentages of student samples.

Marijuana use patterns for male and female students are presented in Table 20. The data indicate few differences in casual and regular use patterns between male and female students. Male students were slightly more often represented in the ever used and heavy use categories. Female students appeared to increase in the category of never used marijuana between 1984 and 1993.

Figure C
Marijuana Use in an Average Month
Among Total Samples 1984-1993



Based on survey item number 48

Table 20
Marijuana Use Monthly by Gender

| | | Never | Ever Used | Casual | Regular | Heavy |
|--------|------|-------|-----------|--------|---------|-------|
| Male | 1984 | 85% | 15% | 4% | 3% | 3% |
| | 1987 | 87 | 13 | 4 | 1 | 2 |
| | 1990 | 86 | 14 | 3 | 2 | 2 |
| | 1993 | 87 | 13 | 3 | 2 | 3 |
| Female | 1984 | 87 | 13 | 4 | 2 | 1 |
| | 1987 | 88 | 12 | 3 | 2 | 1 |
| | 1990 | 89 | 11 | 3 | 1 | 1 |
| | 1993 | 91 | 9 | 2 | 2 | 1 |

E. Other Drug Use and Nonuse

This section of the report provides information about the frequency of other drug use among Iowa students. The other drug use questions included:

- Frequency of cocaine use.
- Frequency of amphetamine use.
- Frequency of inhalant use.
- Frequency of steroid use.
- Frequency of use of such other drugs as hallucinogens (LSD), heroin, or barbiturates.

Most of the other drug questions were only asked in the 1993 youth survey; therefore, no comparisons were possible with previous Iowa surveys. The age of onset for other drug use question was asked in previous Iowa studies.

The age of onset for other drug use was assessed by asking students, "How old were you the first time (if ever) you tried drugs other than alcohol or marijuana?" Responses to this question are revealed in Table 21. Few students (four-13 percent) have tried other drugs. Evidently the 13-to-16 age range was the period of greatest experimentation with other drugs.

Table 21
Age of First Use of Other Drugs by Grade in 1984-93

| | | 6th Grade | 8th Grade | 10th Grade | 12th Grade |
|-----------------------------------|------|--------------|--------------|---------------|---------------|
| Never Tried Other Drugs | 1984 | 98% | 96% | 88% | 81% |
| | 1987 | 98 | 94 | 85 | 81 |
| | 1990 | 98 | 95 | 89 | 86 |
| | 1993 | 96 | 92 | 89 | 87 |
| Tried Other Drugs By Age 12 | 1984 | 2 | 2 | 2 | 1 |
| | 1987 | 2 | 3 | 3 | 2 |
| | 1990 | 2 | 2 | 1 | 1 |
| | 1993 | 4 | 5 | 3 | 2 |
| Tried Other Drugs By Age 14 | 1984 | -- | 4 | 8 | 7 |
| | 1987 | -- | 6 | 9 | 5 |
| | 1990 | -- | 5 | 6 | 4 |
| | 1993 | -- | 8 | 6 | 4 |
| Tried Other Drugs By Age 16 | 1984 | -- | -- | 12 | 16 |
| | 1987 | -- | -- | 15 | 14 |
| | 1990 | -- | -- | 11 | 10 |
| | 1993 | -- | -- | 11 | 9 |
| Tried Other Drugs By Age 18 | 1984 | -- | -- | -- | 19 |
| | 1987 | -- | -- | -- | 19 |
| | 1990 | -- | -- | -- | 14 |
| | 1993 | -- | -- | -- | 13 |

Based on survey item number 53.

The data in Table 21 indicate that approximately 13 percent of 12th grade students in 1993 had tried other drugs as compared to 14 percent in 1990, and 19 percent in both 1987 and 1984. Very few sixth grade or eighth grade students had tried other drugs in any of the four study years.

The frequency of cocaine use was represented by student responses to the question, "In an average month, how often (if ever) do you usually use any amount of cocaine (coke, rock, crack)?" Table 22 presents the findings for this question. The data indicate that very few students (approximately two percent) used cocaine. Male students appeared to be slightly more frequent users of cocaine than were female students.

The frequency of amphetamine use was assessed through the question, "In an average month, how often (if ever) do you usually use any amount of amphetamines (speed, meth, crank)?" The data in Table 23 indicate that very few students (one-five percent) used amphetamines. Approximately four percent of male students and three percent of female students reported themselves to be amphetamine users.

The frequency of inhalant use was determined by asking students, "In the last month, how many times, if any, have you sniffed glue, breathed the contents of aerosol spray cans, or inhaled any other gases or sprays in order to get high?" The data in Table 24 indicate that inhalant use was most prevalent in eighth grade (11 percent) and least prevalent in 12th grade (four percent). Male students were more often inhalant users (10 percent) than were female students (6 percent).

The frequency of steroid use was assessed by asking students, "In the past year, how many times have you taken steroid pills or shots without a doctor's prescription?" Students responses to the question are depicted in Table 25. The data suggest that very few students (three percent) used steroids in 1993. Males appeared to be more frequent steroid (four percent) users than were female students (one percent).

The frequency of other drug use was determined by asking students, "In an average month, how often (if ever) do you usually use any amount of other drugs such as hallucinogens (LSD), heroin, or barbiturates?" The student responses to the question are reported in Table 26.

Most students (94-99 percent) reported that they had not used other drugs. Twelfth grade students were the most frequent users of the other drugs. Male students were more frequent users (six percent) of other drugs than were female students (three percent).

A composite index of the use of any one of these drugs (once or more often per month) was created as a measure of "illicit drug use." The percentages of students reporting such use were as follows:

| | Total | 6th Grade | 8th Grade | 10th Grade | 12th Grade |
|---------------------------|-------|-----------|-----------|------------|------------|
| Frequent Illicit Drug Use | 6% | 1% | 4% | 8% | 11% |

Table 22
Cocaine Use in an Average Month
by Grade and by Gender

| | Total | 6th | 8th | 10th | 12th | Male | Female |
|---------|-------|-----|-----|------|------|------|--------|
| Never | 98% | 99% | 98% | 97% | 97% | 97% | 99% |
| Stopped | 1 | * | 1 | 1 | 1 | 1 | 1 |
| Casual | 1 | * | 1 | 1 | 1 | 1 | * |
| Regular | * | * | * | * | 1 | 1 | * |
| Heavy | 1 | * | 1 | 1 | * | 1 | * |

Based on survey item number 50

Note: * indicates a percentage greater than zero, less than 0.50

Table 23
Amphetamine Use in an Average Month
by Grade and by Gender

| | Total | 6th | 8th | 10th | 12th | Male | Female |
|---------|-------|-----|-----|------|------|------|--------|
| Never | 94% | 99% | 96% | 92% | 90% | 94% | 95% |
| Stopped | 2 | * | 2 | 3 | 5 | 2 | 3 |
| Casual | 2 | * | 1 | 2 | 2 | 2 | 1 |
| Regular | 1 | * | 1 | 1 | 2 | 1 | 1 |
| Heavy | 1 | * | 1 | 1 | 1 | 1 | 1 |

Based on survey item number 51

Note: * indicates a percentage greater than zero, less than 0.50

Table 24
Inhalant Use in the Past Month
by Grade and by Gender

| | Total | 6th | 8th | 10th | 12th | Male | Female |
|------------|-------|-----|-----|------|------|------|--------|
| Never | 92% | 91% | 89% | 92% | 96% | 90% | 94% |
| 1-2 Times | 5 | 6 | 7 | 4 | 2 | 5 | 4 |
| 3-5 Times | 1 | 1 | 2 | 2 | 1 | 1 | 1 |
| 6-9 Times | 1 | * | 1 | 1 | * | 1 | * |
| 10 or More | 1 | 1 | 2 | 1 | 1 | 2 | 1 |

Based on survey item number 54

Note: * indicates a percentage greater than zero, less than 0.50

Table 25
Steroid Use in the Last Year
by Grade and by Gender

| | Total | 6th | 8th | 10th | 12th | Male | Female |
|------------------|-------|-----|-----|------|------|------|--------|
| Never | 97% | 98% | 97% | 97% | 97% | 96% | 99% |
| 1-2 Times | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3-5 Times | * | * | 1 | * | * | 1 | * |
| 6-19 Times | 1 | * | * | 1 | 1 | 1 | * |
| 20 or More Times | 1 | * | 1 | 1 | 1 | 1 | * |

Based on survey item number 59

Note: * indicates a percentage greater than zero, less than 0.50

Table 26
Other Drug Use in an Average Month
by Grade and by Gender

| | Total | 6th | 8th | 10th | 12th | Male | Female |
|---------|-------|-----|-----|------|------|------|--------|
| Never | 96% | 99% | 97% | 96% | 94% | 94% | 97% |
| Stopped | 1 | * | 1 | 2 | 2 | 2 | 1 |
| Casual | 1 | * | 1 | 1 | 3 | 2 | 1 |
| Regular | 1 | * | 1 | 1 | 1 | 1 | * |
| Heavy | * | * | * | * | 1 | 1 | * |

Based on survey item number 52

Note: * indicates a percentage greater than zero, less than 0.50

F. Polysubstance Use and Nonuse

Data on polysubstance use provide a perspective on the number of students who use two or more substances concurrently. This section of the report discusses the percentages of grade level samples and total samples which reported nonuse (never and stopped) and use (casual, regular and heavy) of alcohol, marijuana and other drugs. The computer sorted data and counted frequencies according to the following scheme:

- Nonuse of any substance (alcohol, marijuana or other drugs).
- Alcohol use only (nonuse of marijuana and other drugs).
- Marijuana use only (nonuse of alcohol and other drugs).
- Drugs only (nonuse of alcohol and marijuana).
- Alcohol and marijuana (nonuse of other drugs).
- Alcohol and other drug use (nonuse of marijuana).
- Marijuana and other drug use (nonuse of alcohol).
- Use of all substances.

There were eight possible categories for the polysubstance analyses. Very few students (less than one percent) fit the "drugs only," "marijuana only," and "marijuana and other drugs" categories, so these data are omitted from Tables 27 and 28.

Table 27 indicates that among 12th grade students, 36 percent did not use any of the substances; 50 percent used alcohol only; seven percent used alcohol and marijuana only; and five percent used all substances.

Table 27 describes polysubstances use by grade levels in 1984, 1987, 1990 and 1993. The number of students in 1993 who reported nonuse of any substance decreased from 91 percent in sixth grade to 36 percent in 12th grade. "Alcohol only" accounted for the largest group of substance users in each grade level. Very few students at any grade level fit the categories of "marijuana use only," "drug use only," or "marijuana and drug use." The most frequently reported substance use combinations were "alcohol and marijuana" followed by "use of all substances." Slightly more than three percent of all students in the 1993 study reported using all substances.

Comparisons of 1984, 1987, 1990 and 1993 data reveal an increase in the number of students who were nonusers of any substance. The 1993 data demonstrate significant decreases in the "alcohol only" category at all four grade levels. Very slight differences were observed for the "alcohol and marijuana," "alcohol and other drugs," and "use of all substances" categories. Apparently the increase in the number of nonusers of alcohol can explain the increases in the number of nonusers of any substance category.

Very few differences can be discerned between male and female students in any of the polysubstance use categories.

Polysubstance use in the total samples is presented for 1981, 1984, 1987, 1990 and 1993 in Table 28. The 1993 data show an increase in the number of students who were nonusers of any substance. The 1993 data reflect a continuation of a downward trend in the "alcohol only" category.

Table 27
Polysubstance Use by Grade and by Gender
1984-93

| | | Total | 6th | 8th | 10th | 12th | M | F |
|-------------------------|------|-------|-----|-----|------|------|-----|-----|
| Nonuse | 1984 | 48% | 80% | 58% | 35% | 22% | -- | -- |
| | 1987 | 50 | 84 | 60 | 37 | 23 | 50% | 51% |
| | 1990 | 56 | 88 | 66 | 41 | 30 | 56 | 56 |
| | 1993 | 62 | 91 | 71 | 48 | 36 | 60 | 63 |
| Alcohol Only | 1984 | 43 | 18 | 38 | 53 | 61 | -- | -- |
| | 1987 | 39 | 15 | 33 | 48 | 58 | 39 | 39 |
| | 1990 | 37 | 11 | 31 | 49 | 59 | 36 | 38 |
| | 1993 | 31 | 8 | 25 | 42 | 50 | 31 | 31 |
| Marijuana Only | 1984 | * | 0 | * | 1 | * | -- | -- |
| | 1987 | * | 0 | * | * | * | * | * |
| | 1990 | * | * | * | * | * | * | * |
| | 1993 | * | * | * | * | * | * | * |
| Alcohol and Marijuana | 1984 | 4 | * | 2 | 6 | 8 | -- | -- |
| | 1987 | 6 | 1 | 3 | 8 | 12 | 5 | 7 |
| | 1990 | 3 | * | 2 | 5 | 6 | 4 | 2 |
| | 1993 | 3 | * | 2 | 5 | 7 | 4 | 3 |
| Alcohol and Other Drugs | 1984 | 1 | * | * | 1 | 2 | -- | -- |
| | 1987 | 1 | * | 1 | 2 | 2 | 1 | 1 |
| | 1990 | 1 | * | 1 | 1 | 1 | 1 | 1 |
| | 1993 | 1 | * | 1 | 1 | 1 | 1 | 1 |
| All Substances | 1984 | 3 | * | 2 | 4 | 6 | -- | -- |
| | 1987 | 3 | * | 2 | 5 | 5 | 3 | 3 |
| | 1990 | 2 | 1 | 1 | 4 | 4 | 2 | 2 |
| | 1993 | 3 | 1 | 2 | 3 | 5 | 4 | 2 |

Based on survey item numbers 41, 48, 50, 51, 52

Note: * indicates a percentage greater than zero, less than 0.50

-- = not available

Table 28
Polysubstance Use Among Total Samples
During 1981-1993

| | Nonuse of Any | Alcohol Only | Alcohol and Marijuana | Alcohol and Other Drugs | Use of All Substances |
|------|------------------|-----------------|-----------------------------|-------------------------------|-----------------------------|
| 1981 | 45% | 44% | 5% | 1% | 5% |
| 1984 | 48 | 43 | 4 | 1 | 3 |
| 1987 | 51 | 39 | 6 | 1 | 3 |
| 1990 | 56 | 37 | 3 | 1 | 2 |
| 1993 | 62 | 31 | 3 | 1 | 3 |

G. Substance Use by Size Categories of Districts

Youth survey data was sorted by four size categories of school districts: urban districts, semiurban districts, semirural districts and rural districts. The data in Table 29 represent the percentages of the four total sampling groups that reported themselves to be users of specific substances.

Several general patterns can be discerned from the data in Table 29. In general, urban students more frequently used tobacco, marijuana, cocaine, amphetamines, inhalants and other drugs than was reported for semiurban, semirural and rural students. Rural students seemed to least frequently use the six identified substances. Rural students also appeared to be least frequently involved in the polysubstance use categories of "alcohol and marijuana use" and use of "all substances." Rural and semirural students appeared to be more frequent users of smokeless tobacco as compared to urban and semiurban students. Very few differences between the four size-category samples could be determined for alcohol use, steroid use, and the polysubstance use category "alcohol and other drugs."

Table 29
Substance Use Among Various Size
Categories of Districts in 1993

| | Urban | Semi-Urban | Semi-Rural | Rural |
|-----------------------|-------|------------|------------|-------|
| Alcohol | 54% | 52% | 50% | 52% |
| Tobacco | 17 | 15 | 15 | 12 |
| Smokeless Tobacco | 7 | 7 | 10 | 8 |
| Marijuana | 13 | 11 | 5 | 3 |
| Cocaine | 4 | 3 | 2 | 2 |
| Amphetamines | 9 | 7 | 5 | 4 |
| Inhalants | 9 | 8 | 8 | 7 |
| Steroids | 3 | 3 | 3 | 2 |
| Other Drugs | 6 | 6 | 3 | 2 |
| Alcohol & Marijuana | 7 | 6 | 2 | 1 |
| Alcohol & Other Drugs | 1 | 1 | 1 | 1 |
| All Substances | 4 | 4 | 2 | 2 |

H. Unsafe Motor Vehicle Behaviors

Table 30 presents data related to student responses to the question, "In the last month, how many times have you ridden in a car or other motor vehicle whose driver had been using alcohol or other drugs?"

More students at each grade level reported being passengers in motor vehicles operated by an alcohol and/or drug using driver. The percentages ranged from 16 percent of sixth grade students to 43 percent of 12th grade students. The passenger experiences of male and female students were very similar.

Table 30
Riding with a Drunk Driver in the Past Month
by Grade and by Gender

| Frequency | Total | 6th | 8th | 10th | 12th | Male | Female |
|-----------|-------|-----|-----|------|------|------|--------|
| 0 | 69% | 84% | 73% | 62% | 57% | 70% | 68% |
| 1-2 | 20 | 10 | 17 | 25 | 26 | 18 | 22 |
| 3-5 | 6 | 2 | 5 | 7 | 9 | 6 | 6 |
| 6 or More | 5 | 3 | 5 | 6 | 7 | 7 | 4 |

Based on survey item number 56

The data in Table 31 represent student responses to the question, "In the last month, how many times have you driven a car or other motor vehicle after using any amount of alcohol or other drugs?"

The data indicate that ten percent of 10th grade and 32 percent of 12th grade students had driven a motor vehicle after using alcohol or other drugs.

Comparisons of data from four study years indicate that a downward trend in substance-impaired driving stopped with Iowa youth in 1993.

Table 31
Drinking and Driving Among Tenth and Twelfth Grade Students

| | | | 10th | 12th |
|--------------|------|--|------|------|
| Never | 1984 | | * | 58% |
| | 1987 | | 92% | 62 |
| | 1990 | | 90 | 73 |
| | 1993 | | 90 | 68 |
| 1-2 Times | 1984 | | * | 27 |
| | 1987 | | 5 | 26 |
| | 1990 | | 6 | 19 |
| | 1993 | | 7 | 21 |
| 3-5 Times | 1984 | | * | 10 |
| | 1987 | | 1 | 7 |
| | 1990 | | 2 | 5 |
| | 1993 | | 2 | 6 |
| 6 or More | 1984 | | * | 5 |
| | 1987 | | 2 | 5 |
| | 1990 | | 1 | 3 |
| | 1993 | | 2 | 5 |

Based on survey item number 55

I. Problems and Resources Related to Substance Use

Several questions were added to the 1993 youth survey to assess the following:

- Rate of substance use at school.
- Perceptions of health risks from substance use.
- Presence of substance abuse symptoms (addiction indicators).
- Student sources of help for substance problem.
- Student sources of substance information.

The following text reports the survey findings for these topics.

1. Substance Use at School

The data in Table 32 represent student responses to the question, "In the past year, how often (if ever) were you disciplined at school for breaking school rules about alcohol or other drugs?" A parallel question asked students, "In the past year, how often (if ever) did you use alcohol or other drugs at school or on school property?"

Approximately five percent of the students admitted to being disciplined at school for breaking school rules related to alcohol or other drugs. Nearly 12 percent of students admitted their use of alcohol or other drugs at school or on school property. Male students were more likely than female students to be disciplined for their substance offense.

2. Perceived Health Risk of Substance Use

Five questions asked students to rate the risks associated with specific substance behaviors. The stem for each question was, "How much do you think people risk harming themselves (physically or otherwise) if they" Student ratings are reported in Table 33.

Students rated "Take amphetamines regularly" as the behavior with the greatest risk for harm. The second most highly rated behavior was "Smoke marijuana regularly." Students perceived "Take one or two drinks of alcohol nearly every day" to be the least risky of the five behaviors.

3. Substance Abuse Indicators

Five questions were included in the 1993 survey to estimate the level of substance abuse among Iowa youth. The five questions (addiction indicators) were typical of questions asked in a substance abuse evaluation. The following questions were asked:

- Have you ever used alcohol or other drugs so much that the next day you could not remember what you had said or done?
- Do you find that you use more alcohol or other drugs now than you used to, without feeling the same effects?
- Have you ever hit anyone or become violent while drinking or using other drugs?
- Have you ever wanted to stop drinking or using drugs but could not?
- Have you ever lost any friends because they didn't approve of your alcohol or other drug use?

The data in Table 34 represent responses by substance using students only. Three addiction indicators, "loss of memory," "increased tolerance," and "violence," increased in frequency among substance using students with each increase in grade level. The "lost friends" indicator remained at a consistent nine-13 percent of the sample. The "can't stop" indicator decreased in frequency with each higher grade level. Male substance users reported higher rates of occurrence for four of the five indicators than did female substance users.

Table 32
Disciplined for Alcohol Use at School in the Last Year
by Grade and by Gender

| | Total | 6th | 8th | 10th | 12th | Male | Female |
|-------------|-------|-----|-----|------|------|------|--------|
| Never | 96% | 98% | 97% | 96% | 94% | 95% | 98% |
| 1-2 | 3 | 1 | 2 | 3 | 5 | 3 | 2 |
| 3-5 | * | * | * | * | 1 | 1 | * |
| More than 5 | 1 | * | 1 | 1 | * | 1 | * |

Based on survey item number 66

Note: *indicates a percentage greater than zero, less than 0.50

Table 33
Perceived Health Risks Due to Substance Use

| | None | Slight | Moderate | Great |
|---------------------------------------|------|--------|----------|-------|
| 1-2 Alcohol Drinks Daily | 13% | 34% | 34% | 19% |
| 4-5 Alcohol Drinks Daily | 6 | 8 | 23 | 64 |
| Smoke Marijuana Regularly | 6 | 6 | 19 | 69 |
| One or More Packs of Cigarettes Daily | 6 | 10 | 30 | 54 |
| Take Amphetamines Regularly | 5 | 4 | 17 | 74 |

Based on survey item numbers 67-71

The indicator data trends parallel the trends for an increased frequency of alcohol and other drug use for each higher grade-level sample.

