5-1996

The Relationships of Parental Marital Status, Quality of Family Interaction and Gender to Adolescent Tobacco, Alcohol, and Marijuana Use

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THE RELATIONSHIPS OF PARENTAL MARITAL STATUS, QUALITY OF

FAMILY INTERACTION AND GENDER TO ADOLESCENT TOBACCO,

ALCOHOL, AND MARIJUANA USE

by

Stephen K. Hunsaker

A thesis submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF SCIENCE

in

Family and Human Development

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1996

ABSTRACT

The Relationships of Parental Marital Type, Quality of Family

Interaction, and Gender to Adolescent Tobacco,

Alcohol, and Marijuana Use

by

Stephen K. Hunsaker, Master of Science

Utah State University, 1996

Major Professor: Dr. Thomas R. Lee
Department: Family and Human Development

The tobacco, alcohol, and marijuana use of adolescents was examined to see if any differences existed in the marital status of the adolescent's parents, the quality of family interaction for the adolescent, and the gender of the adolescent. Marital status was defined as intact families where adolescents were living with both biological parents, and nonintact families where adolescents had parents who were single, divorced, widowed, never married, and remarried. Data were from a survey that examined youth issues of 500 adolescents from a rural Utah county. It was hypothesized that marital type and quality of family interaction (family kindness, family hurtfulness, and family communication) would have an effect on adolescent tobacco, alcohol, and marijuana use.

Adolescents from intact families differed significantly from those in nonintact families in terms of substance use. This study also illustrated that being from an intact

family is not enough to prevent adolescent substance use. Rather, the combination of having an intact family and perceiving family kindness had the greatest deterring effect on substance use among adolescents.

Family kindness had the greatest impact in deterring tobacco and alcohol use. Family hurtfulness, on the other hand, was the strongest indicator of marijuana use. Gender was a factor in only one of the dependent variables, tobacco, with males using more than females.

(63 pages)

ACKNOWLEDGMENTS

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CHAPTER I

INTRODUCTION

Concern over alcohol, tobacco, and other drug use in adolescents has been high for many years. Research efforts to understand the correlates of adolescent substance abuse have resulted in findings with potential application for prevention efforts. There is a continued need to better understand the factors associated with adolescents' substance abuse in order to prevent further problems.

The National Survey Results on Drug Use reported that the use of alcohol, tobacco, and other drugs rose sharply in 1993 in three grade levels, 8th, 10th, and 12th, as negative attitudes and beliefs about substance use eroded. Thus, in 1993 a turnaround occurred in the long decline of drug use among the nation's secondary school students. High school seniors' annual usage of any illicit drug rose from 27.1% in 1992 to 31% in 1993. Also, the number of seniors who used illicit drugs in the last 30 days rose from 14.4% to 18.3% (Johnston, O'Malley, & Bachman, 1994).

The same study revealed that 67.1% of 8th graders, 80.8% of 10th graders, and 87% of 12th graders reported using alcohol at least once in their lifetime. Most important, perhaps, is the widespread occurrence of occasions of heavy drinking --measured by the percent reporting five or more drinks in a row at least once in the prior 2-week periods. Among 8th graders, this statistic stands at 14%, among 10th graders at 23%, and among 12th graders at 28% (Johnston et al., 1994).

Additionally, while the daily smoking rate for high school seniors did drop considerably between 1977 and 1981 (from 29% to 20%), it has remained stable since

then (19% in 1993). Eighth and 10th graders' current smoking rates increased between 1992 to 1993, 15.5% to 16.7% and 21.5% to 24.7%, respectively.

Additional studies pointed to an alarming trend with regards to the problems of substance abuse: Adolescents of today are getting younger and younger when they have their first encounter with drugs or alcohol. Approximately 57% of high school seniors had, at some time in their lives, experimented with marijuana, and 27% had used stimulants. Nearly 93% of high school seniors had tried alcohol (Beschner, 1985). Another alarming trend is that of polydrug use. Of those who smoke cigarettes, 74% also drink, 47% also use marijuana, and 9% also use cocaine. Among those who use marijuana, 60% smoke cigarettes, 84% drink alcohol, and 12% use cocaine (National Institute of Drug Abuse, 1985).

The problems of substance abuse among adolescents seemed to have several contributing factors. Within the family domain, the adolescent should be able to learn the appropriate use of alcohol when of legal age, and that substance use is illegal at any age. However, with the change of the family structure and of the composition of the family, the transmission of standards and values from generation to generation may be changing also.

The American family has changed dramatically over the last two decades. These trends include a 30% decrease in the marriage rate from 1970 to 1990, a 40% increase in the divorce rate during the same period, and the expectation that half of all children today will spend a portion of their childhood in a single-parent home (Ahlburg & DeVita, 1992). Additionally, one in eight families was headed by a single parent in 1991, with

women being five times more likely than men to raise a family alone; one fourth of these families had children under the age of 18 (Ahlburg & DeVita, 1992). It is estimated that 50% of couples divorce, but some demographers have argued that this figure is greater. If couples who were separated but never file for divorce were included, the true rate of divorce would be 66% (Castro-Martin & Bumpass, 1989). Bumpass and Sweet (1989) have predicted that 45% of white children and 75% of black children will experience their parents' divorce or separation by age 16, and most will reside in a single-parent family for an average of 5 years. With these changing trends in the American family, the family has been forced to become more adaptive and must continue to do so.

Because single-parent families are becoming increasingly prevalent, communication, discipline, quality time, and parent modeling change for children in these homes. Following divorce, 85% to 90% of children live with their mother (Depner & Bray, 1993; Furstenberg, 1990). Some researchers have asserted that there is less parental control in a single-parent family due to the absence of the other parent (Newcomer & Udry, 1987). With stepfamilies, the parent-child interaction and family relationship may be distinctively different due to the remarriage and the addition of a new spouse (Bray & Berger, 1993). A single-parent family, intact-marriage family, and a step- family will each have different leadership styles and discipline styles. Adolescent use of alcohol and drugs in each of these family structures more than likely differs, too.

This project addresses the relationship between marital status and the adolescent's likelihood of adopting behaviors such as smoking and drinking. In addition, it addresses the quality of family interaction and its relation to adolescent substance use.

By examining the way in which the family structure affects the decisions and choices of adolescents, educators could use this information to help the family realize the effect that they have on their adolescents. These details may also help in explaining the ever-increasing use of alcohol and other substances among our nation's adolescent population.