Table 34
Percent Reporting Indicators of Substance Addiction
Among Those Reporting Substance Use
by Grade and by Gender

| | Total | 6th | 8th | 10th | 12th | Male | Female |
|---------------------|-------|-----|-----|------|------|------|--------|
| Loss of Memory | 46% | 24% | 33% | 47% | 53% | 47% | 44% |
| Increased Tolerance | 32 | 23 | 29 | 33 | 34 | 37 | 28 |
| Violence | 22 | 14 | 17 | 20 | 27 | 27 | 17 |
| Can't Stop | 13 | 24 | 19 | 12 | 9 | 15 | 10 |
| Lost Friends | 10 | 13 | 11 | 9 | 9 | 10 | 10 |

Based on survey item numbers 60-64

Table 35 represents a cross-tabulation of data by grade level and gender and a count of addiction risk factors for each substance using student. For example, two percent of the total substance-using sample experienced all five addiction risk factors.

The data indicate that 54 percent of the sixth grade substance users experienced no addiction risk factors. Fewer students could report no addiction risk factors with each increase in grade level. Approximately 15-19 percent of the substance-using students experienced three or more of the addiction risk factors. Twenty-one percent of male students and 13 percent of female students reported three or more addiction risk factors.

Table 36 continued data cross-tabulations based on the number of addiction risk factors per student and the student's reported frequency of alcohol use. For example, 53 percent of nonusers, 56 percent of casual users, 23 percent of regular users, and five percent of heavy users reported experiencing no addiction risk factors.

The data reveal a linear relationship: The more frequently an individual uses alcohol and the more alcohol consumed per occasion, the more addiction risk factors that person will likely experience.

Table 35
Number of Addiction Risk Factors
Among Those Reporting Substance Use
by Grade and by Gender

| Risk Factors | Total | 6th | 8th | 10th | 12th | M | F |
|--------------|-------|-----|-----|------|------|-----|-----|
| 0 | 36% | 54% | 44% | 36% | 31% | 33% | 39% |
| 1 | 26 | 21 | 24 | 27 | 27 | 26 | 27 |
| 2 | 20 | 10 | 16 | 21 | 23 | 20 | 21 |
| 3 | 12 | 8 | 11 | 12 | 14 | 15 | 10 |
| 4 | 3 | 3 | 4 | 3 | 4 | 4 | 2 |
| 5 | 2 | 4 | 2 | 1 | 1 | 2 | 1 |

Based on survey item numbers 60-64

Note: Sample size is 4515, due to exclusion of nonusers

Table 36
Prevalence of Addiction Risk Factors
by Alcohol User Groups
Among Those Reporting Substance Use

| Number of Risk Factors | Nonuse | Casual | Regular | Heavy |
|------------------------|--------|--------|---------|-------|
| 0 | 53% | 56% | 23% | 5% |
| 1 | 27 | 27 | 29 | 15 |
| 2 | 11 | 11 | 28 | 30 |
| 3 | 6 | 4 | 15 | 33 |
| 4 | 2 | 1 | 3 | 12 |
| 5 | 1 | 1 | 1 | 6 |

Based on survey item numbers 60-64

Note: Sample size is 4502, due to exclusion of nonusers

4. Sources of Help for Substance Problem

Students were asked, "If you were having a problem with alcohol or other drugs and you wanted to talk with someone about it, where would you most likely go first for help?" The data for this question are reported in Table 37.

Most students (34-66 percent) would first turn to a friend for help with a substance abuse problem. The friend choice increased in frequency with each increase in grade level. The second most frequent choice (12-44 percent) as a source of help was parent/guardian. The parent/guardian choice decreased in frequency with each increase in grade level. The least frequency chosen sources of help were doctors (one percent) and clergy (one-two percent).

Table 37
Identity of First Choice for Assistance with Substance Use Problem
by Grade and by Gender

| Sources | Total | 6th | 8th | 10th | 12th | M | F |
|------------------|-------|-----|-----|------|------|-----|-----|
| Friend | 54% | 34% | 52% | 62% | 66% | 49% | 58% |
| Parent/Guardian | 23 | 45 | 24 | 13 | 12 | 26 | 20 |
| Sibling/Relative | 9 | 6 | 10 | 11 | 9 | 9 | 9 |
| Teacher | 4 | 5 | 4 | 3 | 2 | 4 | 3 |
| Clergy | 2 | 2 | 2 | 2 | 1 | 2 | 1 |
| Doctor | * | 1 | * | * | * | 1 | * |
| Crisis Line | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Other Adult | 6 | 6 | 6 | 6 | 7 | 6 | 6 |

Based on survey item number 107

Note: *indicates a percentage greater than zero, less than 0.50

5. Sources of Substance Information

Students were asked to rate several sources of substance information. The data in Table 38 represent student responses to the question, "Please rate the following in terms of how helpful they have been as sources of information about alcohol and other drug issues."

The data in Table 39 indicate that parents were rated as the most helpful source of substance information. The second and third most highly rated sources of information were friends and law enforcement. The lowest rated source of information was a person who uses substances. Six of the eight sources of substance information were less frequently rated as "very helpful" with each increase in grade level.

Students were also asked to rate several mediums as a source of substance information. Students were asked, "Now rate the additional factors in terms of how helpful they are as sources of information about alcohol and other drug issues." Responses are reported in Table 39.

Students rated classroom and personal experience as their most helpful sources of substance information. The classroom rating decreased in frequency from 46 percent in sixth grade to 25 percent in 12th grade. The personal experience rating increased from 30 percent of sixth grade to 44 percent of 12th grade. The hotline source of information was rated very helpful by only eight-17 percent of the student samples.

Table 38
Percent Rating Each Person as "Very Helpful" as a Source of Information
on Substance Abuse by Grade and by Gender

| | Total | 6th | 8th | 10th | 12th | Male | Female |
|---------------------------------|-------|-----|-----|------|------|------|--------|
| Parents | 39% | 62% | 39% | 28% | 27% | 40% | 38% |
| Friends | 29 | 29 | 26 | 30 | 32 | 26 | 32 |
| School Teacher | 25 | 44 | 25 | 16 | 14 | 25 | 24 |
| School Counselor | 23 | 43 | 25 | 15 | 11 | 23 | 24 |
| Person Who Cares | 11 | 8 | 10 | 14 | 15 | 11 | 12 |
| Law Enforcement | 27 | 54 | 27 | 16 | 12 | 28 | 27 |
| Treatment Center Counselor | 22 | 32 | 23 | 18 | 15 | 21 | 23 |
| Prevention Program Personnel | 26 | 38 | 26 | 21 | 19 | 25 | 27 |

Based on survey item numbers 108-115

Table 39
Percent Rating Each Medium as Very Helpful as a Source of Information
on Substance Abuse by Grade and by Gender

| | Total | 6th | 8th | 10th | 12th | Male | Female |
|---------------------|-------|-----|-----|------|------|------|--------|
| TV/Radio | 20% | 22% | 21% | 18% | 19% | 23% | 17% |
| Hotline | 11 | 17 | 12 | 9 | 8 | 11 | 12 |
| Printed Materials | 21 | 25 | 22 | 20 | 19 | 19 | 24 |
| Classroom | 34 | 46 | 36 | 28 | 25 | 31 | 36 |
| School Assembly | 20 | 31 | 19 | 16 | 14 | 18 | 21 |
| Personal Experience | 35 | 30 | 30 | 36 | 44 | 36 | 34 |

Based on survey item numbers 116-121

J. Summary of Findings for Substance Use as At-Risk Behaviors

The data in Table 40 indicate the prevalence of substance risk behaviors by grade levels. Some clear patterns are apparent in the data:

- The prevalence of substance risk behaviors increased with each increase in grade level. The exception is the higher rate of inhalant use in sixth and eighth grade.
- Riding with a drunk driver, drunk driving, and frequent alcohol use were the most prevalent substance risk behaviors.
- Very few students at each grade level were users of cocaine, amphetamines, and other drugs.

The data in Table 41 represent a cross-tabulation of the number of substance risk behaviors by the grade levels. The data indicate that 59 percent of the total sample of students were not involved in any of the seven substance risk behaviors. The percentages of grade level samples that were not involved in any substance risk behaviors decreased from 80 percent of sixth grade to 40 percent of 12th grade students.

The age of onset data for 12th grade students in 1993 indicate that by age 18...

- 82 percent had tried alcohol.
- 61 percent had tried tobacco.
- 24 percent had tried marijuana.
- 13 percent had tried other drugs.

Table 40
Prevalence of Each Substance Risk Behaviors by Grade Levels

| | Total | 6th | 8th | 10th | 12th |
|--|-------|-----|-----|------|------|
| Frequent Alcohol Use (two-three times/month or more often) | 19% | 2% | 10% | 25% | 39% |
| Binge Drinking (once or more often in last two weeks) | 15 | 3 | 9 | 20 | 31 |
| Daily Cigarette Use (seven-25 times or more per week) | 9 | 1 | 5 | 12 | 18 |
| Frequent Smokeless Tobacco (one-five times or more per month) | 8 | 1 | 6 | 10 | 13 |
| Frequent Use of Illicit Drugs (once or more often per month) | 6 | 1 | 4 | 8 | 11 |
| Marijuana | 7 | 2 | 4 | 9 | 13 |
| Cocaine | 2 | 0 | 2 | 2 | 2 |
| Amphetamines | 4 | 0 | 3 | 4 | 5 |
| Other Drugs | 2 | 0 | 3 | 2 | 5 |
| Inhalants | 8 | 9 | 11 | 8 | 4 |
| Drunk Driving (once or more often per month) | 21 | NA | NA | 10 | 32 |
| Ride with Drunk Driver (once or more often per month) | 31 | 16 | 27 | 38 | 43 |

Comparisons of substance use data between the 1993 survey and previous studies in 1984, 1987 and 1990 revealed the following trends:

- A consistent increase in the nonuse of alcohol from 48 percent of the total 1984 sample to 62 percent of the total 1993 sample.
- A consistent 72-74 percent of the total samples who reported themselves to be nonusers of tobacco.
- A slight increase in 1993 of the number of smokeless tobacco users at each of the four grade levels.
- A consistent 91-94 percent of total samples who reported themselves to be nonusers of marijuana.
- A consistent increase in the nonuse of any substance from 45 percent of the total sample in 1981 to 62 percent of the total sample in 1993.
- A consistent decrease in the number of alcohol only users from 44 percent of the total 1981 sample to 31 percent of the total 1993 sample.

Comparisons of male and female substance use patterns in 1993 indicate the following:

- Male and female use patterns for alcohol, tobacco and marijuana were very similar.
- Males were much more likely than females to use smokeless tobacco.
- Males were slightly more likely than females to use cocaine, amphetamines, inhalants, steroids and other drugs.

Among substance-using students, three addiction indicators increased in prevalence with each increase in grade level: "loss of memory" (23-53 percent), "increased tolerance" (23-34 percent), "violence" (14-27 percent). Approximately 15-19 percent of the substance users experienced three or more of the five addictions risk factors.

Students indicated that their most likely sources of help for a substance abuse problem would be:

- Friends (34 percent of sixth grade -- 66 percent of twelfth grade).
- Parent/guardian (44 percent of sixth grade -- 12 percent of twelfth grade).
- Sibling/relative (six percent of sixth grade -- nine percent of twelfth grade).

Students reported that the most helpful sources of substance information were:

- Parents (62 percent of sixth grade -- 27 percent of twelfth grade).
- Friends (29 percent of sixth grade -- 32 percent of twelfth grade).
- Law enforcement (55 percent of sixth grade -- 12 percent of twelfth grade).

Table 41
Percent Reporting Each Number of Substance Risk Behaviors by Grade

| Substance Risk Behaviors | Total | 6th | 8th | 10th | 12th |
|--------------------------|-------|------|------|------|------|
| 0 | 59% | 80% | 66% | 49% | 40% |
| 1 | 19 | 16 | 21 | 21 | 16 |
| 2 | 7 | 2 | 5 | 9 | 10 |
| 3 | 5 | * | 3 | 8 | 8 |
| 4 | 5 | 1 | 2 | 6 | 12 |
| 5 | 3 | * | 1 | 4 | 8 |
| 6-7 | 3 | * | 2 | 3 | 6 |
| Mean | 1.00 | 0.27 | 0.65 | 1.23 | 1.83 |

IV. Other At-Risk Behaviors

A. Introduction

This section describes findings regarding several at-risk behaviors other than substance use.

The following definition was used to select other at-risk behaviors for inclusion in the 1993 Iowa Youth Survey:

"At-Risk Behaviors" are behaviors which potentially limit psychological, physical or economic well-being during adolescence or adulthood. Engaging in one or even several of these at-risk behaviors during adolescence does not guarantee negative, long-term consequences. But given the possibility of harm, prevention of these risk-taking behaviors is the prudent approach to long-term health and well-being. (Benson, page 39).

There are five other at-risk behaviors reported in this section. The behaviors are described by the statements and criterion levels as follows:

| Categories | Criterion Level | Total Sample |
|---|--|--------------|
| Used a weapon, force or threats to get money or things from someone | Once or more often in past year | 5% |
| Beaten up on someone or fought someone physically because he/she made you angry | Once or more often in past year | 32% |
| Felt sad or depressed | all or most of the time | 17% |
| Ever tried to kill yourself | once or more often | 12% |
| Gambling is a scaled item based on frequency of betting and the amount wagered | more than 3 times in the last year and more than \$10 per occasion | 4% |

The total sample data indicate that "Beaten up on someone..." (32 percent) and "Felt sad or depressed" (17 percent) were the most frequently occurring other at-risk behaviors.

Two tables at the conclusion of this section provide a summary of the grade-level distribution of the five other at-risk behaviors.

B. Violence

The data in Table 42 represent student responses to the following three questions:

"How often in the past 12 months have you . . .

- Been disciplined at school for fighting, theft, or damaging property?
- Used a weapon, force, or threats to get money or things from someone?
- Beaten up on someone or fought someone physically because he/she made you angry?"

The data indicate that approximately 10-21 percent of the students had been disciplined at school on one or more occasions for fighting, theft or damaging property. The highest incidence of disciplined offenses (21 percent) seemed to occur at eighth grade and the lowest incidence (10 percent) seemed to occur at twelfth grade. Males seemed to be more frequently disciplined (24 percent) for misconduct at school than were females (seven percent).

Approximately three-seven percent of the student samples reported that they had they used a weapon, force or threats to get money or things from someone. The highest incidence of the behavior appeared to be at eighth grade (seven percent) and the lowest incidence appeared to be at sixth grade (three percent). Males appeared to be more frequently (eighth percent) involved in the violent behavior than were female students (two percent).

Physically fighting someone from anger seemed to occur among 26-37 percent of the student samples. The fighting behavior seemed to occur most frequently (37 percent) at the eighth grade level and least frequently in 12th grade. Males were more frequently involved (43 percent) in fighting than were females (21 percent).

Table 42
Various Measures of Violence
by Grade and by Gender

| Disciplined for Fighting on School Grounds | | | | | | | |
|---|-------|-----|-----|------|------|------|--------|
| | Total | 6th | 8th | 10th | 12th | Male | Female |
| Never | 85% | 83% | 79% | 86% | 90% | 76% | 93% |
| 1-2 Times | 11 | 12 | 15 | 10 | 7 | 17 | 5 |
| 3-5 Times | 3 | 3 | 4 | 2 | 2 | 4 | 1 |
| 6 or More Times | 2 | 2 | 3 | 2 | 1 | 3 | 1 |
| Extortion by Weapon Use, Force, or Threats | | | | | | | |
| Never | 95% | 97% | 93% | 94% | 95% | 92% | 98% |
| 1-2 Times | 3 | 2 | 4 | 3 | 3 | 5 | 1 |
| 3-5 Times | 1 | * | 1 | 1 | 1 | 1 | * |
| 6 or More Times | 1 | 1 | 2 | 1 | 1 | 2 | * |
| Beat Up Someone In Anger | | | | | | | |
| Never | 68% | 66% | 63% | 69% | 74% | 57% | 79% |
| 1-2 Times | 21 | 22 | 24 | 21 | 17 | 27 | 15 |
| 3-5 Times | 6 | 6 | 7 | 5 | 5 | 8 | 3 |
| 6 or More Times | 5 | 7 | 7 | 5 | 3 | 8 | 3 |

Based on survey item numbers 76, 77, 80

Note: * indicates a percentage greater than zero, less than 0.50

C. Gambling

The data in Table 43 represent student responses on the following two questions:

“How often in the past 12 months have you . . .

- Bet on the outcome of sports events, card games, or horse/dog races?
- Bought lottery tickets, pull tabs, or scratch off tickets?

Between 31 and 40 percent of the students reported that they had gambled on the outcomes of sports events, card games, or horse/dog races. Sixth grade students were the least likely to have gambled. Male students were more likely (53 percent) to have gambled than were female students (23 percent).

State sponsored gambling (lottery, scratch cards) involved 23-46 percent of the students surveyed. Students in 12th grade were more frequent (46 percent) gamblers on lotteries and scratch tickets than were students in other grade levels. Male students were more frequently involved (36 percent) in state-sponsored gambling than were female students (27 percent).

| Table 43 | | | | | | | |
|---|-------|-----|-----|------|------|------|--------|
| Involvement in Betting and Government-Sponsored Gambling in the Last Year by Grade and by Gender | | | | | | | |
| Betting on Sports, Cards, Race | | | | | | | |
| | Total | 6th | 8th | 10th | 12th | Male | Female |
| 0 | 62% | 69% | 60% | 60% | 60% | 47% | 77% |
| 1-2 | 20 | 19 | 22 | 21 | 20 | 25 | 16 |
| 3-5 | 8 | 6 | 9 | 9 | 9 | 12 | 4 |
| 6 or More | 9 | 7 | 9 | 11 | 11 | 16 | 3 |
| Government-Sponsored Lottery Tickets, Pull Tabs | | | | | | | |
| | Total | 6th | 8th | 10th | 12th | Male | Female |
| 0 | 69% | 77% | 72% | 71% | 54% | 64% | 73% |
| 1-2 | 15 | 14 | 15 | 14 | 16 | 16 | 14 |
| 3-5 | 7 | 4 | 6 | 7 | 11 | 8 | 6 |
| 6 or More | 10 | 5 | 7 | 8 | 19 | 12 | 7 |

Based on survey item numbers 78, 81

Table 44
Money Spent on Gambling,
by Grade and by Gender

| | Total | 6th | 8th | 10th | 12th | Male | Female |
|----------------|-------|-----|-----|------|------|------|--------|
| Don't Gamble | 57% | 73% | 56% | 52% | 48% | 41% | 73% |
| Less than \$5 | 29 | 20 | 31 | 32 | 32 | 37 | 20 |
| \$5-\$10 | 9 | 4 | 8 | 11 | 13 | 14 | 4 |
| \$11-\$25 | 2 | 1 | 2 | 2 | 4 | 4 | 1 |
| \$26-\$50 | 1 | * | 1 | 1 | 2 | 2 | 1 |
| More than \$50 | 2 | 1 | 2 | 2 | 1 | 3 | * |

Based on survey item numbers 76, 77, 80

Note: * indicates a percentage greater than zero, less than 0.50

Table 44 presents data for students regarding the question, "When you gamble (if ever), how much money do you usually bet?"

Apparently 57 percent of the total sample did not consider themselves to be gamblers. The "don't gamble" response decreased in frequency from 73 percent at sixth grade to 48 percent in 12th grade. Fewer females (27 percent) considered themselves to be gamblers than was true for males (59 percent reported gambling).

The most frequently (20-32 percent) reported amount of money spent gambling was "less than \$5." Very few students (1-3 percent) reported spending \$26 or more dollars on gambling.

D. Depression and Suicide

Figures D and E and Table 45 describe data generated from three questions:

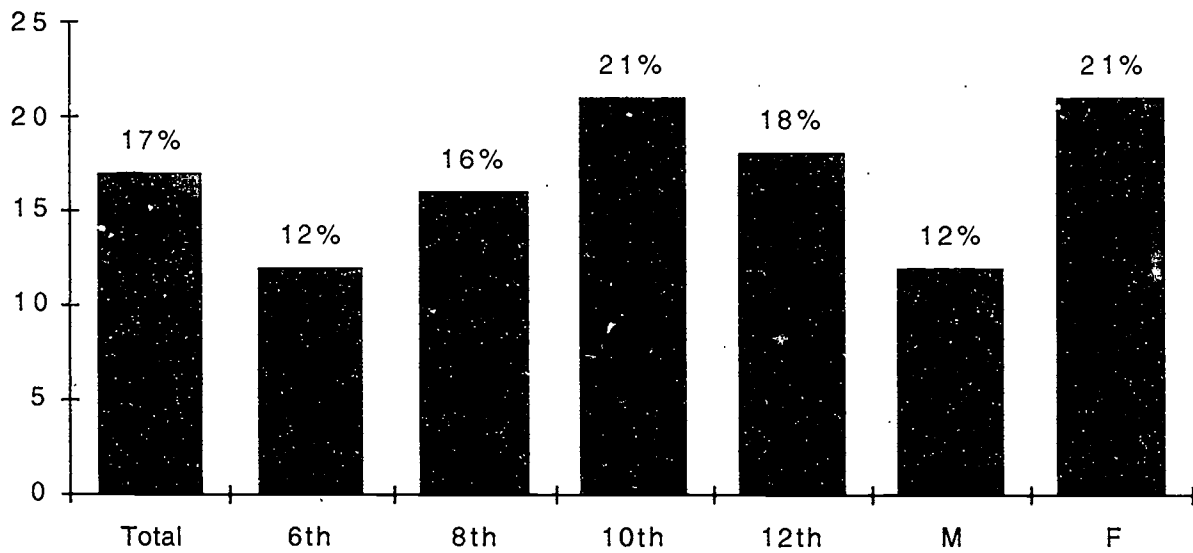
- "How often have you felt sad or depressed during the past month?"
- "In the last year, how often, if at all, have you thought about killing yourself?"
- "Have you ever tried to kill yourself?"

Tenth grade students most frequently (21 percent) reported being depressed most or all of the time. Sixth grade students least frequently (12 percent) reported being depressed. Female students appeared to be almost twice as frequently depressed as were male students (21 percent of females and 12 percent of males).

Between 24 and 37 percent of students reported that they had thought about killing themselves one or more times during the year. Suicide ideation seemed to be most frequent in 10th grade (37 percent) and least frequent in sixth grade (24 percent). Males were less likely than females to think about killing themselves.

Figure E graphically portrays the frequency of suicide attempts among youth samples. Tenth and 12th grade students evidently attempted suicide the most often among the four grade level samples. Females were slightly more likely to have attempted suicide than were males.

Figure D
Percent of Youth Reporting They Are Depressed
Most or All of the Time By Grade and by Gender



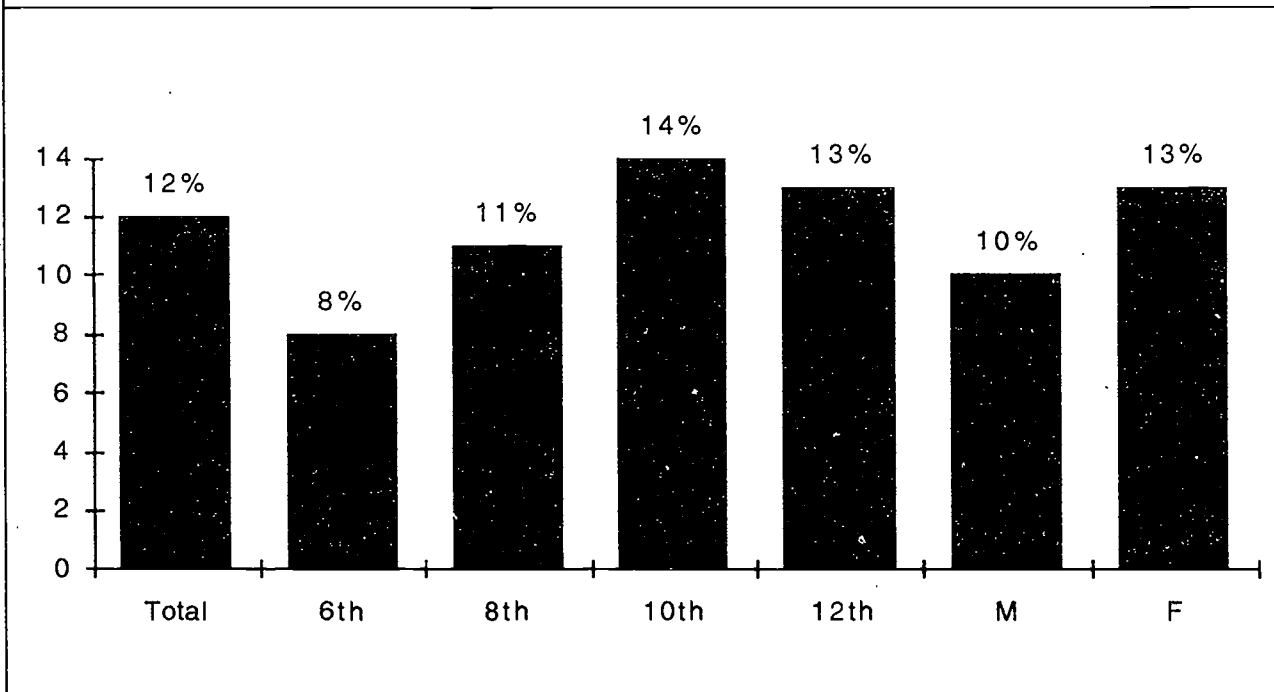
Based on survey item number 38

Table 45
Suicide Ideation in the Past Year
by Grade and by Gender

| | Total | 6th | 8th | 10th | 12th | Male | Female |
|-----------|-------|-----|-----|------|------|------|--------|
| Never | 69% | 76% | 68% | 63% | 68% | 73% | 64% |
| Once | 14 | 12 | 15 | 15 | 13 | 12 | 16 |
| Twice | 7 | 5 | 6 | 8 | 7 | 5 | 8 |
| 3-5 Times | 6 | 3 | 5 | 7 | 6 | 4 | 7 |
| 6 or More | 5 | 4 | 5 | 7 | 5 | 6 | 5 |

Based on survey item number 59

Figure E
Percent Ever Attempting Suicide
By Grade and by Gender



Based on survey item number 40

E. Summary of Findings for Other At-Risk Behaviors

The data in Table 46 report the prevalence of the five other at-risk behaviors by grade levels. "Beat up someone in anger" and "depression" were the most frequently reported of the other at-risk behaviors. The general trend was for the prevalence of "depression," "attempted suicide," and "gambling" to increase with each increase in grade level. The "beat up someone in anger" behavior appeared to decrease in frequency from eighth grade to 12th grade.

Males and females differed in regards to the prevalence of other at-risk behaviors. Males were more frequently than females involved in:

- Disciplinary actions at school for misconduct (24 percent males versus seven percent females).
- Use of weapons, force or threat (eight percent males versus two percent females).
- Physically fighting someone from anger (43 percent males versus 21 percent females).
- Gambling on sports, cards and races (53 percent males versus 23 percent females).
- State-sponsored gambling (36 percent males versus 27 percent females).

Females were more likely than males to be depressed (21 percent female versus 12 percent male) and to have attempted suicide (13 percent female versus 10 percent male).

The data in Table 47 indicates that more than 50 percent of each grade level did not engage in any of other at-risk behaviors. It appeared that eighth grade and 10th grade students were involved in more at-risk behaviors than were sixth and 12th grade students.

| | Total | 6th | 8th | 10th | 12th |
|---|-------|-----|-----|------|------|
| Depression (all or most of the time) | 17% | 12% | 16% | 21% | 18% |
| Attempted Suicide (Once or more often) | 12 | 8 | 11 | 14 | 13 |
| Extortion by Weapons Use, Force or Violence (any time in the last year) | 5 | 3 | 7 | 5 | 5 |
| Beat Up Someone in Anger (any time in the last year) | 32 | 34 | 37 | 31 | 25 |
| Gambling (more than three times in the last year and more than \$10 per occasion) | 4 | 2 | 4 | 4 | 6 |

Table 47
Percent Reporting Each Number of Other
At-Risk Behaviors by Grade

| Number of Other At-Risk Behaviors | Total | 6th | 8th | 10th | 12th |
|-----------------------------------|-------|------|------|------|------|
| 0 | 54% | 57% | 52% | 51% | 56% |
| 1 | 30 | 31 | 31 | 30 | 29 |
| 2 | 10 | 9 | 10 | 13 | 10 |
| 3 | 4 | 2 | 5 | 4 | 4 |
| 4-5 | 1 | 1 | 2 | 1 | 2 |
| Mean | 0.69 | 0.59 | 0.74 | 0.76 | 0.67 |

V. Deficits

A. Introduction

This section describes youth survey findings regarding the concept of deficits. The Search Institute defines *deficits* as:

“... factors inhibiting healthy teenage development. They include influences which limit access to external assets, which block development of internal assets, or which ease the way into risky behavioral choices. Deficits are liabilities, none of which necessarily does permanent harm, but each of which makes harm more probable” (Benson, page 19).

Thirteen deficit variables were identified for the youth survey instrument. The deficits and their criterion levels are listed in Table 48. The table also includes the percentages of the total youth sample who reported each deficit.

The data in Table 48 indicate that the three most frequently reported deficits were disruptive school environment, drinking parties, and stress. The three least frequently reported deficits were poverty, negative peer pressures: marijuana use, and unsafe neighborhood.

The following pages describe each of the deficits with more specific findings. Two tables at the conclusion of this section summarize the grade-level findings on the prevalence of the thirteen deficits.

B. Drinking Parties

The data in table 49 represent student responses to the question “In the past year, how many times have you been to a party where other kids your age were drinking?” Three or more times per year was considered to be the criterion level for this deficit.

There is an increase in the rate of attendance at drinking parties with each increase in grade level. The largest increase in the rate of attendance appears to be between eighth and tenth grades. Only 21 percent of 12th grade students reported never attending drinking parties in the past year.

The following percentages of students at each grade level met or exceeded the criterion for the deficit: four percent of sixth grade, 16 percent of eighth grade, 41 percent of tenth grade and 62 percent of 12th grade students.

C. Stress

Figures H and I portray student responses to the questions, “Have you felt you were under any strain, stress, or pressure during the past month?” and “How often have you felt anxious, worried, or upset during the past month?” The deficit criterion for the first question was “quite a bit” and “almost more pressure than one could take.” The deficit criterion for the second question was “all” or “most of the time.” Student responses were combined to produce the stress deficit factor.

The data in Figure H indicate that 21-47 percent of the students met or exceeded the criterion for “strain, stress or pressure.” The number of students who met the criterion increased with each increase in grade level. The largest increase seemed to occur between eighth and tenth grade. Female students reported being more stressed or pressured than male students.

Figure I indicates that 19-35 percent of the students met or exceeded the criterion for “anxious, worried or upset.” The largest increase in the number of students who met the criterion seemed to occur between eighth and 10th grades. Females, more often than males, reported being anxious, worried or upset in the previous month.

Table 48
Prevalence of Each Deficit for Total Sample

| | |
|--|-----|
| 1. Drinking Parties (three or more times a year) | 30% |
| 2. Stress (Mean four or more on a five-point two-item scale) | 24% |
| 3. Physical Abuse by Adult (One or more time) | 16% |
| 4. Sexual Abuse by Adult (One or more time) | 11% |
| 5. Parental Addiction (One or more parent with substance addiction) | 8% |
| 6. Family Member Addiction (One or more) | 12% |
| 7. Negative Peer Pressure: Marijuana Use ("most") | 4% |
| 8. Negative Peer Pressure: Trouble at School ("most") | 6% |
| 9. Negative Peer Pressure: Alcohol Use ("most drink and get drunk weekly") | 7% |
| 10. Disruptive School Environment (Teacher stops to deal with disruption, three-five/month) | 36% |
| 11. Unsafe Neighborhood | 5% |
| 12. Poverty | 4% |
| 13. Single-Parent Family | 15% |

Average number of deficits, total sample 1.78

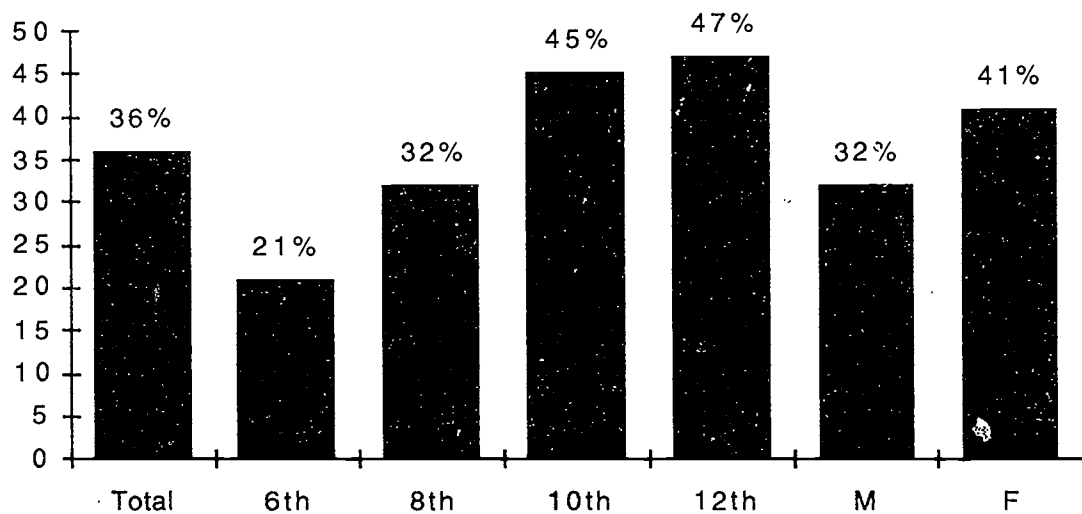
Table 49
Attendance at Drinking Parties in the Past Year
by Grade and by Gender

| | Total | 6th | 8th | 10th | 12th | Male | Female |
|------------|-------|-----|-----|------|------|------|--------|
| 0 | 55% | 92% | 68% | 39% | 21% | 56% | 55% |
| 1-2 | 14 | 5 | 16 | 20 | 17 | 13 | 16 |
| 3-5 | 8 | 1 | 7 | 13 | 13 | 8 | 9 |
| 6-9 | 5 | 1 | 3 | 7 | 11 | 5 | 5 |
| 10-19 | 6 | * | 3 | 9 | 12 | 6 | 6 |
| 20-29 | 3 | * | 1 | 4 | 7 | 3 | 3 |
| 30 or more | 7 | 1 | 2 | 8 | 19 | 9 | 6 |

Based on survey item number 58

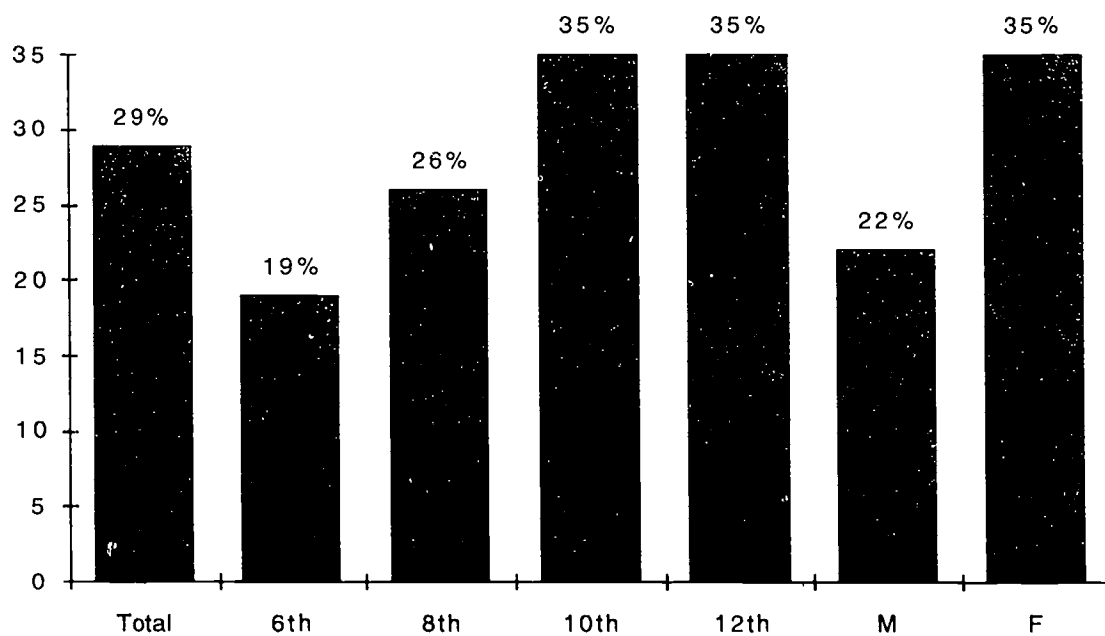
Note: *indicates a percentage greater than zero, less than 0.50

Figure H
Exposure to “Quite A Bit” Or “Almost More Pressure Than One Could Take”
by Grade and by Gender



Based on survey item number 21

Figure I
Feeling “Anxious, Worried, or Upset,” “All” or “Most of the Time”
by Grade and by Gender



Based on survey item number 22

D. Physical Abuse by an Adult

Students were asked, "Have you ever been physically abused by an adult (that is, where an adult caused you to have a scar, black and blue marks, wel's, bleeding, or a broken bone)?" The data in Table 50 indicate that 10-19 percent of the students met or exceeded the "once" criterion level for the deficit. The rate of physical abuse was very similar for eighth, 10th and 12th grade students.

E. Sexual Abuse by an Adult

Table 50 also contains data related to student reports of sexual abuse. The question was worded, "Have you ever been sexually abused by someone (that is, someone in your family or someone else did sexual things to you that you did not want or forced you to touch them sexually)?" Apparently six-14 percent of the students had been sexually abused at least once. Female students more frequently reported being sexually abused than did male students.

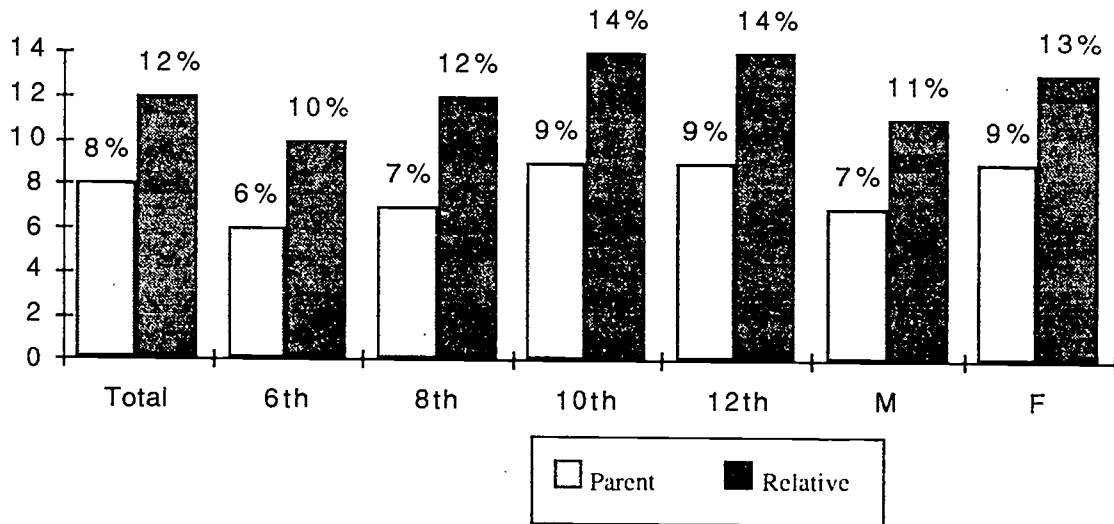
Table 50
Experience of Abuse, Ever,
by Grade and by Gender

| Physical Abuse | | | | | | | |
|-----------------------|-------|-----|-----|------|------|------|--------|
| | Total | 6th | 8th | 10th | 12th | Male | Female |
| 0 | 84% | 90% | 84% | 81% | 82% | 86% | 83% |
| 1 | 7 | 6 | 8 | 8 | 7 | 7 | 8 |
| 2-3 | 4 | 2 | 4 | 6 | 6 | 4 | 5 |
| 4-10 | 2 | 1 | 2 | 2 | 2 | 1 | 2 |
| 10 or more | 2 | 1 | 2 | 3 | 3 | 2 | 2 |
| Sexual Abuse | | | | | | | |
| 0 | 89 | 94 | 91 | 86 | 86 | 96 | 83 |
| 1 | 5 | 4 | 4 | 6 | 7 | 2 | 9 |
| 2-3 | 2 | 1 | 2 | 3 | 3 | 1 | 4 |
| 4-10 | 1 | 1 | 1 | 2 | 1 | * | 2 |
| 10 or more | 2 | 1 | 2 | 2 | 2 | 1 | 3 |

Based on survey item numbers 85, 86

Note: *indicates a percentage greater than zero, less than 0.50

Figure J
Parent and Family Substance Abuse Problems
by Grade and by Gender



Based on survey item numbers 98, 99

F. Parent and Family Substance Abuse Problems

Data on parent and family substance abuse are presented in Figure J. The deficit "parent substance abuse" was assessed through the question, "Do you think your mother, father, or step-parent has a serious problem with alcohol or other drugs?" The deficit "family substance abuse" was assessed by asking students, "Do you think another member of your family such as a brother, sister, or grandparent has a serious problem with alcohol or other drugs?" The response "yes" was the established deficit criterion for each question.

Approximately eight percent of the total sample reported that a parent had a substance abuse problem and 12 percent of the total sample estimated that other family members had a substance abuse problem.

G. Negative Peer Influence

Several questions were included in the youth survey to assess the extent of negative peer modeling. The wording for the five questions was as follows:

"Among the people you consider friends, how many would you say . . .

- drink alcoholic beverages (liquor, beer, wine)?
- smoke cigarettes?
- smoke marijuana (pot, grass) or hashish?
- get drunk at least once a week?
- get into trouble at school?"