The two main questions that are addressed in this paper are: (1) Does parental marital status affect adolescent substance use? (2) Does the quality of family relationships affect adolescent substance use?

CHAPTER II

REVIEW OF LITERATURE

Rates in Adolescent Substance Use

This section first reviewed instances of tobacco, alcohol, and other drug use among adolescents. Statistics show that many of today's adolescents use and abuse these substances and that these numbers are on an upward trend. Secondly, it looked at the family factors involved with adolescent substance use, such as changes in the American family, family relationship quality, and marital status. Finally, it examined the different effects that gender had on the above factors.

Tobacco

Studies showed that the average age of initiation of smoking has decreased across birth cohorts and that few people began smoking after the age of 20. Thus, adolescence is a critical period during which most persons who are going to smoke start smoking (Nelson et al., 1995). Other studies showed that 89% of persons 30-39 years old who smoked cigarettes on a daily basis reported having smoked their first cigarette by age 18 (U.S. Dept. of Health and Human Services, 1994).

A recent study (Nelson et al., 1995) identified a decline in the prevalence of smoking among female adolescents since 1980, which paralleled a decline in adult female smoking. This same study, backed by multiple studies over the period reviewed, showed a large decline in smoking among black adolescents as well as a decline in other

drug use since 1980. Significant declines in smoking for Hispanics, Native Americans, and Asian Americans from High School Senior Surveys were also reported from 1976 through 1989.

Although there was evidence that significant declines in smoking occurred among white adolescents and males in each survey population during 1974 through 1980 and 1980 through 1985, no significant declines in smoking for white adolescents occurred in any survey during 1985 through 1991 (Nelson et al., 1995). Thus, there was a *minimal* decline in smoking prevalence since 1985. Estimates from the 1992 and 1993 High School Senior Surveys (Johnston, O'Malley, & Bachman, 1993) and from the 1992 National Household Survey on Drug Abuse (Substance Abuse and Mental Health Services Administration, 1993) demonstrated little change in adolescent and young-adult smoking since 1991.

Therefore, the minimal decline in adolescent smoking since 1991 showed that it continues to be a major problem in the United States and that far too many adolescents are smoking. At least 3.1 million adolescents, 25% of those 17 and 18 years old, are current smokers (Centers for Disease Control, 1994). The National Survey Results on Drug Use revealed that 45.2% of 8th graders, 53.5% of 10th graders, and 61.8% of 12th graders had at some time in their life tried cigarettes (Johnston et al., 1993).

Alcohol

In 1980, 1,289,443 persons were arrested for driving under the influence. Of those arrested, 29,957 were under the age of 18 and 696 were under the age of 15.

Arrests for DUI among the 18-and-under age group increased 236% between 1971 and 1980 (Wodarski, 1990).

Alcohol remained overwhelmingly popular among young people; nearly all of the high school seniors surveyed in 1990 reported some experience with alcohol (92%), and nearly 40% reported having five or more drinks in a row (Wodarski, 1990). In addition, Novacek, Raskin, and Hogan (1991) found that middle school students have a problem with alcohol use as well; 16% said they used alcohol monthly. The National Survey Results on Drug Use in 1993 further reported that 69.3% of 8th graders, 82.3% of 10th graders, and 87.5% of 12th graders had at least tried alcohol. In addition, 13.4% of 8th graders, 21.1% of 10th graders, and 27.9% of 12th graders had five or more drinks in a row during the prior 2-week interval (Johnston et al., 1993).

These increasingly high rates of adolescent alcohol use did not affect adolescents during the teenage years only. Adolescence was identified as a time when experimentation with substances created lifelong difficulties. An estimated 18 million *adults* 18 years and older in the United States experienced problems as a result of continued alcohol use (Wodarski, 1990). Of these, 10.6 million suffered from the disease of alcoholism.

Drugs

Among American high school seniors, marijuana was the most widely used illicit drug, followed by stimulants, inhalants, hallucinogens, and cocaine (Johnston, O'Malley, & Bachman, 1991). Callen (1985) reported that the period of major risk for initiation into

alcohol and marijuana use peaked between ages 16 and 18, and was completed by the age of 20. Callen also found that the risk of trying other illicit drugs was highest at age 18 and declined by age 21. Current drug users among youth ages 12 to 17 were also polydrug users (Wodarski, 1990).

Illicit drug use changed over the past few years of high school surveys. Johnston et al., (1991) found that 44.1% of high school seniors had used illicit drugs. In addition, they found that 9% admitted to daily use. Johnston et al., (1993) *later* found that only 40.7% of high school seniors reporting ever using illicit drugs with 14.4% claiming they used within the last 30 days. More recently, Johnston et al. (1994) reported that 42.9% of high school seniors had used illicit drugs.

Johnston, O'Malley, and Bachman (1989) identified a change in adolescent drug use. They said that relatively privileged American youth were beginning to turn away from illegal drugs, decreasing 35-49% in the past 9 years. However, lower socioeconomic status and minority youth were experiencing a dangerous increase in drug abuse, drug dealing, and violence (Lamar, 1988).

This increase in drug use among disadvantaged youth could be attributed to the large profits associated with the trade. Rhodes and Jason (1990) stated that in New York City, an aggressive teenager could make as much as $3,000 a day. Consequently, juvenile drug arrests over the past 5 years tripled in many of the nation's largest cities. They concluded that increases in adolescent drug arrests and violence indirectly indicated that the number of urban young people who were being inducted into drug use was increasing.

Family Factors

Wodarksi (1990) stated that the parent's relationship with his/her adolescent is a primary mechanism identified in adolescent drug use. Thus, it was important to look at how the family system, social systems, and adolescent experiences with significant others changed over the last four decades. These changes then might explain how strongly both the quality of family relationships and marital status influenced adolescent drug use.

Changes in Family Structure

In 1960, 87% of children under the age of 18 lived with two parents; only 9.1% of these children lived in a single-parent household, and 3.2% lived with neither parent (Ahlburg & DeVita, 1992). Over the past few decades these percentages changed, especially the percentage of children living in a single-parent household. From 1960 to 1992, the percentage of children in single-parent households increased from less than one in every 10 American children (9.1%) to more than 1 in 4 (26.6%) of all children. More than half (53%) of black children lived in mother only households. The increase of single-parent households has been the greatest change and challenge in the family structure in the latter part of the 20th century (Ahlburg & DeVita, 1992).

In 1959, 45.4% of the single-parent families were headed by widows. This figure was three times the percentage of families headed by divorced parents. These patterns changed quickly during the next three decades. In 1992, the largest percentage of single-parent families, nearly two out of five (36.6%), was due to divorce. More than a third

(34.2%) of single-parent families was headed by a never-married parent, one fourth

(24.4%) was characterized as spouse-absent (usually separated), and only 4.9% was

headed by a widowed parent (Acock & Demo, 1994). Single-parent families made up

20% of white families with children, about one-third of Hispanic families with children,

and 60% of black families with children (Alburg & DeVita, 1992). In addition, Bray and

Hetherington (1993) showed that the circumstance of single-parenthood was temporary,

because two thirds of divorced women and three fourths of divorced men eventually

remarried. This change in family structure usually occurred before children reached the

age of 18.

Quality of Family Interaction

A growing body of literature existed to indicate that the family is one of the key

variables in the prediction or prevention of adolescent substance abuse (Barnes, 1977;

Jurich, Polson, Jurich, & Bates, 1985; Kumfer & DeMarsh, 1986; McCubbin, Needle, &

Wilson, 1985; Streit & Oliver, 1972). Additionally, the family, both as a source of

problems or as an inadequate socializer in coping skills to deal with problems, was

largely ignored as an important component of effective prevention programs (Lee &

Goddard, 1989) for adolescent drug use and abuse.

The lack of quality in family interaction was one of the key factors in adolescent

drug use. Hundleby and Mercer (1987) found lack of parental affection, concern,

involvement, and modeling to be central factors in the family's influence on drug abuse.

Their analysis suggested that as much as 22% of the variance in drug use might be

accounted for by family influence. Tudor, Peterson, and Elifson (1980) additionally supported these finding by stating that negative relationships between adolescents and their parents and a minimal amount of supportive interaction with parents were found to be associated with drug use.

In addition, parental conflict in child rearing, inconsistent discipline, restrictive discipline, and maternal rejection were associated with adolescent substance abuse (Vicary & Lerner, 1986). Vicary and Lerner (1986) further suggested that parenting skills in a limited setting, consistent discipline, and conflict resolution were especially important for preventing drug problems and other adjustment problems in children. Block, Block, and Keyes (1988) found that, for girls, low family expectation of achievement and an unstructured home environment with laissez-faire parental attitudes predicted later drug use; for boys, lack of control at an early age promoted the likelihood as an adolescent to use drugs.

Marital Status

Several studies showed a relationship between the family system and the use of alcohol and drugs (Barnes, 1977; Hundleby & Mercer, 1987; McDermott, 1984; Tec, 1974). Additionally, adolescent drug use was viewed as the long-term outcome of multiple experiences with significant others and social systems from birth to adolescence. Adolescents are more resilient and less likely to engage in problematic early usage as a means of coping with these stressors if they are members of prosocial, supportive social networks (Rhodes & Jason, 1990).

In studies conducted by Auerswald (1980) and Reilly (1976), 28% of adolescent drug users and 54% of adolescent drug abusers stated that they used drugs to relieve pressures and stress at home. Another study found that 68% of the nonusers reported spending free time with their families as compared to 35% and 18% of the users and abusers, respectively (Shilts, 1991). Clinical reports indicated the presence of such risk factors as poor family communication and role modeling in the etiology of adolescent substance use (Auerswald, 1980; Reilly, 1976). Weak sibling and weak parental relationships, a lack of perceived support and encouragement, and a high degree of family problems were related to a higher level of drug usage (Dishion & Loeber, 1983; Kumpfer, 1987). Youth with strong family support, who had developed positive prosocial relations with parents and others, had the confidence and skills to assert prosocial values and resist the pressures to engage in heavy drug use (Hawkins & Weis, 1985; Huba, Wingard, & Bentler, 1980).

Additionally, several studies supported the idea that substance abusers came from broken homes. Stern, Northman, and Van Slyck (1984) reported that "the absence of the father from the home significantly affects the behavior of adolescents, and results in greater use of alcohol and marijuana" (p. 309). Tolone and Dermott (1975) claimed that parental absence is typically found to relate to adolescent substance abuse. Steinberg (1987) reported that single mothers have less control over their youngsters and that this lower level of control is related to their children's greater involvement in deviance.

A recent study found that the highest percentages of adolescent substance abusers had the highest rates of single-parent families (Smart, Adlaf, & Walsh, 1994). Also,

adolescents from dysfunctional or disturbed families were more likely to become

substance abusers (Newcomb & Bentler, 1989; Oetting & Beauvais, 1987; Stern et al.,

1984). Researchers have indicated that a significant number of teenage drug users were

raised in single-parent homes or in families where parents were absent due to separation,

divorce, or death. This statement supported findings that a higher proportion of regular

marijuana users came from broken homes than did nonusers (Blum, 1972; Cannon, 1976;

Craig & Brown, 1975; Johnston, 1973; Tec, 1974). Patterson and Stouthamer-Loeber

(1984) believed that some of the problem behavior of young people could be traced to the

large amounts of time they spend outside of the company of adults.

<div align="center">Gender</div>

Studies showed that there was a significant difference between male and female

substance use and abuse. In addition, there was a significant difference between the

effects of family disruption on boys and girls. Thus, it was important to consider data on

gender.

Of some interest is a study on gender done by Sebald (1986). In his study, girls

were more apt to have a good relationship with their parents. For example, 55% of the

girls said they considered their parents' opinion compared to only 31% of the boys.

Overall, girls were considerably more oriented toward parents or family than boys.

Steinberg (1985) also found that boys were highly susceptible to peer pressure when

unsupervised after school and were more susceptible to peer pressure in general than

girls. Boys were also treated most permissively by single-parent mothers. Steinberg

(1987) added later that boys are more likely than girls to engage in deviant behavior in a single-parent or stepparent family situation.

Several studies have found that males have higher rates of alcohol and illicit drug use than do females (Johnston et al., 1991; Lang, 1985; Pascale & Evans, 1993; Thorne & DeBlassie, 1985). Males also had a higher rate of negative consequence during marital disruption than females, an increase in negative consequence that usually took the form of substance use and abuse (Doherty & Needle, 1991). In a study by Crowe, Torabi, and Nakornkhet (1994) of seventh- and eighth-graders, girls were much less likely to smoke; 30% of the boys and 41% of the girls never smoked. In addition, 8% of the boys were current smokers compared to 5% of the girls.

Penfield (1990) reported similar results for alcohol use. Almost four times as many males drank beer frequently than females (15% compared to 4%) and 473 females stated they had never drank beer compared to 237 males. The numbers were lower but the ratios similar for wine and hard liquor.