The data in Table 51 summarize the total sample's responses to each of the five negative peer influence questions. Approximately 66 percent of the youth had friends who got into trouble at school and 62 percent had friends who drank alcoholic beverages. Fifty-six percent of the youth knew friends who smoked cigarettes and 44 percent of the youth had friends who got drunk at least once a week. Only 25 percent of the youth reported that they had friends who smoked marijuana.

| | None | A Few | Some | Most |
|----------------------------|------|-------|------|------|
| Drink alcoholic beverages | 38% | 22% | 19% | 20% |
| Smoke cigarettes | 44 | 27 | 17 | 12 |
| Smoke marijuana | 75 | 14 | 6 | 4 |
| Get drunk once a week | 56 | 22 | 12 | 9 |
| Get into trouble at school | 34 | 43 | 16 | 6 |

Based on survey item number 89, 90, 92, 93, 96

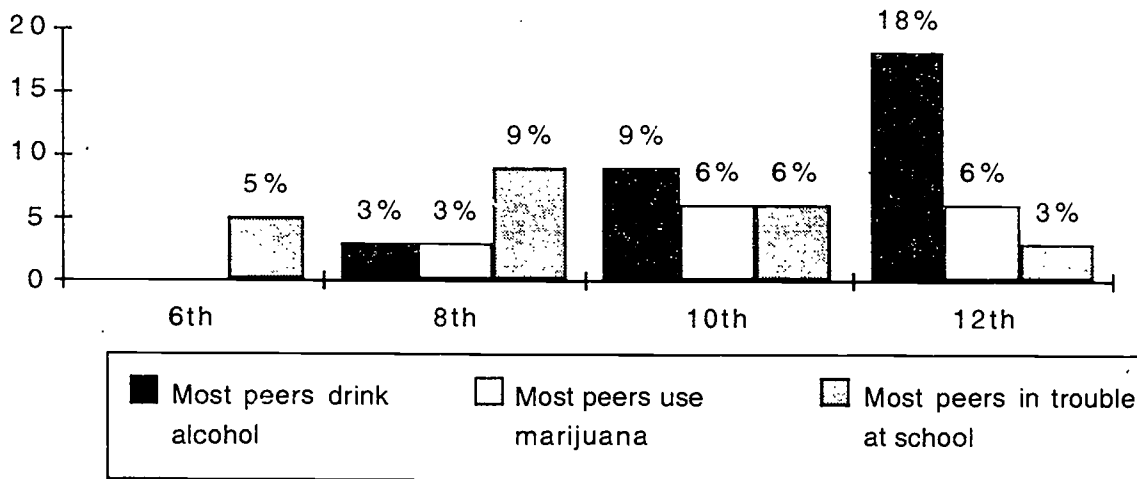
The negative peer influence variables that were selected to represent deficits were "drink alcoholic beverages/get drunk once a week" (combined), "smoke marijuana," and "get into trouble at school." The criterion level for each deficit was the response "most." The data in Table 52 and Figure K describe the grade-level responses for the deficits.

| | Total | 6th | 8th | 10th | 12th |
|---|-------|-----|-----|------|------|
| Most peers drink alcohol and get drunk at least once a week | 7% | * | 3% | 9% | 18% |
| Most peers smoke marijuana | 4 | * | 3 | 6 | 6 |
| Most peers trouble at school | 6 | 5 | 9 | 6 | 3 |

Note: * indicates a percentage greater than zero, less than 0.50

The most frequently reported deficit was "most peers drink alcoholic beverages/get drunk once a week." The deficit increased in frequency with each increase in grade level.

**Figure K
Negative Peer Behavior By Grade**



Based on survey item numbers 89, 92, 96

*Indicates a percentage greater than zero, less than 0.50

H. Unsafe/Disruptive School Environment

Students were asked three questions to ascertain the safety and orderliness of their schools.

The question, "About how often in the last month have any of your classroom teachers had to stop teaching in order to deal with a major student disruption or behavior problem?" was selected to represent the deficit disruptive school environment. The deficit criterion was the response three or more times in the last month.

The data in Table 53 identifies eighth grade as the grade-level where more students experienced disruptions in their classroom. Students in 12th grade reported the least classroom disruptions. The following percentages of student samples at each grade level met or exceeded the criterion for the deficit: 31 percent of sixth grade, 46 percent of eighth grade, 39 percent of 12th grade, and 28 percent of 12th grade students.

Table 53 includes student responses to the question, "How often in the past 12 months have you had your things (clothing, books, bike, car) stolen or deliberately damaged on school property?" Fifty-nine percent of 10th grade students and 77 percent of sixth grade students reported that they had never had things stolen or damaged on school property.

Table 53 also includes data related to the question, "How often in the past 12 months have you been threatened or injured by someone with a weapon (such as a gun, knife, or club) on school property?" The "never" response ranged from 91 percent to 94 percent of the grade level samples. Students in eighth and 10th grade reported slightly more victim experiences than did sixth and 12th grade students. Approximately 11 percent of urban, eight percent of semiurban, seven percent of semirural and six percent of rural students reported being threatened or injured by a weapon last year.

Table 53
Unsafe/Disruptive School Environment
by Grade and by Gender

| Had things stolen or damaged in the last year | | | | | | | |
|--|-------|-----|-----|------|------|------|--------|
| | Total | 6th | 8th | 10th | 12th | Male | Female |
| 0 | 65% | 77% | 62% | 59% | 62% | 61% | 69% |
| 1-2 | 29 | 20 | 31 | 33 | 32 | 31 | 26 |
| 3-5 | 4 | 2 | 5 | 6 | 4 | 5 | 4 |
| 6 or More | 2 | 2 | 2 | 2 | 2 | 3 | 1 |

| Threatened or injured by a weapon, last year | | | | | | | |
|---|----|----|----|----|----|----|----|
| 0 | 92 | 94 | 91 | 91 | 94 | 89 | 95 |
| 1-2 | 6 | 4 | 6 | 7 | 5 | 7 | 3 |
| 3-5 | 1 | 1 | 2 | 1 | 1 | 2 | 1 |
| 6 or More | 1 | 1 | 1 | 1 | 1 | 2 | * |

| Teacher stopped teaching to deal with disruption, last month | | | | | | | |
|---|----|----|----|----|----|----|----|
| 0 | 28 | 35 | 21 | 23 | 33 | 30 | 26 |
| 1-2 | 36 | 33 | 33 | 38 | 39 | 35 | 36 |
| 3-5 | 19 | 17 | 22 | 21 | 16 | 19 | 20 |
| 6-9 | 6 | 5 | 8 | 6 | 5 | 6 | 7 |
| 10 or more | 11 | 9 | 16 | 12 | 7 | 11 | 11 |

Based on survey item numbers 72, 73, 83

Note: *indicates a percentage greater than zero, less than 0.50

I. Unsafe Neighborhood

An unsafe neighborhood was considered to be a deficit. The responses "strongly disagree" or "disagree" were the deficit criterion for the question, "My neighborhood is a safe place to live." Approximately three-seven percent perceived their neighborhoods to be unsafe places to live. Nearly eight-13 percent of the students were "not sure" about the safety of their neighborhoods. Eleven percent of urban, six percent of semiurban, four percent of semirural and 3 percent of rural students considered their neighborhoods to be unsafe.

Table 54
"My Neighborhood is a Safe Place to Live"
by Grade and by Gender

| | Total | 6th | 8th | 10th | 12th | Male | Female |
|-------------------|-------|-----|-----|------|------|------|--------|
| Strongly Disagree | 2% | 3% | 3% | 2% | 1% | 3% | 1% |
| Disagree | 3 | 4 | 3 | 3 | 2 | 3 | 3 |
| Not Sure | 10 | 13 | 10 | 10 | 8 | 10 | 10 |
| Agree | 38 | 28 | 38 | 41 | 43 | 35 | 40 |
| Strongly Agree | 47 | 52 | 46 | 44 | 46 | 49 | 45 |

Based on survey item number 24

J. Poverty

Family poverty was postulated to be a deficit and was assessed through the question, "My family has enough money to meet our basic needs for food and clothing." The deficit criterion included the responses "disagree" and "strongly disagree."

The data in Table 55 indicate that only three-four percent of the students perceived that their families did not have enough money for food and clothing. The "not sure" response was chosen by five-six percent of the students.

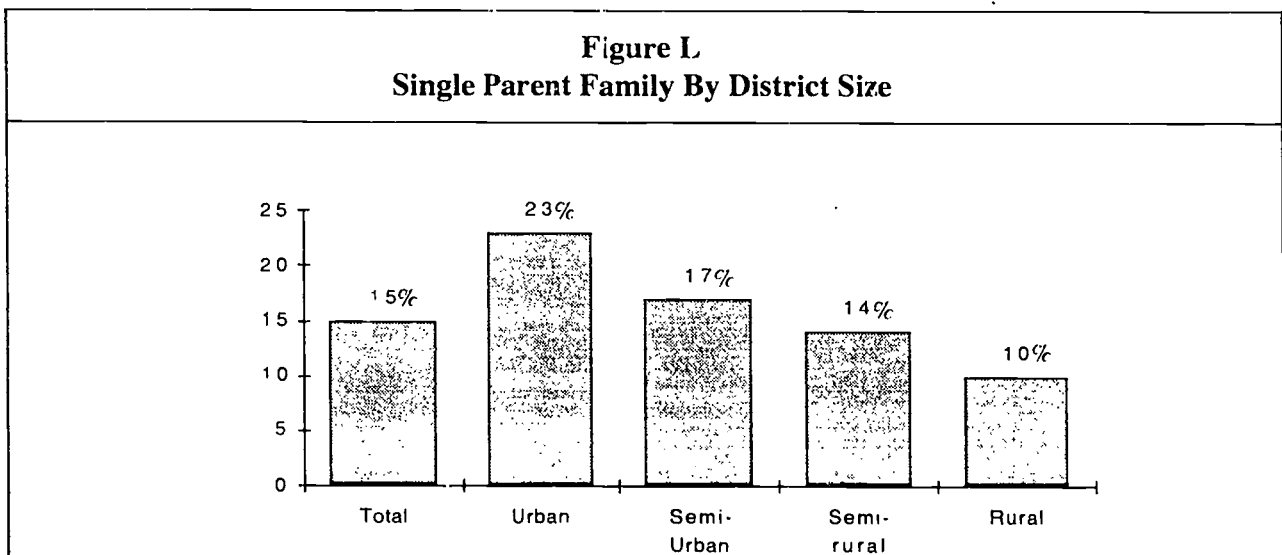
K. Single Parent Family

A single parent family was considered to be a deficit. The question, "With whom do you live most of the time?", was used to assess the incidence of the deficit. Student responses "mother only" and "father only" were the deficit criterion. Approximately 15 percent of the students reported that they lived in a single parent family.

Figure L illustrates that the "single parent family deficit" was most common in urban districts (23 percent) and least common in rural districts (10 percent).

| | Total | 6th | 8th | 10th | 12th | Male | Female |
|----------------------------|-------|-----|-----|------|------|------|--------|
| Strongly Agree | 54% | 63% | 57% | 48% | 46% | 54% | 54% |
| Agree | 37 | 27 | 34 | 43 | 45 | 36 | 38 |
| Not Sure | 6 | 6 | 6 | 6 | 5 | 6 | 5 |
| Disagree/Strongly Disagree | 4 | 3 | 4 | 4 | 4 | 4 | 3 |

Based on survey item number 24



Based on survey item number 4

L. Summary of Deficit Findings

The data in Tables 56 and 57 serve to summarize the findings for the deficit variables by grade levels.

The three most commonly reported deficits were disruptive school (36 percent), drinking parties (30 percent), and stress (25 percent). The three least frequent deficits were poverty (four percent), negative peer-marijuana use (four percent) and unsafe neighborhood (five percent).

Among the thirteen deficit variables, seven variables increased with each increase in grade level. Two variables (negative peer-school trouble and disruptive school) decreased in frequency with each increase in grade level after eighth grade. Four deficits (parental addiction, unsafe neighborhood, poverty, and single parent family) remained at a constant frequency across grade levels.

The data in Table 57 illustrate an increase in the number of deficits among youth with each increase in grade level. For example, 73 percent of sixth grade, 58 percent of eighth grade, 44 percent of 10th grade and 39 percent of 12th grade students experienced one or less deficits. The greatest increase in the number of deficits seemed to occur between sixth and eighth grades.

| | Total | 6th Grade | 8th Grade | 10th Grade | 12th Grade |
|-----------------------------------|-------|--------------|--------------|---------------|---------------|
| 1. Drinking Parties | 30% | 4% | 16% | 41% | 62% |
| 2. Stress | 25 | 14 | 22 | 31 | 31 |
| Under Pressure | 36 | 22 | 32 | 45 | 47 |
| Anxious/Worried | 29 | 19 | 26 | 35 | 35 |
| 3. Physical Abuse | 16 | 10 | 17 | 19 | 18 |
| 4. Sexual Abuse | 11 | 6 | 9 | 14 | 14 |
| 5. Parental Addiction | 8 | 6 | 7 | 9 | 9 |
| 6. Family Member Addiction | 12 | 9 | 12 | 14 | 14 |
| 7. Negative Peer - Marijuana Use | 4 | * | 3 | 6 | 6 |
| 8. Negative Peer - School Trouble | 6 | 5 | 9 | 6 | 3 |
| 9. Negative Peer - Alcohol Use | 7 | * | 3 | 9 | 18 |
| 10. Disruptive School | 36 | 31 | 46 | 39 | 28 |
| 11. Unsafe Neighborhood | 5 | 7 | 6 | 5 | 3 |
| 12. Poverty | 4 | 3 | 4 | 4 | 4 |
| 13. Single Parent Family | 15 | 15 | 15 | 15 | 14 |

| Number of Deficits | Total | 6th | 8th | 10th | 12th |
|--------------------|-------|-----|-----|------|------|
| 0 | 25 | 40 | 27 | 19 | 14 |
| 1 | 28 | 33 | 31 | 25 | 25 |
| 2 | 20 | 15 | 19 | 22 | 24 |
| 3 | 12 | 6 | 10 | 15 | 16 |
| 4 | 7 | 3 | 5 | 9 | 10 |
| 5 | 4 | 1 | 3 | 5 | 6 |
| 6 | 2 | * | 2 | 3 | 3 |
| 7-8 | 1 | 1 | 1 | 2 | 2 |
| 9-13 | * | * | 1 | 1 | * |
| Mean Number | 1.8 | 1.1 | 1.6 | 2.1 | 2.2 |

VI. External Assets

A. Introduction

The following section presents youth survey findings related to the concept of external assets. The Search Institute defines *external assets* as follows:

". . . factors promoting positive teenage development. These assets may result from 'external' factors such as positive relationships in families, friendship groups, schools and the community . . ." (Benson, page 7).

There were 17 external assets included in the youth survey instrument. Table 58 lists the external assets, the criterion used to define each asset and the percentages of the total youth sample which demonstrated each asset.

The data in Table 58 indicate that the five most prevalent external assets were respectively: parental standards, parental monitoring, parent-child communications, time at home, and involved in church or synagogue. The four least prevalent external assets were positive peer influence: extracurriculars, positive school climate, involved in extra-curriculars, and positive peer influence: altruism.

The following pages describe each external asset in more detail. Two tables at the conclusion of this section summarize the grade-level prevalence of the external assets.

Table 58
Prevalence of Each External Asset for Total Sample

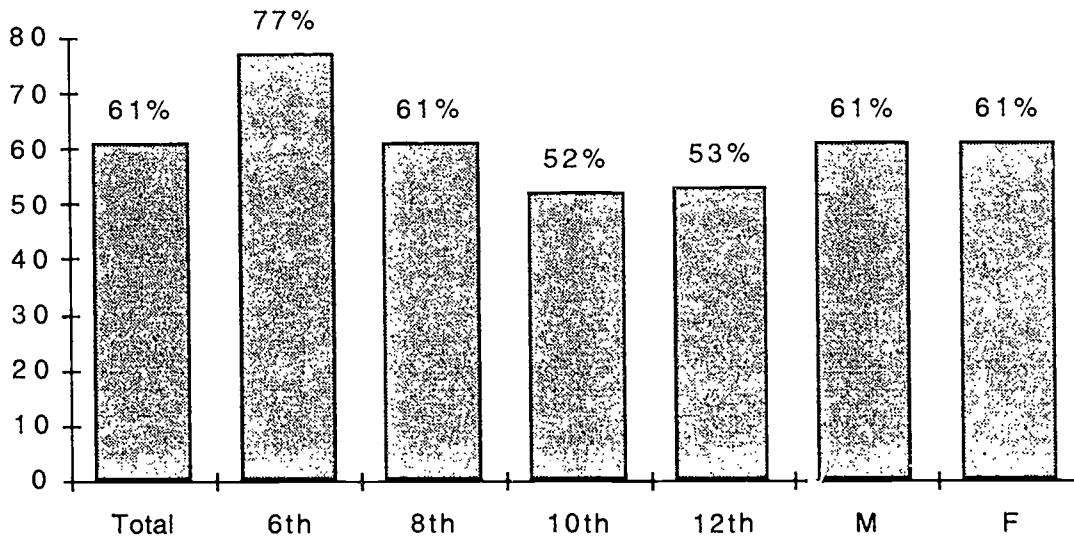
| | |
|--|-----|
| 1. Family Support (Family offers love and support; mean of four or greater on a five-point, five-item scale) | 61% |
| 2. Parents as Social Resources (Parents accessible; "probably" or "would" talk to parents about serious issues) | 50% |
| 3. Parent-child Communication (Frequency of "good talks"; three or more times in the last month) | 71% |
| 4. Parent Ask About School ("Often" or "very often") | 62% |
| 5. Positive School Climate (Teachers care and encourage; mean of four or greater on a five-point, three-item scale) | 34% |
| 6. Parental Standards (Parents upset if alcohol or drug use; mean of four or greater on a five-point, two-item scale) | 83% |
| 7. Parental Discipline (Parents enforce rules; agree or strongly agree) | 59% |
| 8. Parental Monitoring (Parents ask what done, with whom; most or all of the time) | 76% |
| 9. Time at home (Nights out per week; three or fewer) | 66% |
| 10. Positive Peer Influence School (Peers do well in school; "most") | 59% |
| 11. Positive Peer Influence: Altruism (Peers "help other people"; "most") | 22% |
| 12. Positive Peer Influence: Extracurriculars (Peers involved in music or other organizations outside of school; both must be "most") | 34% |
| 13. Positive Peer Influence: Emotional Support (Peers "really care" about you and your feelings; "most") | 42% |
| 14. Involved in Music (one or more hr/week) | 51% |
| 15. Involved in Extra-Curriculars (one or more hr/wk) | 31% |
| 16. Involved in Community Activities (one or more hr/wk) | 54% |
| 17. Involved in Church or Synagogue (one or more hr/wk) | 64% |

B. Family Support

The family support asset was calculated as a five-item scale. The criterion level was a mean of four or more points on a five-point agree/disagree scale. The five items were as follows:

- "My parents often tell me they love me."
- "My family life is happy."
- "There is a lot of love in my family."
- "I get along well with my parents."
- "My parents give me help and support when I need it."

Figure O
Loving and Supportive Family
By Grade and By Gender



Note: Percent scoring four or more on a five-point, five-item scale. Based on survey item numbers 28, 31, 33, 34, 37
Scale reliability = 0.88

Figure O illustrates that 52-77 percent of the students perceived that they lived in a loving and supportive family. Male and female responses were identical on this external asset; 61 percent of both genders responded in the affirmative. Evidently, sixth grade students most frequently perceived love and support from their families.

C. Parents as Social Resources

The parents as social resources asset was assessed through the question, "If you had an important question or concern about alcohol, other drugs, sex, or some other serious issue, would you talk to your parent(s) about it?" The criterion level for the asset included the responses "yes" and "probably."

Table 59
“Would Consult Parents About Important Questions”
by Grade and by Gender

| | Total | 6th | 8th | 10th | 12th | Male | Female |
|--------------|-------|-----|-----|------|------|------|--------|
| Yes | 28% | 41% | 27% | 21% | 25% | 26% | 31% |
| Probably | 22 | 24 | 23 | 21 | 21 | 21 | 23 |
| Not Sure | 19 | 18 | 20 | 21 | 18 | 20 | 19 |
| Probably Not | 14 | 7 | 13 | 17 | 17 | 15 | 12 |
| No | 17 | 10 | 18 | 20 | 18 | 19 | 15 |

Based on survey item number 103

The data in Table 59 indicate that 65 percent of sixth grade, 50 percent of eighth grade, 42 percent of 10th grade and 46 percent of 12th grade students met the criterion level on the parents as social resources asset. Apparently students became less inclined to seek advice and support from their parents as the students became older. Male students (47 percent) were less likely than female students (54 percent) to perceive their parents as social resources.

D. Parent-Child Communications

The parent-child communications asset was defined by student responses to the question, “About how often in the last month have you had a good conversation with one of your parents that lasted 10 minutes or more?” The criterion level for the asset included the responses “three times” and “four or more times.”

The data in Figure P describe a trend toward more frequent parent-child communications with each increase in grade level. Apparently 66 percent of sixth grade, 67 percent of eighth grade, 73 percent of 10th grade and 78 percent of 12th grade students met the criterion level for the asset. Female students more frequently reported such parent-child communications than did male students.