Penfield (1990) also showed differences in substance use. In six of the eight drug categories, females had higher percentages of present nonuse than males. Marijuana was the most commonly used drug with 13% of males saying they used it less than once a month. Previous drug usage percentages increased for both males and females, however. Fifteen percent of males claimed they had used marijuana over 25 times compared with 6.2% of females (Penfield, 1990).

Hypotheses

The purpose of this thesis was to examine the relationship between the parents' marital status, quality of family interaction, and gender on adolescent alcohol, tobacco, and marijuana use. These relationships were examined to determine if a statistically significant difference in adolescent use of these substances could be found between the three subsets of parental types: single-parent, intact-first marriages, and stepparent. The study also examined parents' use of alcohol.

Three null hypotheses were examine to determine the relationship among the variables being studied. The first null hypothesis was that no differences would be found in the use of tobacco by gender, marital status, or quality of family interaction. The second null hypothesis was that no differences would be found in the use of alcohol by gender, marital status, or quality of family interaction. The third null hypothesis was that no differences would be found in the use of marijuana by gender, marital status, or quality of family interaction.

CHAPTER III

METHODS

This study is based on the analysis of a survey administered in school to adolescents in grades 7 through 12. The survey assessed each adolescent's possible problem behaviors and relationships in the home, school, and community.

Sample

The sample consisted of 7th through 12th graders in one rural Utah high school. Within the sample, 93 seventh-, 97 eighth-, 82 ninth-, 97 tenth-, 71 eleventh-, and 60 twelfth-graders completed the questionnaire in a public high school. Of the respondents, 56.4% were male and 43.6% were female. Seventy of the adolescents' families were headed by a single parent, which included either divorced, separated, widowed, or never married parents; 343 married couples were in the intact parent category. Eighty-three families were in the remarried parent category (Table 1).

This sample was not representative of the U.S. population because it had limited external validity, but it may be representative of adolescents in similar rural communities. However, precautions were taken within the design of the survey to insure high internal validity.

Data Collection

The survey data were collected in a one-time distribution and collection procedure. The surveys were administered by community volunteers who gave out and

Table 1

Demographic Profile of Adolescent/Family Sample

Variable	Total number	Total percent
Adolescents	500	100.0
Gender		
Male	282	56.4
Female	218	43.6
Grade		
7th grade	93	18.6
8th grade	97	19.4
9th grade	82	16.4
10th grade	97	19.4
11th grade	71	14.2
12th grade	60	12.0
Parents' Marital status [a]		
Married	343	68.6
Remarried	83	16.6
Divorced/separated	53	10.6
Widowed	10	2.0
Never married	7	1.4

[a] Missing (4)

collected the surveys in the schools during class time. The students had approximately 50

minutes in a class period to complete the survey. Precautions were made to insure

complete anonymity so that individual respondents could not be identified. Students did

not put their names on the survey. Surveys were numbered by the researcher for later

data coding verification only.

Information about alcohol, tobacco, and marijuana use was collected from the adolescents. The adolescents' responses to these three categories were used in the analysis and results section of this study.

Ethical Considerations

Collecting accurate responses of people's attitudes and behaviors about sensitive issues requires that participants feel secure and anonymous. This is especially true when collecting people's attitudes and behaviors in regards to personal issues, such as alcohol and drug use.

In this project, the adolescents were assured that their answers would be kept anonymous to insure that no potential parental reprovals would occur due to the adolescents' differing opinions or possible misbehavior as reported. Through the analyses and evaluation of the survey, there was no way to identify individual respondents.

Also, because the initial survey participation was purely voluntary, any student could have withdrawn at any time without fear of reproval or penalty. Furthermore, in answering the questionnaire, the participant could have declined to respond to any question he or she deemed inappropriate.

Measurement

The adolescents' survey had items relating to three areas of substance use:

(a) tobacco use, (b) alcohol use, and (c) marijuana use. In each of these three areas the questions covered the frequency of use and the age of first initiation.

Specifically, this study examined the questions pertaining to the teenager's use. The questions in each area were on a 5-point scale and were broken down into never used, have tried or used less than monthly, used 1-3 times a month, used 1-2 times a week, and used every day. The scale was coded as never tried = .01, have tried or used less than monthly = 1, used 1-3 times a month = 12, used 1-2 times a week = 52, and used every day = 365. The most conservative numbers for each question were used. Age of use ranged from never tried, to first tried smoking at 9 years old or younger, to first tried at 17 years or older.

Definitions

The independent variables and the dependent variables were defined as follows.

Independent variables. Marital status was measured as:

1. The intact family type included all families where both biological parents lived in the same household.

2. The single-parent type included all households under the supervision and care of only one biological parent. This included separated, divorced, widowed, and never married parents.

3. The remarried-parent type included all households where one biological parent had remarried and youth were living with the remarried parent.

Categories two and three were collapsed into one category called nonintact

family. Another independent variable looked at was quality of family interaction. This variable had a 5-point scale ranging from "almost never" to "almost always." There were 30 questions asked that addressed three levels of quality in a family: kindness, hurtfulness, and communication. These items came from a family measure that was currently being tested and developed. However, a Cronbach's alpha was run on each of the three categories, kindness, hurtfulness, and communication, to test for reliability and validity. The kindness category had an alpha of .91, hurtfulness had an alpha of .87, and communication had an alpha of .84. When the questionnaire was run with all three categories entered together, there was an alpha of .93.

The third independent variable that was used was gender. It was assessed with a dichotomous response of "male" and "female."

Dependent variables. In the study, the dependent variables of alcohol use, tobacco use, and marijuana use were described in the following manner. All substance use was assessed on a 5-point frequency scale from "never used" to "every day" use.

Analysis

The variables were examined using multiple regression procedures according to the respondent's parental marital status, family relationship quality, and gender. Adolescents' alcohol use, tobacco use, and marijuana use were used as the dependent variables. The dependent variables were transformed into standardized scores using the log base 10. These transformed variables were used throughout the study. A correlation was also used to examine the relationships of the variables. Also, mean score

comparisons were used to determine how the groups differ.

CHAPTER IV

RESULTS

A major purpose of this study was to examine and compare adolescent alcohol, tobacco, and marijuana use in intact and nonintact families. Also, the study looked at how the quality of family interaction affected the use of these drugs with adolescents. The first null hypothesis was that no differences would be found in the use of tobacco by gender, marital status, or quality of family interaction. The second null hypothesis was that no differences would be found in the use of alcohol by gender, marital status, or quality of family interaction. The third null hypothesis was that no differences would be found in the use of marijuana by gender, marital status, or quality of family interaction.