E. Positive School Climate

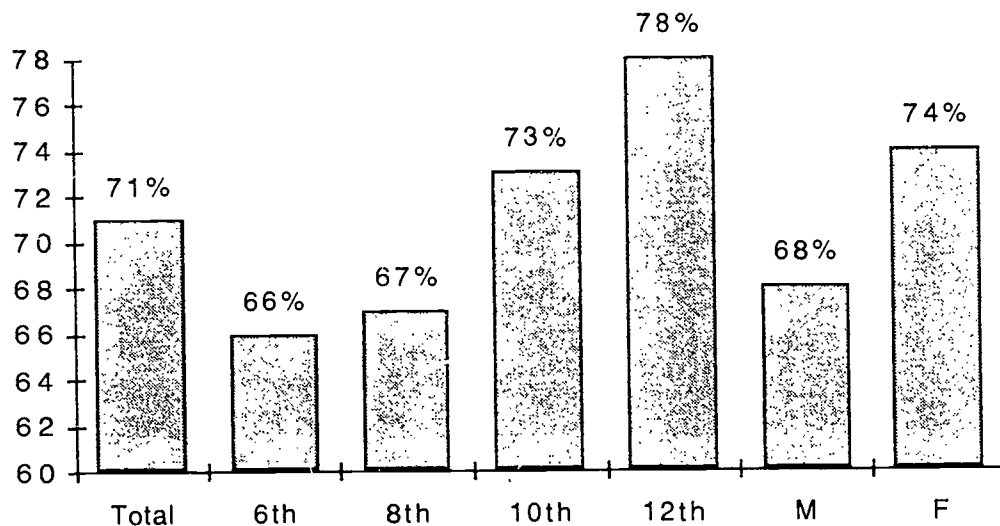
The positive school climate asset was defined by a three-item scale. The items included in the scale were:

- “My teachers really care about me.”
- “My teachers don’t pay much attention to me.”
- “I get a lot of encouragement at my school.”

The criterion level for the asset was a mean of four or greater on the five-point, three-item scale.

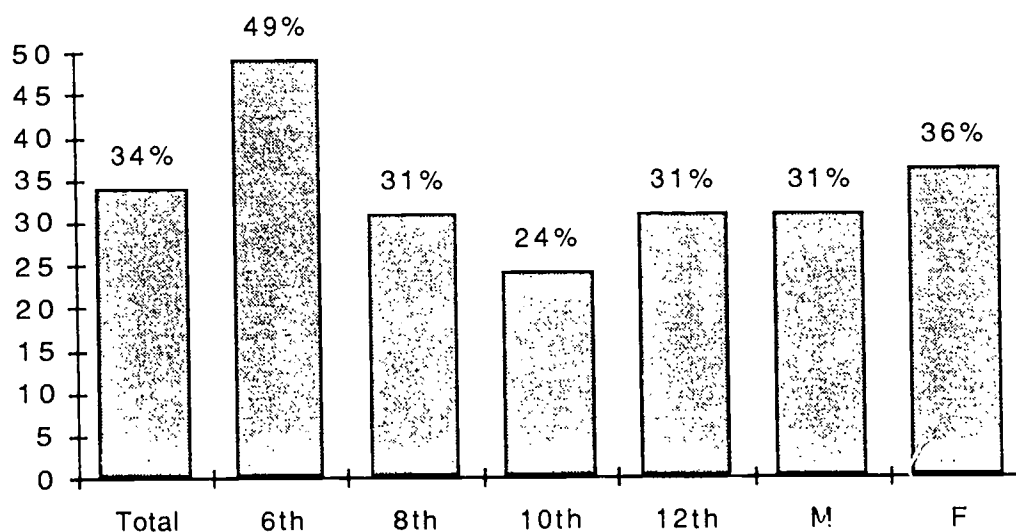
Figure Q indicates that less than half of the students (24-49 percent) rated their schools as providing a positive school climate. The most positive rating for school was made by sixth grade students; the least positive rating was made by 10th grade students.

Figure P
Parent-Child Communication:
Two or More 10-Minute Conversations Per Month
By Grade and Gender



Based on survey item number 106

Figure Q
Students Reporting Positive School Climate
By Grade and Gender



Percent scoring four or higher on a five-point, three-item scale.

Based on survey item numbers 14, 17, 18

Scale reliability = .73

F. Parental Standards, Discipline and Monitoring

The survey findings for three external assets are described in Table 60. The three assets are parental standards, parental discipline, and parental monitoring.

The parental discipline asset was determined by asking students how much they agree or disagree with the statement, "If I break one of my parent's rules, I usually get punished." The criterion level and response included "agree" and "strongly agree."

Between 49 and 67 percent of the students agreed/strongly agreed with the statement that they would be punished for breaking their parents' rules. The frequency of agree/strongly agree responses decreased with each increase in grade level. Female students appeared to be slightly more likely than male students (61 percent to 57 percent) to be punished for rule infractions.

Two questions attempted to assess parental standards regarding alcohol and other drug behaviors of youth. The two questions were:

- "How upset do you think your parents would be if you came home from a party and they found out you had been drinking?"
- "How upset do you think your parents would be if you came home from a party and they found out you had been using illegal drugs such as marijuana or cocaine?"

The criterion level response for the two-item scale was "Very upset" and "Extremely upset."

The data in Table 60 indicate that fewer students at each higher grade level perceived that their parents would be "very/extremely upset" to discover the students' drinking behaviors. The criterion level response was met by 90 percent of the sixth grade, 82 percent of eighth grade, 72 percent of 10th grade and 53 percent of 12th grade students. Female students were more likely (79 percent) than male students (71 percent) to meet the criterion level.

Most students (92-96 percent) perceived that their parents would be very/extremely upset to learn of the students' use of illicit drugs at a party.

Data are also presented in Table 60 concerning the parental monitoring asset. Students were asked, "How often does one of your parents ask you where you are going or with whom you will be?" The criterion level included the responses "often" and "very often."

Approximately 76 percent of the students reported that their parents often/very often monitored where the student was going and with whom they would be. Data for female students indicated that they would more likely be monitored by their parents than would male students.

G. Time at Home

The Search Institute postulated that spending greater amounts of time at home was an external asset. The Iowa Youth Survey included the following question to assess the status of this asset: "During an average week, on how many evenings do you go out for fun and recreation?"

The data in Table 61 illustrate that 63-68 percent of the students met the criterion level of three or fewer evenings away from home each week. No discernible differences in the criterion level was observed in grade level comparisons.

Table 60
Parental Standards, Discipline, and Monitoring
by Grade and by Gender

| | Total | 6th | 8th | 10th | 12th | M | F |
|--|-------|-----|-----|------|------|-----|-----|
| If I break my parents' rules, I get punished (agree, strongly agree) | 59% | 67% | 61% | 58% | 49% | 57% | 61% |
| How upset parents would be if you had been drinking (very, extremely) | 75 | 90 | 82 | 72 | 53 | 71 | 79 |
| How upset parents would be if you had been using drugs (very, extremely) | 94 | 95 | 96 | 94 | 92 | 92 | 96 |
| How often do your parents ask where you're going and with whom (often, very often) | 76 | 74 | 76 | 81 | 73 | 71 | 81 |

Based on survey item numbers 35, 101, 102, 104

Table 61
Nights Out per Week for Fun and Recreation
by Grade and by Gender

| Frequency | Total | 6th | 8th | 10th | 12th | M | F |
|-----------|-------|-----|-----|------|------|----|----|
| 0 | 5% | 7% | 6% | 5% | 3% | 6% | 4% |
| 1 | 13 | 15 | 14 | 12 | 10 | 13 | 13 |
| 2 | 23 | 21 | 22 | 25 | 24 | 21 | 25 |
| 3 | 25 | 23 | 24 | 26 | 27 | 22 | 27 |
| 4 or 5 | 20 | 19 | 20 | 20 | 22 | 20 | 20 |
| 6 or 7 | 14 | 15 | 15 | 12 | 15 | 18 | 10 |

Based on survey item number 12

H. Positive Peer Influence

Five questions were included in the survey to assess the status of four positive peer influence assets. The questions were as follows: "Among the people you consider friends, how many would you say . . .

- Do well in school?
- Help other people?
- Are involved in band, choir, or other musical activities?
- Are involved in clubs, organizations, or sports programs outside of school?
- Really care about you and your feelings?"

The criterion level for each positive peer influence asset was the response "most of my friends."

The data in Table 62 present some general patterns relative to the four positive peer influence assets. The first general pattern is based on the frequencies at which the criterion levels were met. The most prevalent positive peer influence was school performance (53-65 percent), followed by emotional support (40-45 percent), altruism (19-28 percent) and extracurricular (22-46 percent). The second general pattern was that female students more frequently than male students reported the positive peer influence of school performance, altruism, extracurriculars, and emotional support.

| | Total | 6th | 8th | 10th | 12th | M | F |
|--|-------|-----|-----|------|------|-----|-----|
| Most Peers Do Well in School | 58% | 65% | 57% | 53% | 59% | 50% | 66% |
| Most Peers Help Other People | 22 | 28 | 21 | 19 | 22 | 14 | 31 |
| Most Peers in Extracurriculars | 34 | 46 | 41 | 26 | 22 | 21 | 45 |
| Most Peers Care About Me and My Feelings | 42 | 45 | 40 | 40 | 41 | 28 | 55 |

Based on survey item numbers 88,91, 94, 97

I. Personal Involvement

Five questions were included in the youth survey to assess the extent to which youth were involved in positive behaviors. The five questions had the stem: "During an average week, how many hours do you spend . . .?" The statements were as follows:

- "In band, choir, orchestra, music lessons, or practicing voice or a musical instrument?"
- "Playing sports on a school team?"
- "In clubs or organizations at school, such as student government, debate or drama, science clubs, language clubs, chess clubs, journalism?"
- "In clubs or organizations outside of school?"
- "At church or synagogue worship services, programs, or activities?"

The questions "Playing sports . . ." and "In clubs or organizations at school" were combined as a two-item scale for the extracurricular asset.

The criterion level for each involvement asset was 1 or more hours per week.

The data in Table 63 present some general patterns related to the four involvement assets. The most frequently occurring asset (54-72 percent) was student involvement in religious services and programs. The second most frequently occurring asset (51-58 percent) was involvement in community activities (clubs or organizations outside of school). Student involvement in music seemed to decrease from 69 percent of students in sixth grade to 34 percent of 12th grade students. Student involvement in religious services and programs and clubs and organizations outside of school also appeared to decrease in frequency with each increase in grade level. Female students appeared to be more frequently involved in music, clubs/organizations outside of school, and religious services than were male students. School sport teams appeared to be the only activity in which males were more frequently involved than were females.

Table 63
Percent Spending One or More Hours in an Average Week
at Various Activities by Grade and by Gender

| | Total | 6th | 8th | 10th | 12th | M | F |
|---|-------|-----|-----|------|------|-----|-----|
| Involved in music, one or more hours per week | 51% | 69% | 60% | 41% | 34% | 40% | 63% |
| Playing on a sports team at school | 49 | 32 | 68 | 56 | 46 | 56 | 46 |
| School-based clubs and organizations | 31 | 21 | 23 | 35 | 45 | 25 | 37 |
| Clubs and organizations outside of school | 54 | 58 | 54 | 54 | 51 | 51 | 57 |
| Religious services and programs | 64 | 72 | 69 | 62 | 54 | 60 | 68 |

Based on survey item numbers 88, 91, 94, 97

J. Summary of Findings for External Assets

The data in Table 64 illustrate that the prevalence of nine external assets decreased with each increase in grade level. The largest decrease in prevalence was observed with: involved in music, positive school climate, parental standards, parents as social support, family support, parental discipline, and involved in church.

Two external assets increased in prevalence with each increase in grade level: parent-child communications and involved in extracurricular activities.

Four external assets appeared to remain at a fairly constant level of prevalence across grades. Parental monitoring (73-81 percent) and time at home (64-68 percent) remained constant at high levels of prevalence.

The data in Table 65 indicate that the total number of external assets for individual students generally decreased with each increase in grade level. For example, the percentages of student samples with nine or more external assets decreased from 69 percent of sixth grade to 48 percent of 12th grade students. The greatest decrease in external assets appeared to occur between sixth and eighth grade.

Table 64
External Assets by Grade Level

| Asset | Total | 6th | 8th | 10th | 12th |
|------------------------------------|-------|-----|-----|------|------|
| 1. Family Support | 61% | 71% | 61% | 52% | 53% |
| 2. Parents As Social Support | 50 | 65 | 50 | 42 | 46 |
| 3. Parent-Child Communications | 71 | 66 | 67 | 73 | 78 |
| 4. Parent Ask About School | 62 | 69 | 61 | 59 | 57 |
| 5. Positive School Climate | 34 | 49 | 31 | 24 | 31 |
| 6. Parental Standards | 83 | 92 | 89 | 82 | 69 |
| 7. Parental Discipline | 59 | 67 | 61 | 58 | 49 |
| 8. Parental Monitoring | 76 | 74 | 76 | 81 | 73 |
| 9. Time at Home | 66 | 66 | 66 | 68 | 64 |
| 10. Positive Peer: School | 59 | 65 | 57 | 53 | 59 |
| 11. Positive Peer: Altruism | 22 | 28 | 21 | 19 | 22 |
| 12. Positive Peer: Extracurricular | 34 | 18 | 19 | 13 | 11 |
| 13. Positive Peer: Emotional | 42 | 45 | 40 | 40 | 41 |
| 14. Involved Music | 51 | 69 | 60 | 41 | 34 |
| 15. Involved Extracurricular | 31 | 21 | 23 | 35 | 45 |
| 16. Involved Community | 54 | 58 | 54 | 54 | 51 |
| 17. Involved Church | 64 | 72 | 69 | 62 | 54 |

Table 65
Percent Reporting Each Number
of External Assets by Grade

| External Assets | Total | 6th | 8th | 10th | 12th |
|-----------------|-------|-----|-----|------|------|
| 0 | *% | 0% | *% | *% | 1% |
| 1-2 | 2 | 1 | 2 | 3 | 5 |
| 3-4 | 8 | 4 | 7 | 10 | 11 |
| 5-6 | 15 | 9 | 16 | 16 | 18 |
| 7-8 | 20 | 19 | 20 | 21 | 18 |
| 9-10 | 21 | 25 | 22 | 21 | 19 |
| 11-12 | 18 | 23 | 18 | 16 | 15 |
| 13-14 | 11 | 15 | 11 | 8 | 10 |
| 15+ | 4 | 6 | 4 | 4 | 4 |
| Mean Number | 8.8 | 9.9 | 8.9 | 8.4 | 8.2 |

Note: *indicates a percentage greater than zero, less than 0.50.

VII. Internal Assets

A. Introduction

The following narrative, tables and figures provide youth survey findings relative to the concept of internal assets. The Search Institute describes *internal assets* as follows:

"...assets are factors promoting positive teenage development. These assets may result from 'internal' factors reflecting the teenager's personal convictions, values and attitudes." (Benson, page 7).

Eight internal assets were included in the 1993 youth survey instrument. The internal assets and their criterion levels are listed in Table 66. Also included in Table 66 are data for the total sample on each internal asset.

The data in Table 66 indicate that the three most prevalent internal assets were: educational aspiration, cares about people's feelings, and achievement motivation. The three least prevalent internal assets were: homework, values sexual restraint, and prosocial behavior.

The following pages describe each of the internal assets in more detail. Two tables at the end of the section summarize the grade-level prevalence of the internal assets.

Table 66
Prevalence of Internal Assets for Total Sample

| | |
|--|-----|
| 1. Achievement Motivation (Four or greater on a three-item, five-point scale) | 75% |
| 2. Educational Aspiration (Aspires to post-high school education) | 84% |
| 3. School Performance (Students calls own performance above average) | 47% |
| 4. Homework (Six or more hrs/wk) | 20% |
| 5. Cares About People's Feelings (Agree, strongly agree) | 88% |
| 6. Values Sexual Restraint (Agrees sex while a teen is against values) | 38% |
| 7. Self-Esteem (Mean four or more on a five-point, five-item scale) | 52% |
| 8. Prosocial Behavior (Engages in both behaviors at least once a year) | 39% |

B. Achievement Motivation

The achievement motivation asset was a composite of three items on the youth survey. The criterion level was a score of four or five points on each of the following questions: "How much do you agree or disagree with each of the following?"

- "At school I try as hard as I can to do my best work."
- "It bothers me when I don't do something well."
- "I don't care how I do in school."

The data in Table 67 describe four general patterns. More than 70 percent of the students expressed a strong motivation to achieve in their school performance. Fewer students in each higher grade level agreed with the statement, "At school I try as hard as I can to do my best work." More students at each higher grade level agreed with the statement, "It bothers me when I don't do something well." Female students appeared to have higher achievement motivation levels than did male students.

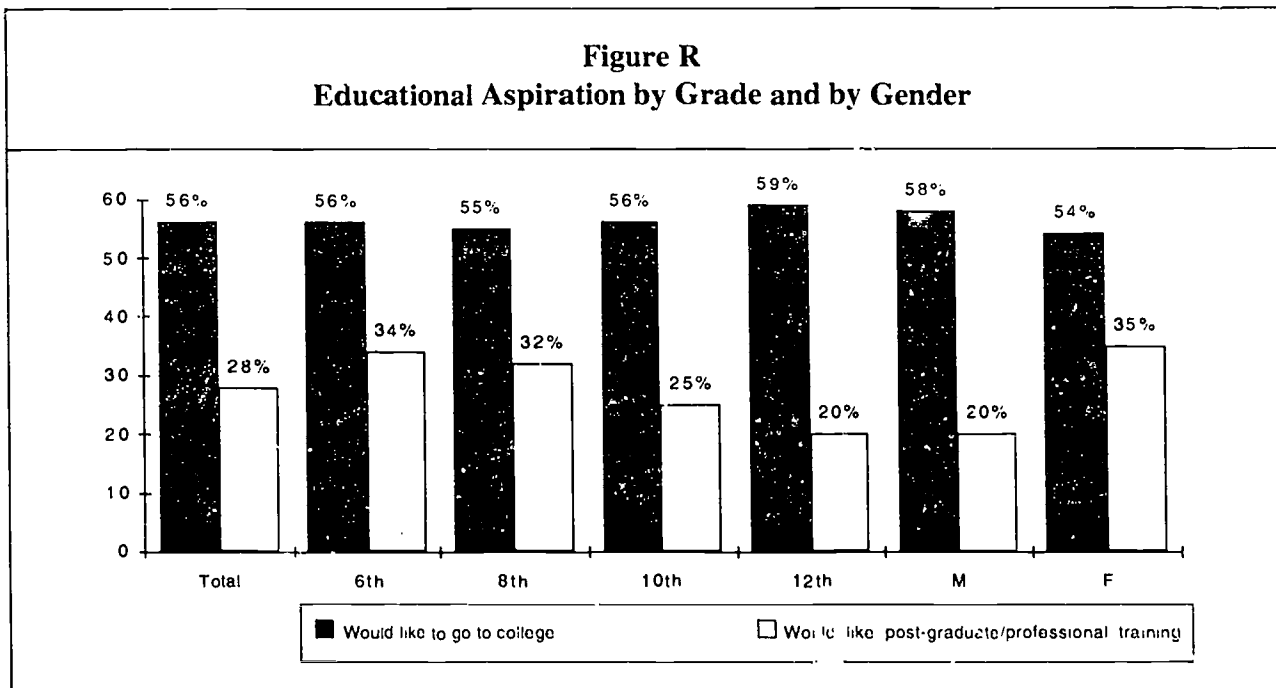
C. Educational Aspirations

A question on the youth survey asked students, "How long do you expect to go to school?" The criterion levels for the asset included: "Would like to go to college after high school" and "Would like to go to college and then go on after college to study to be something like a lawyer, professor or doctor."

| | Total | 6th | 8th | 10th | 12th | M | F |
|---|-------|-----|-----|------|------|-----|-----|
| At school I try to do my best. (agree, strongly agree) | 80% | 89% | 81% | 76% | 73% | 73% | 86% |
| It bothers me when I don't do well. (agree, strongly agree) | 78 | 70 | 74 | 87 | 84 | 74 | 81 |
| I don't care how I do in school. (disagree, strongly disagree) | 91 | 93 | 90 | 91 | 91 | 88 | 94 |

Based on survey item numbers 13, 15, 16

Note: *indicates a percentage greater than zero, less than 0.50



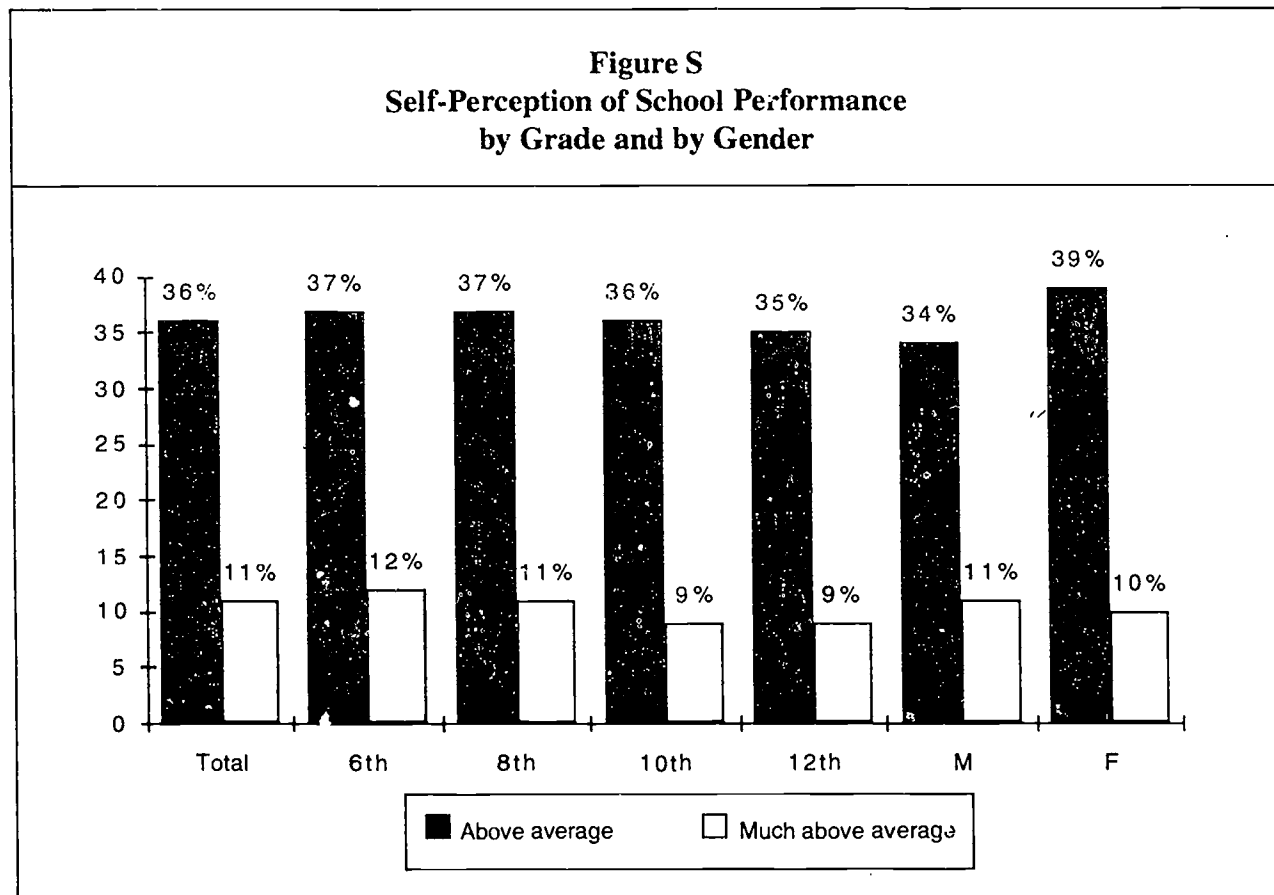
Based on survey item number 19

Figure R illustrates the survey findings for each of the criterion levels of the educational aspiration asset. For example, 56 percent of the total sample reported that they would like to go to college and an additional 28 percent said they would continue college to enter a professional career. The educational aspiration asset appeared to remain consistent across grade levels: 55-59 percent of students aspiring to a college education and an additional 20-34 percent aspiring to post-graduate/professional training. Males appeared to more frequently aspire to a college education only and females appeared to aspire more frequently to post-graduate/professional training.

D. School Performance

Students were asked to rate their school performance through the question, "Compared with others your age, how well do you do in school?" The criterion level for the school performance asset included the responses "above average" and "much above average."

Figure S portrays student data for each criterion level response for the school performance asset. Approximately 35-37 percent of the students rated their school performances as above average and an additional 9-12 percent rated themselves as much above average. Nearly 47 percent of the total sample met the criterion level for the school performance asset. An estimated 45 percent of the male students and 49 percent of the female students attained the criterion for the school performance asset.



Based on survey item number 20

E. Homework

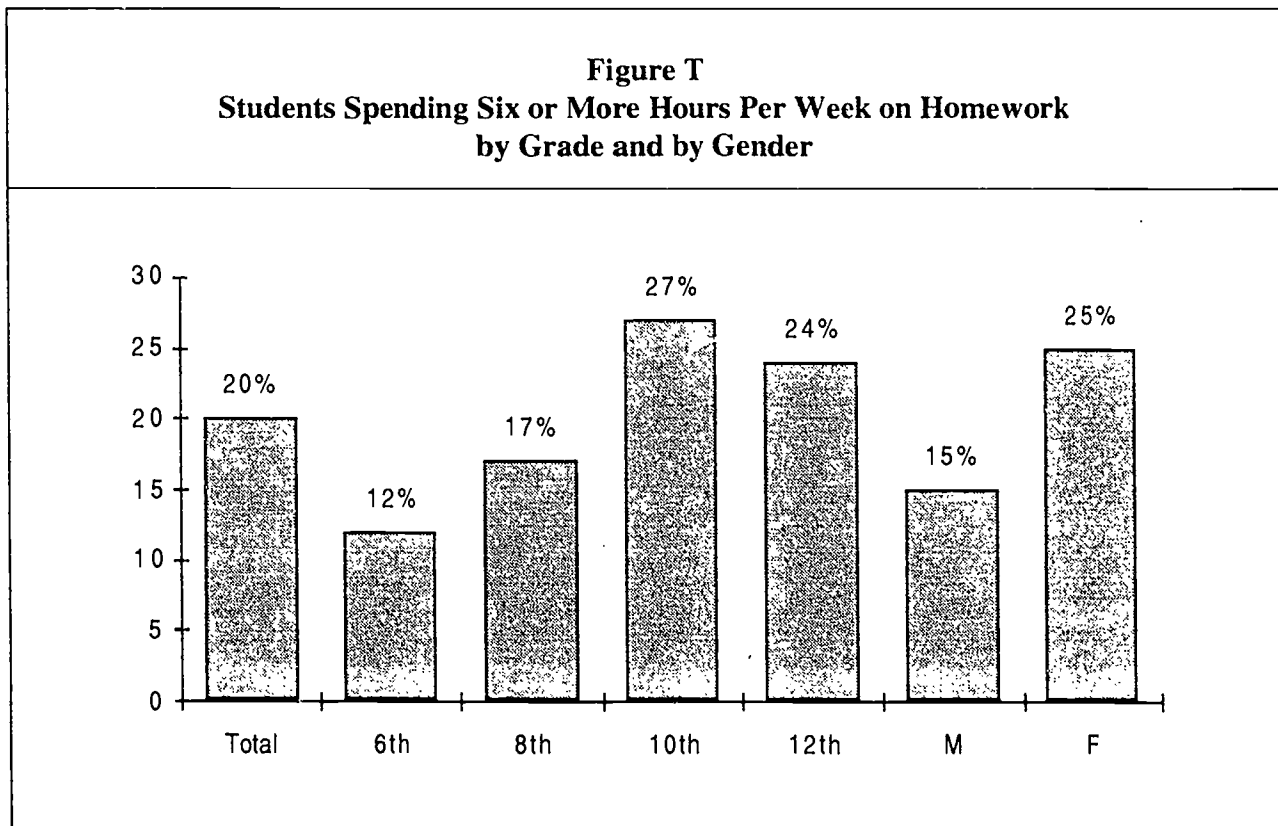
The amount of time students engaged in homework assignments was considered to be an internal asset. The asset was assessed by asking students, "During an average week, how many hours do you spend doing homework?" The criterion level for the asset was six or more hours per week.

The data in Figure T indicate that 12-27 percent of the students engaged in homework for six or more hours each week. In general, the number of students who met the criterion for the homework asset increased with each increase in grade level. Female students were more likely than male students to report engaging in six or more hours of homework each week.

F. Cares About People's Feelings

The statement, "I care about people's feelings" was added to the youth survey to assess students' empathy and sensitivity. The criterion level included the responses "agree" and "strongly agree."

Table 68 provides the grade level and gender distribution of student responses to the question. Approximately 86-91 percent of the students met the criterion level for the asset. Female students (95 percent) were more likely than male students (81 percent) to meet the criterion level for the asset.



Based on survey item 26

G. Values Sexual Restraint

The statement, "It is against my values to have sex while I am a teenager," was established in prior studies by the Search Institute to be an internal asset that had high negative correlation with each of several at risk behaviors. The criterion level for the values sexual restraint asset included the agree and strongly agree responses.

The data in Table 68 indicate that the number of students who met the criterion level for the asset decreased with each increase in grade level. For example, 55 percent of sixth grade, 45 percent of eighth grade, 29 percent of 10th grade and 22 percent of 12th grade students met the criterion levels. Female students were more likely (46 percent) than male students (29 percent) to agree/strongly agree with the statement. "It is against my values to have sex while I am a teenager." There were 15-25 percent of the students sampled who were "not sure" of their positions.

H. Self-Esteem

The self-esteem asset was a composite of five items on the youth survey. The items were as follows:

- "I have a number of good qualities."
- "At times, I think I am no good at all."
- "All in all, I am glad I am me."
- "I feel I do not have much to be proud of."
- "On the whole, I like myself."

Table 68
Positive Values by Grade and by Gender

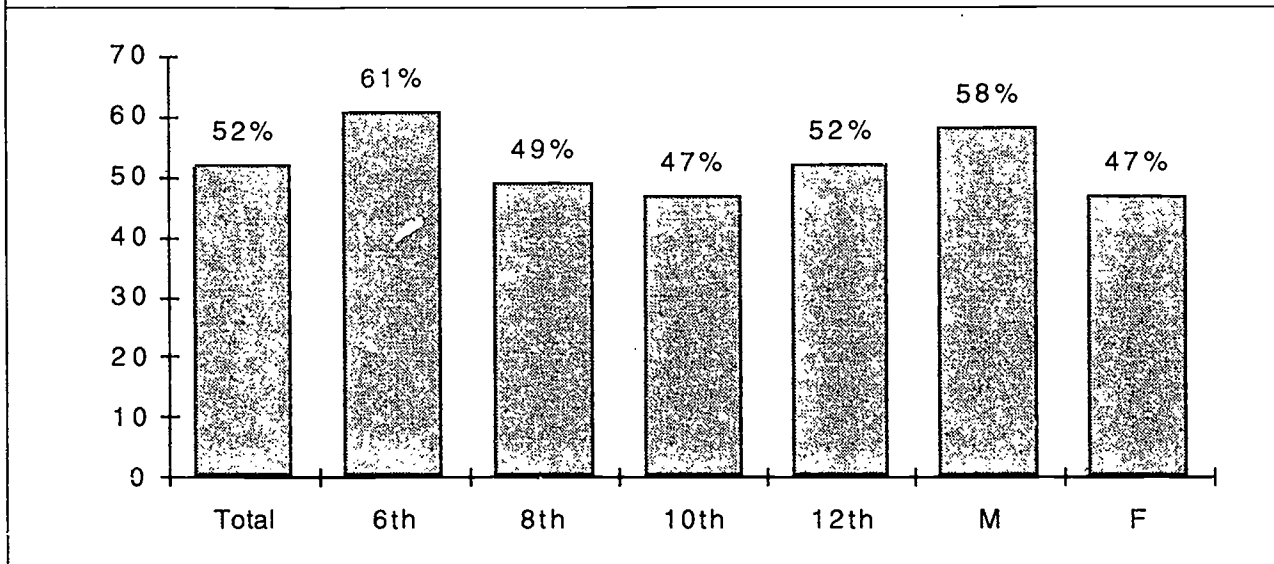
| | Total | 6th | 8th | 10th | 12th | M | F |
|--|-------|-----|-----|------|------|-----|-----|
| I Care About People's Feelings | | | | | | | |
| Strongly Agree | 41% | 43% | 37% | 41% | 44% | 27% | 55% |
| Agree | 47 | 44 | 49 | 48 | 47 | 54 | 40 |
| Not Sure | 8 | 10 | 9 | 7 | 7 | 13 | 4 |
| Disagree, Strongly Disagree | 4 | 4 | 4 | 4 | 3 | 5 | 1 |
| It's Against My Values To Have Sex While I'm a Teenager | | | | | | | |
| Strongly Agree | 26 | 43 | 31 | 18 | 12 | 18 | 34 |
| Agree | 12 | 12 | 14 | 11 | 10 | 11 | 12 |
| Not Sure | 21 | 25 | 25 | 21 | 15 | 23 | 20 |
| Disagree | 19 | 7 | 14 | 25 | 31 | 19 | 19 |
| Strongly Disagree | 22 | 13 | 17 | 26 | 32 | 29 | 14 |

Based on survey item numbers 26, 30

The criterion level for three items ("...good qualities," "...glad I am me," and "...I like myself") included the responses "agree" and "strongly agree". The criterion level for two items ("...think I am no good..." and "...not much to be proud of") included the responses "disagree" and "strongly disagree."

Figure U illustrates that approximately 47-61 percent of the students met the criterion level for the self-esteem asset. Sixth grade students appeared to have the highest frequency (61 percent) for the self-esteem asset and 10th grade students the lowest frequency (47 percent). Males appeared to have a higher frequency of the self-esteem asset than did female students.

Figure U
Students With High Self-Esteem
by Grade and by Gender



Percent scoring four or more on a five item, five-point scale
 Based on survey item numbers 23, 25, 27, 29, 32
 Scale reliability = .79

I. Prosocial Behavior

The Search Institute described prosocial behavior as helping people in distress, donating time or energy to voluntary service organizations and, attempting to reverse political, economic and social injustice or inequality. It is the desire or intent to promote the welfare of others. The Iowa Youth Survey included the following three items to assess the prosocial behavior asset:

“How often in the past 12 months have you ...

- Been involved in a service project at school that helped make life better for other people?
- Given money or time to a charity or organization that helps people?
- Spent time helping people who are poor, hungry, sick, or unable to care for themselves?”

The data in Table 69 indicate that among the total sample: 61 percent had given money or time to charity, 49 percent had spent time helping the poor or sick, and 43 percent had been involved in service projects. Gifts of money or time to charity appeared to decrease slightly with each increase in grade level. The frequency of “spending time to help poor or sick” people also seemed to decrease with each increase in grade level. The “involved in service projects” behavior also appeared to decrease in frequency with each increase in grade level. Females were more frequently involved in the prosocial behaviors than were males.

The criterion levels for the prosocial behavior variable were obtained by the following percentages of grade-level samples:

| Total | 6th | 8th | 10th | 12th |
|-------|-----|-----|------|------|
| 39% | 47% | 40% | 35% | 35% |

Table 69
Prosocial Behavior by Grade and by Gender
(Number of Times in the Past Year)

| | Total | 6th | 8th | 10th | 12th | M | F |
|--|-------|-----|-----|------|------|-----|-----|
| Give Money or Time to Charity | | | | | | | |
| 0 | 39% | 33% | 40% | 42% | 41% | 46% | 32% |
| 1-2 | 39 | 39 | 38 | 38 | 39 | 34 | 43 |
| 3-5 | 13 | 14 | 13 | 12 | 12 | 11 | 15 |
| Greater or equal to 6 | 10 | 14 | 9 | 8 | 8 | 9 | 11 |
| Spent Time Helping Poor or Sick | | | | | | | |
| 0 | 51 | 43 | 50 | 55 | 57 | 60 | 43 |
| 1-2 | 34 | 37 | 36 | 32 | 29 | 29 | 38 |
| 3-5 | 9 | 11 | 9 | 8 | 7 | 7 | 11 |
| Greater or equal to 6 | 6 | 8 | 6 | 6 | 6 | 5 | 8 |
| Involved in Service Projects | | | | | | | |
| 0 | 57 | 54 | 57 | 60 | 55 | 63 | 51 |
| 1-2 | 32 | 31 | 31 | 31 | 32 | 28 | 36 |
| 3-5 | 7 | 8 | 7 | 6 | 8 | 6 | 9 |
| Greater or equal to 6 | 4 | 6 | 4 | 3 | 4 | 4 | 5 |

Based on survey item numbers 26, 30

J. Summary of Findings for Internal Assets

The data in Table 70 summarize the findings for the internal assets variables by grade levels. The three most frequently reported internal assets were, respectively: cares about people's feelings, educational aspiration, and achievement motivation. The three least frequently reported assets were homework (20 percent), values sexual restraint (38 percent), and prosocial behavior (39 percent).

Five internal assets appeared to decrease in frequency with each increase in grade level. The greatest decrease (55-22 percent) in prevalence appeared to occur with the "values sexual restraint" asset. One internal asset (homework) seemed to increase in frequency with each increase in grade level. "Cares about people's feelings" did not appear to vary with grade levels.

The data in Table 71 illustrate a decrease in the number of internal assets within each higher grade-level sample. For example, the percentage of grade-level samples who had five or more internal assets decreased from 52 percent of sixth grade to 40 percent of 12th grade students. The most pronounced decrease seemed to occur between sixth and eighth grades.

Table 70
Prevalence of Internal Assets By Grade

| | Total | 6th | 8th | 10th | 12th |
|-------------------------------|-------|-----|-----|------|------|
| Achievement Motivation | 75% | 79% | 74% | 74% | 71% |
| Educational Aspiration | 84 | 90 | 87 | 81 | 79 |
| School Performance | 47 | 49 | 48 | 45 | 44 |
| Homework | 20 | 12 | 17 | 27 | 24 |
| Cares About People's Feelings | 88 | 87 | 86 | 89 | 91 |
| Values Sexual Restraint | 38 | 55 | 45 | 29 | 22 |
| Self-Esteem | 52 | 61 | 49 | 47 | 52 |
| Prosocial Behavior | 39 | 47 | 40 | 35 | 35 |

Table 71
Percent Reporting Each Number of Internal Assets by Grade

| Number of Assets | Total | 6th | 8th | 10th | 12th |
|------------------|-------|-----|-----|------|------|
| 0 | 1% | 1% | 2% | 2% | 1% |
| 1-2 | 13 | 9 | 14 | 15 | 15 |
| 3 | 18 | 14 | 16 | 20 | 20 |
| 4 | 24 | 24 | 24 | 23 | 24 |
| 5 | 24 | 28 | 24 | 23 | 24 |
| 6 | 16 | 20 | 17 | 14 | 13 |
| 7-8 | 4 | 4 | 4 | 5 | 3 |
| Mean Number | 4.5 | 4.9 | 4.5 | 4.4 | 4.4 |

VIII. Patterns of Co-Occurrence and Other Cross-Tabulations

A. Introduction

The 1993 Iowa Youth Survey contained measures of 12 at-risk behaviors, 13 deficits, 17 external assets, and eight internal assets. Detailed descriptions of the findings for these variables were reported earlier in this report.

Previous research by the Search Institute has demonstrated a strong negative relationship between at-risk behaviors and the presence of the external and internal assets. The earlier research also demonstrated a positive relationship between the number of deficits and the number of at-risk behaviors.

The data in Table 72 illustrate the extent of the changes in the number of at-risk behaviors, deficits and assets as a function of age, opportunity and experience. The data demonstrate an increase in the mean number of at-risk behaviors, an increase in the mean number of deficits and a decrease in the mean number of assets with each increase in grade level.

The remainder of this section provides more specific findings generated by cross-tabulations of the at-risk behaviors, assets and deficits data for the total youth samples. The findings are categorized into the following sub-sections: at-risk behaviors, deficits, assets, and descriptions of the non-using student.

Table 72
Means by Grade for Study Variables

| | Total | 6th | 8th | 10th | 12th |
|--------------------------------------|-------|------|------|------|------|
| Mean Number Substance Risk Behaviors | 1.0 | 0.3 | 0.7 | 1.2 | 1.8 |
| Mean Number Other At-Risk Behaviors | 0.7 | 0.6 | 0.7 | 0.8 | 0.7 |
| Mean Number of Deficits | 1.8 | 1.1 | 1.6 | 2.1 | 2.3 |
| Mean Number of External Assets | 8.8 | 9.9 | 8.9 | 8.4 | 8.2 |
| Mean Number of Internal Assets | 4.5 | 4.9 | 4.5 | 4.4 | 4.4 |
| Mean Number For All Assets | 13.4 | 14.8 | 13.5 | 12.9 | 12.6 |

B. At-Risk Behaviors

The data in Table 73 indicate that the number of at-risk behaviors among youth increases with each increase in grade level. The mean number of at-risk behaviors increased from 0.9 behaviors at sixth grade to 2.5 behaviors at 12th grade. Another interpretation of the data denotes that 20 percent of the sixth grade students reported two or more at-risk behaviors. This finding is contrasted with 31 percent of eighth grade, 45 percent of 10th grade, and 53 percent of 12th grade students who reported two or more at-risk behaviors.

Table 73
Number of At-Risk Behaviors by Grade Level

| Number of Behaviors | Total | 6th | 8th | 10th | 12th |
|---------------------|-------|------|------|------|------|
| 0 | 38% | 50% | 41% | 32% | 28% |
| 1 | 25 | 30 | 28 | 23 | 19 |
| 2 | 13 | 12 | 14 | 14 | 13 |
| 3 | 7 | 4 | 7 | 10 | 8 |
| 4 | 5 | 1 | 3 | 6 | 9 |
| 5 | 4 | 1 | 2 | 5 | 8 |
| 6 | 3 | * | 1 | 4 | 7 |
| 7 | 2 | 1 | 1 | 2 | 4 |
| 8-9 | 2 | * | 2 | 3 | 3 |
| 10-12 | 1 | * | 1 | 1 | 1 |
| Mean Number | 1.69 | 0.86 | 1.39 | 1.99 | 2.50 |

Note: *indicates a percentage greater than zero, less than 0.50.

The data in Table 74 represent a cross-tabulation for the total sample on the co-occurrence of 10 at-risk behaviors.

Among the total youth sample 19 percent were frequent alcohol users. The sub-group was also involved in the following at-risk behaviors:

- 66 percent in binge drinking
- 57 percent in drunk driving.
- 48 percent in beating up someone in anger.
- 34 percent in daily cigarette use.
- 25 percent in depression.
- 24 percent attempted suicide.
- 23 percent in frequent use of illicit drugs.
- 13 percent in extortion.
- 12 percent in gambling.