Frequency of Substance Use

The use of tobacco among adolescents in this survey (Table 2) showed that the majority (61.7%) of adolescents have never used tobacco, although nearly 10% used it on a daily basis. The use of alcohol among adolescents in this sample (Table 2) showed that 56.9% had never used alcohol. This survey also showed that nearly 15% were using alcohol once a month or more. The use of marijuana among adolescents in this sample (Table 2) showed that the vast majority (84%) had never tired marijuana. However, approximately 8% used it at least once a month or more.

Correlation

Correlations were run on the independent and dependent variables to see if any

relationships between them could be determined (Table 3). When the dependent

Table 2

Substance Use Among Adolescents

Value Label	Frequency	Percent
Tobacco		
Never have used	309	61.7
Have tried	95	19.0
Uses 1 to 3 times a month	29	5.8
Uses 1 to 2 times a week	13	2.6
Uses every day	46	9.2
Alcohol		
Never have used	285	56.9
Have tried	124	26.7
Uses 1 to 3 times a month	36	7.2
Uses 1 to 2 times a week	29	5.8
Uses every day	9	1.8
Marijuana		
Never have used	421	84.0
Have tried	37	7.4
Uses 1 to 3 times a month	12	2.4
Uses 1 to 2 times a week	10	2.0
Uses every day	13	2.6

Note. The percentages do not equal 100% because of non-respondents.

Table 3

Correlation Matrix of Independent and Dependent Variables

	Tobacco	Alcohol	Marijuana	Family kindness	Family hurtfulness	Family communication	Gender	Marital status
Tobacco	1.00 (492)							
Alcohol	.73 (490)p=.00	1.0 (493)						
Marijuana	.54 (490)p=.00	.58 (491) p=00	1.0 (493)					
Family Kindness	-.20 (486)p=.00	-.26 (487)p=.00	-.11 (487)p=.01	1.0 (491)				
Family Hurtfulness	.14 (485)p=.00	.19 (487)p=.00	.17 (486)p=.00	-.50 (484)p=.00	1.0 (490)			
Family Communication	-.13 (491)p=.01	-.14 (492)p=.00	-.07 (492)p=.13	.67 (489)p=.00	-.42 (488)p=.00	1.00 (496)		
Gender	-.15 (492)p=.00	-.04 (493)p=.39	-.00 (493)p=.94	.04 (491)p=.37	-.03 (490)p=.51	.07 (496)p=.11	1.00 (500)	
Marital status	-.21 (489)p=.00	-.22 (490)p=.00	-.15 (490)p=.00	.10 (488)p=.02	-.10 (487)p=.04	.08 (493)p=.10	.00 (496)p=.96	1.000 (496)

variables were run, the strongest correlation (r = .73) was between alcohol use and tobacco use. This positive correlation showed that the more tobacco was used, the more likely the subjects were to use alcohol. Conversely, the less tobacco was used, the less alcohol was used. Alcohol use and marijuana use had the next highest correlation (r = .58). The smallest correlation was between tobacco use and marijuana use (r = .54). All of these variables were positively correlated and statistically significant at the $p \leq .001$ level.

When the independent variables were run, the strongest correlation among the quality of family interaction (family kindness, family hurtfulness, and family communication) variables was family kindness and alcohol use (r = -.26). The next highest was with family kindness and tobacco use (r = -.20). This was followed by family hurtfulness and marijuana use (r = .17). All of these were statistically significant at the $p \leq .001$ level.

These correlations showed a strong link between the quality of family interaction and tobacco, alcohol, and marijuana use, especially with the variable family kindness and tobacco and alcohol use and with family hurtfulness and marijuana use. The correlation between family communication and the three independent variables was not as strong. The only substance that had a difference between the genders was tobacco (r = -.15). It was statistically significant at the $p \leq .001$ level.

When marital status was compared with all other variables, there was statistical significance with all the variables except family communication (p = .10) and gender (p = .96). Marital status was correlated with tobacco, alcohol, and marijuana (r = -.21,

$\underline{r}$ = -.22, $\underline{r}$ = -.15), and they were all statistically significant at the $\underline{p} \leq .001$ level. The correlation between marital status and family kindness and family hurtfulness was not quite as strong ($\underline{r}$ = .10, $\underline{r}$ = -.09). However, family kindness was statistically significant at the $\underline{p}$ = .02 level and family hurtfulness at the $\underline{p}$ = .04 level.

<div align="center">Mean Score Comparisons</div>

<u>Marital Status</u>

The main effects of marital status on the dependent variable of tobacco showed that the overall means for adolescents in the intact marriage were significantly different at the .01 level from the overall means of adolescents from the nonintact marriage, whereas alcohol and marijuana were not significantly different (Table 4). Mean levels of use were higher in adolescents from nonintact families. Thus, the overall tobacco and alcohol use means of adolescents in the intact-marriage type were significantly lower than the overall means of adolescents in the nonintact-marriage types. However, marijuana use was no different in the intact and nonintact families.

<u>Gender</u>

Gender as an independent variable was also examined for possible different overall mean scores for males and females in each of the dependent variables (Table 5). In all three dependent variables (tobacco, alcohol, and marijuana use), overall mean scores by gender were different. With regard to tobacco, the overall mean score for males was significantly higher than that for females, with a .014 significance level.

Table 4

Overall Mean Score Comparisons for Tobacco, Alcohol, and Marijuana Use by Marital

Status

Variable	Non-Intact Family			Intact Family				
	$\bar{x}$	SD	n	$\bar{x}$	SD	n	t-value	p
Tobacco	57.43	130.53	152	27.25	92.00	337	2.58	.01
Alcohol	17.73	65.99	151	7.88	40.74	339	1.69	.09
Marijuana	14.43	65.78	151	9.65	55.70	339	.78	.44

However, with alcohol and marijuana the overall mean scores for males and females

were not significantly different. The highest overall mean score for the three dependent

variables was males in the tobacco category. In the marijuana and alcohol category, the

overall mean score for females was slightly higher than the overall mean score for males.

Quality of Family Interaction by Marital Status

Quality of family interaction was also examined for possible different overall

mean scores for intact and nonintact marriages (Table 6). In family kindness and family

hurtfulness, overall mean scores by marital status were different. However, the overall

mean score for communication by marial status did not differ significantly. Family

kindness and hurtfulness both differed significantly by marital status at the $p < .05$ level.