Another way to interpret the co-occurrence data is to compare the frequent alcohol use sub-group with the norms for the total sample. For example, the frequent alcohol use subgroup was three to six times more likely that the total sample to binge drink, smoke cigarettes, use illicit drugs and gamble. Frequent alcohol users were also more than twice as likely as the total sample to drive drunk, attempt suicide, and use a weapon, force or threat to get something from someone.

Table 74
Co-Occurrence of Selected Risk Factors

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|------------------------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. Frequent Alcohol Use | - | 66% | 34% | 23% | 57% | 25% | 24% | 13% | 48% | 12% |
| 2. Binge Drinking | 82 | - | 36 | 27 | 63 | 27 | 28 | 17 | 53 | 14 |
| 3. Daily Cigarette Use | 72 | 62 | - | 38 | 55 | 34 | 35 | 17 | 55 | 12 |
| 4. Frequent Illicit Drug Use | 74 | 68 | 56 | - | 66 | 34 | 40 | 27 | 59 | 20 |
| 5. Drunk Driving* | 77 | 70 | 35 | 29 | - | 26 | 25 | 16 | 49 | 14 |
| 6. Depression | 29 | 25 | 18 | 12 | 30 | - | 31 | 10 | 43 | 6 |
| 7. Attempted Suicide | 39 | 37 | 28 | 22 | 38 | 46 | - | 16 | 53 | 10 |
| 8. Extortion | 49 | 49 | 29 | 32 | 50 | 30 | 36 | - | 83 | 27 |
| 9. Beat Up Someone in Anger | 29 | 25 | 15 | 11 | 31 | 22 | 19 | 13 | - | 8 |
| 10. Gambling | 61 | 56 | 30 | 33 | 52 | 28 | 31 | 37 | 69 | - |

*Includes only those who drive

To Use This Table: Always enter the table from the left, not the top. To find the percentage of binge drinkers who also use illicit drugs, follow row two (Binge Drinking) over to column four--the percentage is 27 percent. To find the percent of frequent illicit drug users who also engage in binge drinking, follow row four (Frequent Illicit Drug Use) to column two--the percentage is 68 percent.

Among the total youth sample six percent were frequent users of illicit drugs. This sub-group was also involved in several other at-risk behaviors as follows:

- 74 percent in frequent alcohol use.
- 68 percent in binge drinking.
- 66 percent in drunk driving.
- 59 percent in beating up someone in anger.
- * 56 percent in daily cigarette use.
- 40 percent attempted suicide.
- 34 percent in depression.
- 27 percent in extortion.
- 20 percent in gambling.

Frequent illicit drug users were four to six times more likely than the total sample to smoke cigarettes; gamble; use a weapon, force or threat to get something; frequently use alcohol; and binge drink. Frequent illicit drug users were also two to three times more likely than the total sample to drive drunk, attempt suicide, fight someone, and experience depression.

The remaining eight at-risk behavior sub-groups demonstrated similar patterns of co-occurrence.

Another cross-tabulation of at-risk behaviors data is reported in Table 75. Student data were sorted on the basis of whether the students abstained from substance use or the students reported substance use. The table illustrates the relationship between abstinent substance behavior and the five other at-risk behaviors. The table also illustrates the relationship between substance use behavior and the five other at-risk behaviors.

The data indicate that substance users were nearly twice as likely as abstainers to be involved in gambling and extortion behaviors. Substance users were also more likely than abstinent students to be involved in the depression, attempted suicide, and beat up someone in anger behaviors. Approximately 33-37 percent of the abstainer group were involved in each of the five other at-risk behaviors.

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Table 75
Percent Reporting Each Non-Substance-Related Risk
as a Function of Whether They Abstain
or Report Any Level of Substance Use

| | | If Risk is Present, Percent Reporting that They... | |
|----|-------------------|--|-----|
| | | Abstain | Use |
| 1. | Depression | 36% | 52% |
| 2. | Attempted Suicide | 35 | 62 |
| 3. | Extortion | 37 | 73 |
| 4. | Beat Up in Anger | 33 | 49 |
| 5. | Gambling | 37 | 70 |

C. Deficits

The data in Table 76 serve to contrast non-substance using students (abstain) with substance-using students (use) on each of the 13 deficit variables. Approximately 19-38 percent of the abstaining students reported the presence of the deficit variables as contrasted with 42-85 percent of the substance-using students. The most common deficits reported by the substance-using students were "negative peer pressure: marijuana use" (85 percent), "negative peer pressure: alcohol use" (84 percent), and "drinking parties" (81 percent). The three deficits also provided the greatest contrast between the abstain and use groups of students. The abstain and use groups also noticeably differed on the deficits of "negative peer pressure: trouble at school," "physical abuse by an adult," "sexual abuse by an adult," and "stress." The comparison groups differed the least on the deficits of "disruptive school environment," "single-parent family," and "unsafe neighborhood."

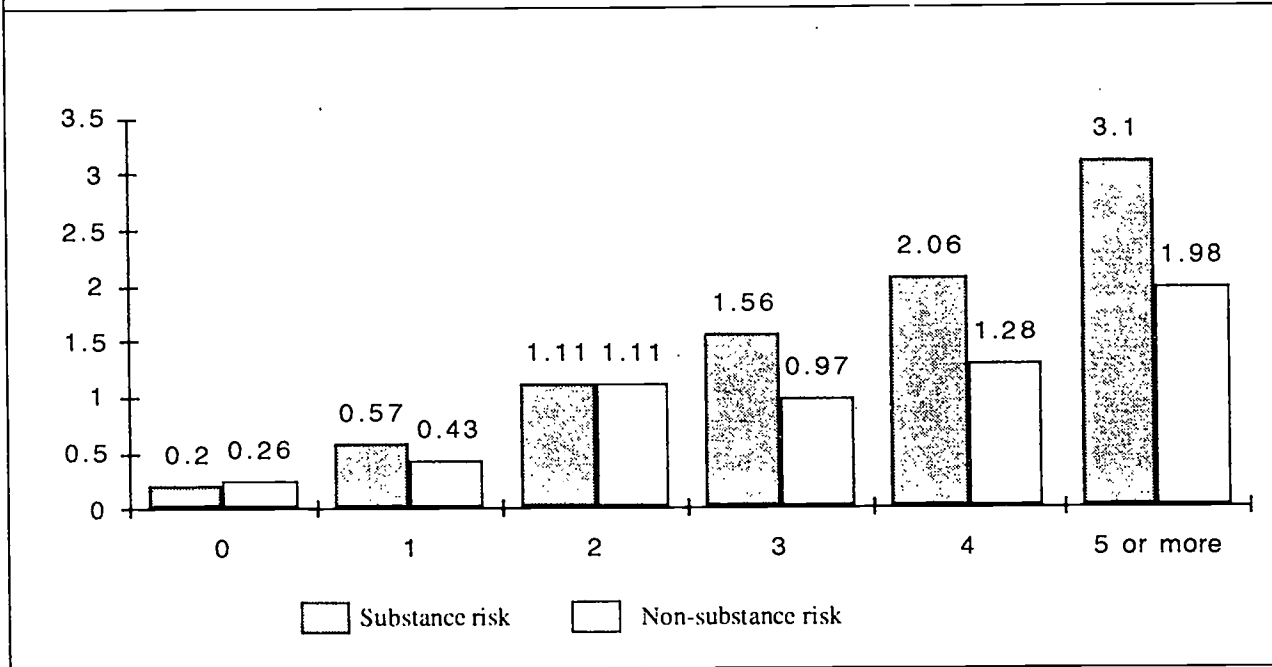
Another cross-tabulation of data produced a comparison of the number of deficits with substance risk behaviors and non-substance risk behaviors. These comparisons are reported in Figure V.

The data in Figure V clearly indicate an increase in the number of substance risk behaviors and non-substance risk behaviors with each increase in the number of deficits. For example, very few students were involved in substance behaviors or non-substance risk behaviors when they also experienced no deficits. Youth experiencing five or more deficits were involved in approximately three substance risk behaviors and two non-substance risk behaviors.

Table 76
Percent Reporting They Abstain or Report Any Level of Substance Use
by Presence or Absence of Each Deficit

| | | If Deficit is Present, Percent Reporting that They... | |
|-----|---|---|-----|
| | | Abstain | Use |
| 1. | Drinking Parties | 19% | 81% |
| 2. | Stress | 34 | 52 |
| 3. | Physical Abuse by Adult | 35 | 58 |
| 4. | Sexual Abuse by Adult | 36 | 55 |
| 5. | Parental Addiction | 37 | 53 |
| 6. | Family Member Addiction | 37 | 49 |
| 7. | Negative Peer Pressure: Marijuana Use | 37 | 85 |
| 8. | Negative Peer Pressure: Trouble at School | 37 | 65 |
| 9. | Negative Peer Pressure: Alcohol Use | 35 | 84 |
| 10. | Disruptive School Environment | 36 | 42 |
| 11. | Unsafe Neighborhood | 38 | 48 |
| 12. | Poverty | 38 | 52 |
| 13. | Single-Parent Family | 37 | 43 |

Figure V
Average Risk-Taking Indices by Number of Deficits



D. Assets

The data in Table 77 contrast non-substance using students (abstain) with substance-using students (use) on each of the 25 asset variables. The five most often reported (71-52 percent) assets for the abstain group of students were, respectively: parental standards, achievement motivation, educational aspiration, values sexual restraint, and family support. The five most often reported (41-37 percent) assets among substance-using students were: involved in extracurriculars, parent-child communication, homework, educational aspiration, and cares about people's feelings.

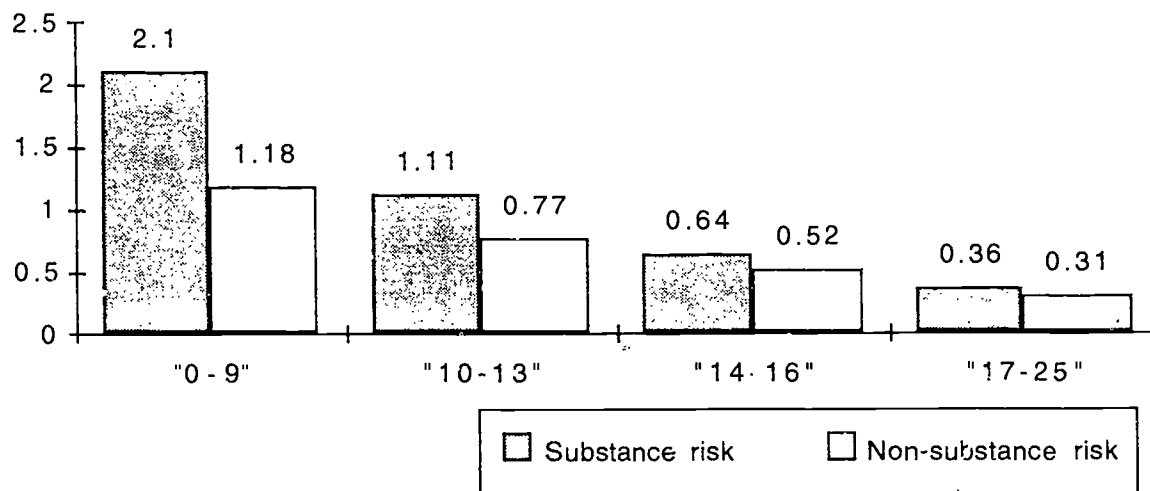
The abstain and substance-using groups differed most relative to the following assets: parental standards, values sexual restraint, time at home, family support and involved in music. The two comparison groups varied the least on the following assets: homework, involved in extracurricular, parent-child communications, positive peer influence, emotional support, and involved in community activities.

A cross tabulation of the number of assets, substance risk behaviors and non-substance risk behaviors generated the data in Figure W. The bar graph portrays a decrease in the number of substance use behaviors with an increase in the number of assets. The figure also illustrates that fewer non-substance risk behaviors are associated with greater numbers of assets. For example, students with 17-25 assets were very unlikely to engage in substance use and non-substance risk behaviors.

Table 77
Percent Reporting They Abstain or Report Any Level of Substance Use
by Presence or Absence of Each Asset

| Assets | If Asset is Present, Percent Reporting They... | |
|--|--|-----|
| | Abstain | Use |
| 1. Family Support | 52% | 29% |
| 2. Parents as Social Resources | 47 | 30 |
| 3. Parent-Child Communication | 39 | 38 |
| 4. Parent Ask About School | 47 | 33 |
| 5. Positive School Climate | 45 | 27 |
| 6. Parental Standards | 71 | 32 |
| 7. Parental Discipline | 46 | 33 |
| 8. Parental Monitoring | 45 | 36 |
| 9. Time at Home | 48 | 22 |
| 10. Positive Peer Influence: School | 46 | 33 |
| 11. Positive Peer Influence: Altruism | 41 | 31 |
| 12. Positive Peer Influence: Extracurriculars | 41 | 24 |
| 13. Positive Peer Influence: Emotional Support | 40 | 36 |
| 14. Involved in Music | 49 | 28 |
| 15. Involved in Extra-Curriculars | 37 | 41 |
| 16. Involved in Community Activities | 42 | 35 |
| 17. Involved in Church or Synagogue | 50 | 32 |
| 18. Achievement Motivation | 53 | 34 |
| 19. Educational Aspiration | 53 | 37 |
| 20. School Performance | 44 | 33 |
| 21. Homework | 38 | 38 |
| 22. Cares About People's Feelings | 51 | 37 |
| 23. Values Sexual Restraint | 53 | 14 |
| 24. Self-Esteem | 46 | 32 |
| 25. Prosocial Behavior | 43 | 34 |

Figure W
Average Risk-Taking Indices by Number of Assets



E. Description of the Non-Using Student

Approximately 62 percent of the total student sample was identified as non-substance users (abstain group). The sorting process identified students who were non-users of alcohol and marijuana and other drugs. The remaining 38 percent of the total student sample were categorized as substance users (use group).

The abstain group was comprised of 91 percent of the sixth grade sample, 71 percent of the eighth grade sample, 48 percent of the 10th grade sample and 36 percent of the 12th grade sample. Data projections for the total 6-12 grade population provided an estimate of 159,900 non-using students in 1993-94.

Several cross tabulations of the data were performed in order to contrast the abstain group with the use group on several variables. The following outline attempts to phrase attributes of the abstain group in positive terms.

In relationship to the other at-risk behaviors, among the abstain group ...

- 64 percent were not depressed.
- 65 percent had not attempted suicide.
- 63 percent had not used a weapon, force or threats to extort.
- 67 percent had not beaten up someone from anger.
- 63 percent had not gambled.

In regards to the deficit variables, among the abstinent group...

- 80 percent did not attend drinking parties.
- 66 percent did not feel stressed/pressured.
- 65 percent had not been physically abused by an adult.
- 64 percent had not been sexually abused by an adult.
- 63 percent did not have a substance-abusing parent.
- 63 percent did not have a substance abusing family member (other than parent).
- 63 percent reported that their friends didn't pressure them to use marijuana.
- 63 percent reported that their friends did not cause trouble at school.
- 65 percent reported that their friends did not use alcohol.
- *64 percent reported that their classes were not often disrupted by student misbehavior.
- 62 percent considered their neighborhood to be safe.
- 64 percent did not live in a single-parent family.

(*The disruptive school environment variable did not discriminate between abstain and use groups.)

In relationship to external assets, among the abstinent group...

- 52 percent reported having a supportive family.
- 47 percent viewed their parents as social resources.
- *39 percent reported frequent communications with their parents.
- 47 percent reported that their parents frequently asked about school performance.
- 45 percent positively rated the climate of their schools.
- 71 percent reported that their parents clearly discouraged alcohol and other drug use.
- 46 percent reported that their parents consistently applied discipline.
- 45 percent reported that their parents consistently monitored where the youth were going and with whom.
- 48 percent reported that they spent three (3) or less evenings away from home each week.
- 46 percent reported that their friends did well in school.
- 41 percent reported that their friends tried to help others.
- 41 percent reported that their friends were involved in extracurricular activities.
- *40 percent reported that their friends provided emotional support.
- 49 percent were involved in music.
- *37 percent were involved in extracurricular activities.
- 42 percent were involved in community activities.
- 50 percent were involved in church or synagogue activities.

(*There were insignificant differences between the abstain and use groups on these assets.)

In regards to internal assets, among the abstain group...

- 53 percent reported high achievement motivation.
- 53 percent reported high educational aspirations.
- 44 percent reported above average school performance.
- *38 percent reported completing 6 or more hours of homework per week.
- 51 percent expressed care for the feelings of other people.
- 53 percent valued sexual restraint as a teenager.
- 46 percent demonstrated positive self-esteem.
- 43 percent reported prosocial behavior.

(*The abstain and use groups did not differ on the homework variable.)

F. Summary of Findings from Cross-Tabulations

The series of data cross-tabulations identified four major trends:

- The mean number of deficits increased with each increase in grade level.
- The mean number of assets decreased with each increase in grade level.
- The mean number of substance risk behaviors increased with each increase in grade level.
- The mean number of other at-risk behaviors increased with each increase in grade level.

Cross-tabulations of 10 at-risk behaviors reinforced the concept of co-occurrence. The most common patterns of co-occurrence involved frequent alcohol use, drunk driving, cigarette smoking and fighting someone from anger. The frequent alcohol user sub-group and the frequent illicit drug use sub-group were much more likely to engage in other at-risk behaviors than were the total sample of youth.

Cross-tabulations of the asset variables with the at-risk behaviors revealed that students with 14 or more of the 25 assets were very seldom involved in any of the substance or other at-risk behaviors. The contrary statement also seemed valid: students with only nine or fewer assets were involved in two or more substance risk behaviors and one or more other at-risk behaviors.

Cross-tabulations of the deficit variables with at-risk behaviors illustrated that students with one or no deficits were very unlikely to be involved in the at-risk behaviors. Students with five or more of the 13 deficits were involved in three or more substance behaviors and two other at-risk behaviors.

When substance using students (user group) were compared with non-substance using students (abstain group), the two subgroups differed most on the following deficits:

- Friends who used marijuana, alcohol and got into trouble at school.
- Physical and sexual abuse by an adult.
- Attendance at drinking parties.
- Stress.

The two comparison groups (user and abstain) differed most on the following assets:

- Parental standards regarding alcohol and other drugs.
- Family support.
- Values sexual restraint as teenager.
- Time at home.
- Involvement in music.

IX. Summary and Recommendations

A. Introduction

The 1993 Iowa Youth Survey was conducted during the fall months of 1993 in 72 school districts. A total of 14,100 students in grades six, eight, 10 and 12 completed an anonymous questionnaire.

The survey instrument included 121 items that were selected to describe the status of 12 at-risk behaviors, 13 deficit variables and 25 asset variables among Iowa youth. The survey also included items pertaining to symptoms of substance abuse, the age of onset for substance use, and youth's sources of help and information.

The completed youth surveys were processed by the Search Institute of Minneapolis, Minnesota. All data reports to districts and the state were completed by the Search Institute.

The 1993 Iowa Youth Survey was designed to answer four research questions:

- What is the current status of substance use and other at-risk behaviors among Iowa youth?
- What are some important trends in youth substance use and nonuse behaviors?
- What are major factors involved in promoting nonuse and health-enhancing behaviors among Iowa youth?
- What actions do the findings of the 1993 Iowa Youth Survey suggest for families, schools, and communities?

The following text is organized as responses to the four research questions.