Table 5

Overall Mean Score Comparisons for Tobacco, Alcohol, and Marijuana Use by Gender

	Male			Female				
Variable	$\bar{x}$	SD	$\underline{n}$	$\bar{x}$	SD	$\underline{n}$	t-value	$\underline{p}$
Tobacco	46.42	118.00	276	23.62	86.90	216	2.47	.01
Alcohol	10.22	45.09	277	11.72	55.53	216	-.32	.75
Marijuana	8.20	49.00	278	14.74	69.38	215	-1.17	.24

Quality of Family Interaction by Gender

Quality of family interaction was also examined by gender for possible different overall mean scores (Table 7). In all three areas of quality of family interaction (family kindness, family hurtfulness, and family communication), overall mean scores were not significantly different. The overall mean scores for male and female adolescents in each of these three categories did not differ significantly, showing that males and females were not affected any differently by family kindness, family hurtfulness, and family communication in association with tobacco, alcohol, and marijuana use.

Multiple Regression Analyses

A multiple regression procedure was used to examine the effects of parents' marital status, adolescent's gender, and quality of family interaction on the dependent variables. Three different multiple regressions with a stepwise procedure were run with

Table 6

Overall Mean Score Comparisons for Family Kindness, Family Hurtfulness, and Family
Communication by Marital Status

Variable	NonIntact Family			Intact Family				
	$\bar{x}$	SD	n	$\bar{x}$	SD	n	t-value	p
Family Kindness	3.18	.83	150	3.36	.78	338	-2.31	.02
Family Hurtfulness	2.48	.77	153	2.33	.74	334	2.11	.04
Family Communication	3.35	.84	152	3.48	.77	341	-1.67	.10

Table 7

Overall Mean Score Comparisons for Family Kindness, Family Hurtfulness, and Family
Communication by Gender

Variable	Male			Female				
	$\bar{x}$	SD	n	$\bar{x}$	SD	n	t-value	p
Family Kindness	3.28	.76	179	3.34	.84	212	-.91	.37
Family Hurtfulness	2.40	.69	275	2.35	.82	215	.65	.51
Family Communication	3.39	.75	279	3.50	.84	217	-1.63	.11

the variables tobacco, alcohol, and marijuana use as the dependent variables (see Tables 8, 9, & 10).

Tobacco Use

A multiple regression stepwise procedure for tobacco use (Table 8) was run, where gender, parental marital status, and quality of family interaction, which includes family kindness, family hurtfulness, and family communication, were simultaneously put into this analysis. The main effects of marital status, gender, and family kindness were statistically significant.

Table 8

Regression Analysis for Variables Predicting Adolescent Tobacco Use (N=496)

Variable	B	Beta	T	Sig
Gender	-.42	-.13	-3.04	.00
Parents' Marital Status	-.68	-.20	-4.59	.00
Family Kindness	-.36	-.18	-4.20	.00

R-square = .10
Note. The other independent variables tested: family hurtfulness and family communication were not statistically significant in the regression.

The beta's showed the relative contribution of the variables to the prediction of the dependent variables. Marital status entered in first with a beta of -.20 and was statistically significant at the $p \leq .001$ level. A negative beta showed that an intact family

Table 9

Regression Analysis for Variables Predicting Adolescent Alcohol Use (N=496)

Variable	B	Beta	T	Sig
Parents' Marital Status	-.59	-.20	-4.68	.00
Family Kindness	-.42	-.25	-5.83	.00

R-square = .12

Note. The other independent variables tested: gender, family hurtfulness, and family communication were not statistically significant in the regression.

Table 10

Regression Analysis for Variables Predicting Adolescent Marijuana Use (N=496)

Variable	B	Beta	T	Sig
Parental Marital Status	-.31	-.14	-3.02	.00
Family Hurtfulness	.21	.15	3.35	.00

R-square = .04

Note: The other independent variables tested: gender, family kindness, and family communication were not statistically significant in the regression.

is negatively correlated with adolescent tobacco use. Quality of family interaction, family

kindness, entered in next with a beta of -.18 and was statistically significant at the $p \leq$

.001 level. This also showed that family kindness was negatively correlated with tobacco

use. Gender entered with a beta of -.13 and was statistically significant at the $p \leq$ .003

level. The other variables of family hurtfulness and family communication were not statistically significant and did not make it into the regression. The R-square for this model of tobacco use was .10.

Alcohol Use

In the multiple regression procedure for alcohol use (Table 9), only two variables entered the equation. As explained above, the beta's showed the relative contribution of the variables to the prediction of the dependent variables. Family kindness entered in first with a beta of -.25 and was statistically significant at the $p \leq .001$ level. The negative beta showed that family kindness is negatively correlated with alcohol use. Marital status entered in next with a beta of -.20 and was statistically significant at the $p \leq .001$ level. Again the beta showed a negative correlation with intact families and alcohol use. The other variables (gender, family hurtfulness, and family communication) were not statistically significant and did not make it into the regression. The R-square for this model of alcohol use was .12.

Marijuana Use

In the multiple regression procedure for marijuana use (Table 10), family hurtfulness entered in first with a beta of .15 and was statistically significant at the $p \leq .001$ level. This beta showed that there is a positive correlation with family hurtfulness and marijuana use. Marital status entered next with a beta of -.14 and was statistically significant at the $p \leq .003$ level. The negative beta showed that there was a negative correlation with intact families and marijuana use. The other variables (gender, family

kindness, and family communication) were not statistically significant and did not make it into the regression. The $\underline{R}$-square for this model of marijuana use was .04.

Mean comparison tests for each of the significant main effects were performed next to further assess the predictive relationships between the independent and dependent variables. Also, those tests were run to determine which groups were higher on substance use and to strengthen the study. The overall mean scores for each of the independent variables were tested in each category of tobacco, alcohol, and marijuana use to further determine in which groups the mean differences existed.

Tests of Hypotheses

Hypothesis 1

The first null hypothesis was that no differences would be found in the use of tobacco by gender, marital status, or quality of family interaction. The multiple regression performed on tobacco use by marital status, gender, and quality of family interaction showed statistical significance in the main effects of marital status and gender (Table 3). It also showed statistical significance in the family kindness area of quality of family interaction. Family kindness and marital status were statistically significant at the $\underline{p} \leq .001$ level, while gender was statistically significant at the $\underline{p} \leq .003$ level. Therefore, this null hypothesis of no difference in tobacco use by marital status, quality of family interaction, and gender was rejected.

<u>Hypothesis 2</u>

The second null hypothesis was that no difference would be found in the use of alcohol by gender, marital status, or quality of family interaction. The multiple regression performed on alcohol by marital status, gender, and quality of family interaction showed statistical significance for marital status at the $p \leq .001$ level and statistical significance for the family kindness area of quality of family interaction at a $p \leq .001$ level (Table 4). Gender was not statistically significant with a $p = .65$. Nonetheless, the null hypothesis of no difference in alcohol use by marital status and quality of family interaction was rejected.

<u>Hypothesis 3</u>

The third null hypothesis was that no difference would be found in the use of marijuana by gender, marital status, or quality of family interaction. The multiple regression performed on marijuana by marital status, gender, and quality of family interaction showed statistical significance for marital status at the $p \leq .003$ level and statistical significance for the family hurtfulness area of quality of family interaction at the $p \leq .001$ level (Table 5). Gender was not statistically significant with a $p = .91$. However, the null hypothesis of no difference in marijuana use by marital status and quality of family interaction was rejected.

Summary

This study of adolescents' parents' marital status and quality of family interaction

revealed that significant differences existed in adolescents' tobacco, alcohol, and marijuana use. The three null hypotheses were rejected, showing that differences did exist in adolescents' tobacco, alcohol, and marijuana use within the two marital status types and the three areas of quality of family interaction, specifically in regards to adolescents in the intact family to adolescents in the nonintact families. Three different tests (correlation, mean comparisons, and multiple regression) were run on each of the variables. Correlation was used to examine the relationships between the independent variables and the dependent variables. Mean comparison tests were used to determine which groups were higher on substance use. Multiple regression was used to see which variables contributed the most to the explained variance.

Marital Status

Adolescents from nonintact families had higher mean levels of substance use on the variables of tobacco, alcohol, and marijuana use. However, tobacco was the only one where the differences were statistically significant.

Gender

In the category of tobacco use, there was a statistically significant difference in males and females. However, in the categories of alcohol and marijuana use, there was no statistically significant difference between male and females in this study. There was no statistically significant difference on the means tables for gender and marital status.

Quality of Family Interaction

Quality of family interaction (family kindness, family hurtfulness, and family communication) showed strong statistical significance in the family kindness category with regards to tobacco and alcohol use, whereas family hurtfulness showed statistical significance in marijuana use. The family communication variable did not show any statistical significance in any of the three dependent variables. The lack of family kindness was the strongest predictor of the use of tobacco and alcohol among the adolescents, with family hurtfulness being the strongest predictor of marijuana use.

Correlations

In examining the correlations of the dependent variables, alcohol had two of the highest correlations. Alcohol use had a high correlation with tobacco use ($\underline{r}$ = .73), and a strong correlation with marijuana use ($\underline{r}$ = .58).

In the correlation of the independent variables, family kindness had the two highest correlations. The family kindness variable had a high correlation with family communication ($\underline{r}$ = .67) and a strong correlation with family hurtfulness ($\underline{r}$ = -.50).

CHAPTER V

CONCLUSIONS

Discussion

In this study, differences in adolescents tobacco, alcohol, and marijuana use were examined by looking at the influence that marital status, quality of family interaction (family kindness, family hurtfulness, and family communication), and gender had on the adolescents' likelihood of using any of these substances. Marital status, family kindness, and gender proved to have significant influences on the dependent variable tobacco use. In addition, marital status and family kindness were significant influences on alcohol use. Finally, marital status and family hurtfulness were significant in relation to marijuana use.

In this sample, adolescents in nonintact families used tobacco, alcohol, and marijuana more than adolescents in intact families. Even though no parental surveys were obtained that described the parents' behaviors or attitudes, it seemed that certain family environment issues, such as discipline styles, attitudes towards substance use, and parental use of substances, may have affected the adolescent use of tobacco, alcohol, or marijuana.

Some possible explanations for the differences in the adolescents' drug use by parent marital status can be noted: the effects of the changing family structure due to divorce, death, or remarriage of the parents; differing amounts of parental supervision by one or two parents; differences in parental modeling of or attitude toward the negative

behavior; or the parenting style of the parents.

Family kindness, which was a category of the independent variable quality of family interaction, was the strongest predictor of overall adolescent substance use. Adolescents who perceived their families to be kind were less likely to use both alcohol and tobacco. However, family kindness was more strongly related to deterring alcohol use than it was in deterring tobacco use.

Another category of quality of family interaction, family hurtfulness, had an interesting effect on adolescent substance use. The only dependent variable that family hurtfulness had a statistically significant influence on was marijuana use. The more hurtful an adolescent viewed his/her family, the more likely he/she was to use marijuana. Family hurtfulness was correlated with the other types of substance use, but did not add significantly to the regression equation with the other variables entered.

This study has placed a great emphasis on the perceived kindness an adolescent experiences in his or her family. This kindness could be important because of the way it makes an adolescent feel when he or she is with his or her family. The way members of a family treat each other shows what kind of an environment the adolescent has in which to grow up. When an environment is safe, filled with kindness, adolescents gain a feeling of acceptance. With this feeling of acceptance, it is possible that adolescents do not need to look to alcohol or tobacco use for acceptance.

The third category of quality of family interaction, family communication, had no statistically significant effect on any of the three dependent variables. Though much emphasis has been placed on the importance of family communication, this study showed

that it made little difference in an adolescent's choice of whether or not to use tobacco, alcohol, or marijuana.

Marital status, meaning whether families were intact or nonintact (never married, divorced/separated, widowed, or remarried), also played an important role in the likelihood of adolescents using alcohol, tobacco, and marijuana. It was the only independent variable that showed statistical significance in all three of the dependent variables.

The strong influence of intact families on adolescents' choosing not to use alcohol, tobacco, or marijuana could be due to the fact that two-parent intact families provide a more stable environment for the adolescent. In addition, two-parent intact families may be more united in their discipline style, agreeing on and executing the same kind of discipline towards the adolescent. On the other hand, in a nonintact remarried type, the uniting of discipline styles seems to be much more difficult. It also seems necessary to consider that adolescents who do not have to go through the trauma of separation or divorce are more likely to be secure in their environment and in their trust in the solidity of their family.

Lastly, it is essential to realize that being in an intact family does not guarantee that there is happiness or kindness in the home and thus it does not guarantee that an adolescent will not turn to substance abuse. In addition, an adolescent can feel that his/her family is hurtful, whether or not that family really is hurtful, and may have a tendency to turn to substance use.