B. Current Status of Substance Use and Other At-Risk Behaviors Among Iowa Youth

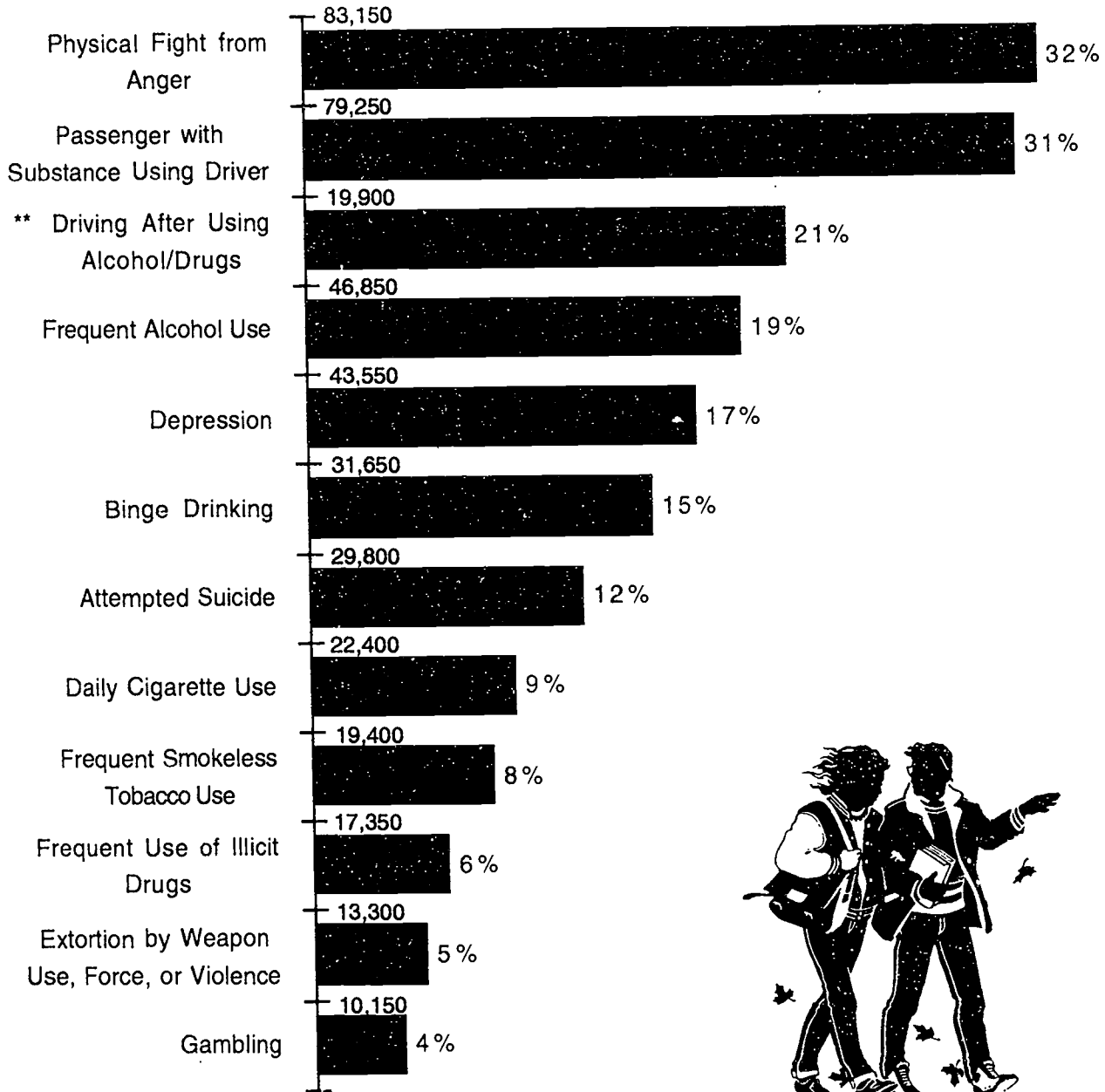
The data in Table 78 summarize the findings for the total youth sample on each of the 12 at-risk behaviors. The table also provides estimates of the number of Iowa students who were engaged in the at-risk behaviors. The following are the main findings summarized in the table:

- The most commonly occurring at-risk behaviors were fighting someone in anger and riding in a motor vehicle driven by an alcohol or other drug user.
- The least commonly occurring at-risk behaviors were gambling and using weapons, force or threats to get something from someone.

Other key findings regarding substance use and other at-risk behaviors were as follows:

- The frequency of alcohol, tobacco, marijuana, amphetamine, and cocaine use increased with each increase in grade level.
- The frequency of binge drinking, drunken driving, and riding with a drunk driver increased with each increase in grade level.
- The frequency of depression, attempted suicide, and gambling increased with each increase in grade level.
- The frequency of fighting someone from anger decreased from eighth grade through 12th grade.
- The frequency of using weapons, force or threats remained fairly consistent at three-seven percent of the grade level samples.
- The most frequently co-occurring risk behaviors were: alcohol use, drunk driving, smoking tobacco, and physically fighting someone from anger.
- Among the 12th grade sample, approximately 43 percent were passengers of drunk drivers, 39 percent were frequent alcohol users, 32 percent were drunk drivers, 31 percent were binge drinkers, 25 percent reported physically fighting someone from anger, 18 percent were daily cigarette users, and 18 percent experienced depression.
- Very few students at any grade level were only users of marijuana or only users of other drugs.
- Among substance using students, 40-69 percent reported experiencing one or more of the five substance addiction symptoms.
- Urban students, as contrasted with semi-urban, semi-rural and rural students, were more frequent users of tobacco, marijuana, cocaine, amphetamines, inhalants and other drugs.

Table 78
Percentages and Number of Youth with Each At-Risk Behavior*
(In Rank Order for Total Sample)



*Projections based on 1993-94 enrollments of 257,400 students in grades 6-12

**Projection based on grades 10-12 only

- Rural students seemed to least frequently use tobacco, marijuana, cocaine, amphetamines, inhalants and other drugs in comparison to urban, semi-urban and semi-rural students.
- Male and female use patterns for alcohol, tobacco, and marijuana were very similar.
- Males were more frequent users of smokeless tobacco, inhalants, cocaine and steroids than were female students.

C. Important Trends in Youth Substance Use and Nonuse

Youth survey data on substance behaviors has been collected on a three-year cycle since 1975. The following remarks represent comparisons between data sets for only the 1984, 1987, 1990 and 1993 youth surveys.

1. Trends in Alcohol Behaviors include:

- The number of alcohol users at each grade level continued to decline from 1984 through 1993.
- A fairly consistent number of heavy alcohol users (1-12 percent) at each grade level was noted across the four youth surveys.

2. Trends in Tobacco Behaviors include:

- Patterns of tobacco use and nonuse remained very similar across the four youth surveys.
- Approximately 16-18 percent of the total youth samples reported themselves to be current smokers in each of the four youth surveys.

3. Trends in Marijuana Behaviors include:

- Nonuse of marijuana continued to be the response of most (91-94 percent) Iowa youth in each of the four survey years.
- Very few youth at any grade level and in any survey year were regular (0-5 percent) or heavy (0-5 percent) marijuana users.

4. Polysubstance Use Behaviors include:

- A continued increase was observed in the number of students at each grade level who did not use any substance (alcohol or marijuana or other drugs).
- Very little or no change was observed between data for 1990 and 1993 in the number of youth who were alcohol and marijuana users, alcohol and other drug users, and users of all substances.

D. Major Factors in Promoting Nonuse and Health-Enhancing Behaviors

The 1993 Iowa Youth Survey was designed to test the concept of "dynamic prevention." The concept involves a three-pronged approach to promote the development of assets, to prevent or lessen deficits, and to intervene early in at-risk behaviors. A coordinated and community-wide effort is considered to be necessary to alter the frequency at which adolescents engage in health-compromising or future-jeopardizing behaviors.

Several data treatments provided findings that supported the dynamic prevention concept. The general patterns in the data findings were as follows:

- With each increase in grade level,
 - the prevalence of asset variables decreased,
 - the prevalence of deficit variables increased, and
 - the prevalence of at-risk behaviors increased.
- The greater the number of deficits that students experienced, the greater the number of student at-risk behaviors.
- The greater the number of assets that students reported, the less likely the students were to be involved in at-risk behaviors.
- It was very rare for students to engage in only one at-risk behavior. Early interventions with individual students would necessitate working with two or more co-occurring at-risk behaviors.

Some more specific findings are summarized as follows:

- The mean number of asset variables for the total sample was 13.4 assets out of a maximum of 25 assets. The mean number of assets for each grade level were: 14.8 (sixth grade), 13.5 (eighth grade), 12.9 (10th grade) and 12.6 (12th grade).
- The mean number of deficit variables for the total sample was 1.8 deficits out of a maximum of 13 deficits. The mean number of deficits for each grade level were: 1.1 (sixth grade), 1.6 (eighth grade), 2.1 (10th grade), and 2.3 (12th grade).
- The mean number of at-risk behaviors for the total sample was 1.7 out of a maximum of 12 at-risk behaviors. The mean number of at-risk behaviors for each grade level were: 0.9 (sixth grade), 1.4 (eighth grade), 2.0 (10th grade), and 2.5 (12th grade).
- The percentages of each grade-level sample with 14 or more assets were as follows: 65 percent (sixth grade), 51 percent (eighth grade), 45 percent (10th grade) and 44 percent (12th grade).
- The percentages of each grade-level sample with two or more deficits were as follows: 23 percent (sixth grade), 42 percent (eighth grade), 56 percent (10th grade), and 61 percent (12th grade).
- The percentages of each grade-level sample with two or more at-risk behaviors were as follows: 20 percent (sixth grade), 31 percent (eighth grade), 45 percent (10th grade), and 53 percent (12th grade).
- Students who reported 14 or more assets were involved in fewer than 0.6 substance behaviors and 0.5 other at-risk behaviors.
- Students who reported one or fewer deficits were involved in fewer than 0.6 substance behaviors and 0.4 other at-risk behaviors.

NOTE: It is important to consider the assets, deficits and at-risk behaviors data within a child development perspective. Some variables like poverty, positive school climate, unsafe neighborhood, and single parent family are not affected by the maturation and/or socialization processes.

Comparisons between substance using students (38 percent of total sample) and non-using students (62 percent of total sample), indicated four assets were two or more times as prevalent among nonusers as they were among users. The noticeably more prevalent assets were as follows: parental standards regarding substances, time spent at home, family support, and values sexual restraint as a teenager.

Comparisons of non-users and substance users were also made with deficit variables. The deficits that were two or more times as prevalent among users, as compared to nonusers, were the following: participation in drinking parties, friends who use marijuana, and friends who use alcohol.

The deficits and asset variables used in this study are predictive of at-risk behaviors but the variables do not fully explain all at-risk behaviors. Other factors within families, schools communities, and the personalities of the youth themselves certainly influence such behaviors.

E. Suggested Actions for Families, Schools, Youth Agencies, and Youth

The findings of this study lead to the conclusion that a community-wide commitment to positive youth development is necessary. Positive outcomes will require extraordinary commitment to children and youth by several sectors of the community including government, business, schools, families, service organizations, law enforcement, youth-serving organizations and religious institutions.

Each sector of the community must accept its responsibility to:

- Foster the development of assets within all children and youth.
- Coordinate efforts to reduce or eliminate the deficits in the lives of children and youth, and
- Provide information and treatment services for children, youth and families who are enmeshed in at-risk behaviors.

The 1993 Iowa Youth Survey was designed to provide more direction for community-wide efforts. The description of the status of 12 at-risk behaviors, 13 deficit variables, and 25 asset variables among Iowa youth should be of most value to parents/families, schools, youth-serving agencies and youth themselves. The following text provides recommendations for these sectors of the community.

Many of the following recommendations to parent/families, schools/educators and youth-serving agencies are direct quotes from *The Troubled Journey: A Profile of American Youth* published by Search Institute (Minneapolis, Minnesota) in 1991. Some statements are slightly altered to reflect specific findings of the 1993 Iowa Youth Survey. The recommendations for youth themselves are unique to this study.

1. Recommendations for Parents/Families

- "Place high priority on giving frequent and sincere expressions of love, care and support. Avoid the common tendency to assume that adolescents are less in need of such expressions than are younger children."
- "Set clear rules and limits. Negotiate with children reasonable consequences for rule-breaking, consistently follow through with consequences and consistently reward positive behavior."
- Encourage involvement in structured youth activities, especially those that develop assets.
- Eliminate attendance at drinking parties; band together with other parents to prevent their occurrence.
- Model moderate use or no use of alcohol, tobacco, or other drugs.
- Model responsible motor vehicle behaviors.
- Learn to recognize signs of such at-risk behaviors as substance abuse, depression and violence/aggression. Know where to get help.
- "Make 'family helping' projects a priority, in which parents and children together give help to others in need."
- Help children to learn friendship-making and conflict-resolution skills.
- "Encourage and reward achievement motivation, post-high school educational aspirations and homework."
- Minimize overexposure to violence and substance abuse through television, films and other mass media forms.
- Clearly state the family's guidelines/expectations regarding the child's nonuse of tobacco, alcohol or other drugs
- "Emphasize the development of positive values, including prosocial values and values of behavioral restraint."
- Provide support to schools and community youth-serving organizations as they attempt to promote assets and health-enhancing behaviors among youth.

2. Recommendations for Schools/Educators

- "Personalize schools so that each and every student feels cared for, supported and important."
- "Enhance social competencies, including friendship-making skills, caring skills, assertiveness skills and resistance skills."
- "Emphasize the development of positive values, particularly those that build a sense of personal responsibility for the welfare of others."
- "Offer quality prevention programming in multiple areas of risk including alcohol, tobacco, illicit drugs, suicide and depression, violent and abusive behavior, sexuality, and vehicle safety."
- "Enhance academic effectiveness to ensure that students in all income levels gain in academic motivation and competence."
- "Emphasize service learning programs, seeking to provide all students with helping opportunities and personal reflection on the meaning of helping."
- Provide strong support services for youth who are experiencing deficits.
- Provide effective early intervention services for youth who have become involved in at-risk behaviors.
- Encourage school personnel to work in partnership with families to promote assets within all children and youth.

3. Recommendations for Youth-Serving Agencies

- Some programming for middle school and high students will need to be re-designed and expanded to more effectively promote assets.
- Expand opportunities for youth to interact with adult mentors and social resources.

- "Provide and/or advocate for quality day care and after school care."
- "Equip parents with parenting skills, particularly in the area of support-giving, control and values formation."
- "Involve youth in helping projects."
- "Plan programs to address multiple at-risk behaviors."
- Provide strong support services for youth who are experiencing deficits.

4. Recommendations for Youth Themselves

The findings of this study and several other studies clearly describe many of the positive and negative influences that friends and peer groups can exert on an individual youth's behavior.

It is critically important for more youth to focus their emotional energy, problem-solving talents and altruism to help themselves and children.

The following are major challenges to youth:

- Change local norms regarding the co-occurring behaviors of frequent alcohol use, binge drinking, drunk driving, riding with alcohol drug-impaired drivers, and participating in drinking parties. Those are normative behaviors established by local peer groups. Such peer group norms can be most effectively changed by the leaders of peer groups themselves.
- Establish a "zero tolerance for violence" norm within the peer groups and the school. The survey describes a high prevalence for physical fights from anger, violent acts related to substance use, the use of a weapon, force or threats to get money or things from someone, and frequent disruptions of the school environment.
- Act as early intervention agents. The survey describes a high number of youth who are in great danger due to their substance use, depression, violent behavior, and/or the physical/sexual abuse they are receiving. The data suggest that the troubled youth will most likely first turn to a peer/friend for information and help. The act of hearing the request for help is the first step in the intervention process. The peer/friend must take the second step to encourage the troubled youth to immediately seek help from competent adults.
- Reinforce each peer's assets. Youth can find several ways to encourage others to do well in school, to become involved in extracurricular and prosocial activities, and to refrain from or avoid at-risk behaviors.

APPENDIX

ITEM INDEX FOR IOWA YOUTH SURVEY

The Iowa Youth Survey was designed to assess the prevalence and significance of six prevention constructs:

- * **Assets**
- * **Prosocial Behavior**
- * **Deficits**
- * **At Risk Behaviors**
- * **Patterns of Co-Occurrence**
- * **Dynamics of Prevention**

The following quotes from The Troubled Journey: A Portrait of 6th - 12th Grade Youth provide some clearer definitions of the constructs.

"ASSETS: Positive development requires constant exposure to interlocking systems of support, control, and structure. In the ideal, young people - via schools, families, community organizations, and religious institutions - constantly interact with caring, principled adults. These patterns of support, control, and structure function as external assets, providing young people with webs of safety and love important for stimulating and nurturing healthy development.

Adolescence is the bridge between a childhood surrounded by networks of external support, and adulthood, in which these networks are partially supplanted by the internal checks and balances that enable the individual to make wise choices when beyond the reach of childhood's protective cocoon. It is of primary importance, then, to nourish - particularly during adolescence - a range of internal assets. They are the commitments, values, and competencies that help an individual thrive competently and responsibly when 'on one's own'." (page 7)

"PROSOCIAL BEHAVIOR covers a wide range of human actions, including face-to-face helping of persons in distress, acts of interpersonal kindness, donating time or energy to voluntary service organizations, and efforts to alter political, economic, and social sources of injustice or inequality. The common thread is the desire or intent to promote the welfare of others." (page 33)

"DEFICITS are countervailing influences which can interfere with healthy development, limiting access to external assets, blocking development of internal assets, or easing the way into risky behavioral choices. Deficits are liabilities, none of which necessarily does permanent harm, but each of which makes harm more possible." (page 19)

"AT-RISK BEHAVIORS are choices that potentially limit psychological, physical, or economic well-being during adolescence or adulthood. Many of the behaviors can have negative, long-term consequences. To some extent, our choice of these at-risk indicators is based on speculative and incomplete knowledge, for there is little firm evidence about the actual long term consequences of certain choices during the first 18 years of life. We rely, then, on informed hunches, choosing indicators that one could reasonably argue are possible precursors to later difficulties. Again, we are dealing here with probability, which means, in part, that a risky choice, or even several, during adolescence does not guarantee negative, long-term consequences. But given the possibility of harm, we press the point that prevention of these risk-taking behaviors is the prudent approach to long-term well-being." (page 39)

PATTERNS OF CO-OCCURENCE. The frequency at which students are concurrently involved in more than one domain of at-risk behaviors. For example, one of the most common patterns of co-occurrence in adolescence involves alcohol use, sexuality and vehicle safety. The patterns suggest that effective prevention and intervention programs must address multiple behavioral areas as well as the underlying social and cultural dynamics that give rise to such prevalent risk-taking. (page 49)

DYNAMICS OF PREVENTION. "Both deficits and assets, as measured in this project, are strongly tied to at-risk behaviors." A three-pronged approach to **promote** assets, to **prevent** deficits and to **intervene** early in at-risk behaviors - is necessary to alter the frequency with which adolescents engage in health - compromising or future - jeopardizing behaviors. (page 65)

The following pages provide an outline of the items included in the Iowa Youth Survey instrument. Additional survey items were included to maintain comparisons with prior Iowa Youth Surveys.

ITEM INDEX

EXTERNAL ASSETS

| | <u>QUESTIONS</u> |
|---|--------------------|
| 1. Family Support (scaled) | 28, 31, 33, 34, 37 |
| 2. Parent(s) as social resources | 103 |
| 3. Parent-child communication | 106 |
| 4. Parent asks about school | 105 |
| 5. Parental standards (scaled) | 101, 102, 57 |
| 6. Parental discipline | 35 |
| 7. Parental monitoring | 104 |
| 8. Time at home | 12 |
| 9. Positive school climate | 14, 17, 18 |
| Positive Peer Influence: | |
| 10. •School performance | 88 |
| 11. •Altruism | 91 |
| 12. •Extracurriculars (scaled) | 94, 95 |
| 13. •Emotional support | 97 |
| 14. Involved in music | 6 |
| 15. Involved extra-curricular activities (scaled) | 7, 8 |
| 16. Involved in community activities | 9 |
| 17. Involved in church or synagogue | 10 |

INTERNAL ASSETS

| | |
|------------------------------------|----------------|
| 1. Achievement motivation (scaled) | 13, 15, 16 |
| 2. Educational aspiration | 19 |
| 3. School performance | 20 |
| 4. Homework | 11 |
| 5. Cares about people's feelings | 26 |
| 6. Values sexual restraint | 30 |
| 7. Self esteem (scaled) | 23, 25, 29, 32 |
| 8. Prosocial behavior (scaled) | 74, 75, 79, 87 |

106

DEFICITS

| | |
|--|------------|
| 1. Drinking parties | 58 |
| 2. Stress (scaled) | 21, 22 |
| 3. Physical abuse by adult | 85 |
| 4. Sexual abuse by adult | 86 |
| 5. Parental addiction | 98 |
| 6. Family member addiction | 99 |
| Negative peer pressure: | |
| 7. •Marijuana use | 92 |
| 8. •Trouble at school | 96 |
| 9. •Alcohol use | 89 |
| 10. Disruptive school environment (scaled) | 72, 73, 83 |
| 11. Unsafe neighborhood | 24 |
| 12. Poverty | 36 |
| 13. Single-parent family | 4 |

AT-RISK BEHAVIORS: SUBSTANCE USE

| | |
|---|-----|
| 1. Frequent Alcohol Use | 41 |
| 2. Binge drinking | 43 |
| 3. Daily cigarette use | 45 |
| 4. Frequent smokeless tobacco use | 47 |
| 5. Frequent use of illicit drugs (scaled) | |
| Use of marijuana | 48, |
| Use of cocaine | 50 |
| Use of amphetamines | 51 |
| Use of other drugs | 52 |
| Use of inhalants | 54 |
| Use of steroids | 59 |
| 6. Drunk driving | 55 |
| 7. Ride with drunk driver | 56 |
| Additional substance use questions: | |
| Age of onset for alcohol use | 44 |
| Age of onset for tobacco use | 46 |
| Age of onset for marijuana use | 49 |
| Age of onset for other drug use | 53 |
| Amount of alcohol consumed per occasion | 42 |

OTHER RISK-TAKING BEHAVIOR

| | |
|---|------------|
| 1. Depression | 38 |
| 2. Attempted suicide | 40 |
| 3. Extortion by weapon use, force, or violence | 77 |
| 4. Beat up someone in anger | 80 |
| 5. Gambling (scaled) | 78, 81, 82 |
| Additional other risk-taking questions | |
| Suicide ideation | 39 |
| Disciplined for fighting or theft on school grounds | 76 |

PROBLEMS AND RESOURCES RELATED TO SUBSTANCE USE

| | |
|--|---------|
| 1. Prevalence of substance use at school | 65, 66 |
| 2. Perception of health risks from substance use | 67-71 |
| 3. Presence of substance abuse symptoms (indicators) | 60-64 |
| 4. Student sources of help for substance problems | 107 |
| 5. Student sources of substance information | 108-121 |

MISCELLANEOUS

| | |
|--|-----|
| 1. Peer tobacco use | 9 |
| 2. Peers get drunk | 93 |
| 3. Friend has substance abuse problem | 100 |
| 4. Peer helping program | 84 |
| 5. Grade level | 1 |
| 6. Gender | 2 |
| 7. Ethnicity | 3 |
| 8. Parents divorced/separated | 5 |
| Size of school district coded into data record | |