Nonintact families, which included remarried, divorced/separated, never married,

or widowed, were more likely to have adolescents who used alcohol, tobacco, and marijuana. This study reiterated the problems of adolescents with only one parental figure who are home alone a lot, are given excess time to themselves, and are missing direction from the absent parent, maybe due to the parent's work schedule or social life. These are adolescents who then turn to other means to provide them the perceived security that they may not always find in their nonintact family. This perceived security can often come from substance use.

The independent variable of gender had a statistically significant effect on adolescent tobacco use for males. Males were more likely to use tobacco than females. There was no difference in adolescent alcohol and marijuana use between males and females.

Previous studies have showed that females used alcohol, tobacco, and marijuana substantially less than males. However, this study showed that just as many females are using alcohol and marijuana as males (Table 7). This conclusion could be the same for tobacco; however, this study included tobacco and chewing tobacco in the same question. Females may be less likely to use chewing tobacco, which may explain why the results indicate a higher tobacco rate among males. Thus, the *smoking* rate may actually be the same among males and females, but overall tobacco use was higher for males.

Limitations

Though this study found statistical significance with marital status, quality of family relations, and gender in relation to tobacco, alcohol, and marijuana use, the R-

squares for each multiple regression were very low. Thus the overall statistical significance could be due to the large sample size.

In addition, this study is not easily generalized on a national level, nor can it have national implication because of the large percentage of adolescents who did not use substances. The adolescents who completed the surveys were from a small, conservative, religious community with a low rate of substance use, which was not indicative of the majority of high school students in this nation.

This survey was also given in the school setting, which would indicate that non-attenders and students who were habitually absent were not included. The answers on the survey were self-reported, thus increasing the likelihood that the answers were not completely honest.

Implications

The quality of family interaction variables in this study was significantly related to the adolescent's alcohol, tobacco and marijuana use. Family kindness was found to be the most important predictor of alcohol and tobacco use. The greater the perceived family kindness, the less likely the adolescent was to use alcohol and tobacco. In addition, family hurtfulness was found to be the most influential factor on adolescents who used marijuana. The more hurtful adolescents perceived their families to be, the more likely they were to use marijuana.

Thus, emphasis needs to be placed on more effective family relationships, including teaching family members to express appreciation for one another, to be

sensitive to each other's feelings, to express love for one another, and to sacrifice time for each other. The findings of this study suggested that parents needed to take more time to develop these relationships and skills with their children, thus promoting an atmosphere of love, kindness, and security for their adolescents. When efforts are made to improve these family relationships, this study suggested that parents might be able to deter some adolescents from choosing inappropriate behaviors, such as tobacco, alcohol, and marijuana use.

Parents' marital status was also a strong predictor of adolescent tobacco, alcohol, and marijuana use. Adolescents from intact two-parent families had a substantially lower likelihood of using any of the three dependent variables (tobacco, alcohol, and marijuana).

From this study, we can conclude that parents need to be educated of the reality that their adolescent might become involved in substance use because of the potential trauma of a nonintact familial situation. Although studies cannot change marital status, studies can emphasize with nonintact families the importance of developing loving and kind relationships regardless of the family structure. If adolescents are deterred from substance use because of quality family relationships, then how much more important are these kinds of relationships in families that are not intact? Information from this study could assist these nonintact families just as much, if not more, in providing for them ways to help their adolescents avoid tobacco, alcohol, and marijuana.

Finally, this study also illustrated that being an intact family was not always enough in preventing adolescent substance use. It was the combination of having an

intact family and perceiving family kindness that contributed to the least amount of substance use among adolescents.

Recommendations for Future Studies

The subject of how family structure may affect adolescent substance use is a topic of concern for researchers. Thus, from this study, researchers need to examine specifically the effects of family kindness and hurtfulness on adolescent substance use. In addition, it is important to realize that, though society has placed much emphasis on family communication, this study may illustrate the need for a reevaluation of what exactly constitutes quality of family interaction. This reevaluation is not to suggest that family communication is insignificant, rather possibly that family communication is incomplete without family kindness. Therefore, researchers need to direct their efforts to find out if there is indeed more power in a family's ability to treat each other kindly than in a family's ability to communicate. If so, is this power strong enough to prevent deviant adolescent behavior?

In addition, a repeated longitudinal measurement would be more effective in testing theories and hypotheses. Because an adolescent's attitudes and behaviors change over the teenage years and because there are possible changes in the family unit to which the adolescent belongs during the teenage years, a longitudinal design would be more effective in detecting these possible changes.

In this study, the survey conducted was not representative of the American teenage population. A future study conducted in a community more representative of the

American teenage population would produce findings more representative of the whole nation.

Lastly, there was not a parental survey obtained in this research to include the parents' perception of quality family interaction. Hence, in future studies it would be helpful, to conduct a survey regarding the parents' perception of the quality of family interaction in comparison with the adolescent's perception of that interaction.

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APPENDIX

Questions on survey regarding adolescents feelings about their family:

On your answer sheet, please mark the letter of the response that best describes your

feelings bout our family. For example, if the statement said "We quarrel a lot in our

family", you would mark "A" if your family hardly ever quarrels; "C" if it sometimes

happens; or "E" if quarreling seems like it always happens.

A	B	C	D	E
Almost Never	Once in a while	Sometimes	Frequently	Almost Always

16. We feel and express appreciation for one another.

17. Some family members are rude to others.

18. We can say what we really feel.

19. We are sensitive and gentle with each other.

20. Some family members ridicule others.

21. The parent(s) and child(ren) get actively involved in conversations.

22. Family members give of their time for one another.

23. Some family members are cruel to one another.

24. We are unable to discuss our problems with each other.

25. We are compassionate.

26. There are negative feelings between family members.

27. It is difficult to find someone in my family to sit down and talk to.

28. We are very helpful to each other.

29. Some family members intentionally humiliate others.

30. We are afraid to say what we are thinking.

31. Family members sacrifice for each other.

32. There are feelings of resentment between members of our family.

33. Children can talk comfortably with parents about personal problems.

34. We compliment each other.

35. Some family members are very critical of others.

36. Family members have the ability to express thoughts and ideas
    effectively.

37. We do nice things for each other.

38. Some family members are verbally abusive with one another.

39. We discuss differences openly.

40. We express love for each other.

41. Some family members get very angry.

42. We are unable to discuss our fears and concerns.

43. Family members depend on each other for help.

44. There is extreme anger in our family.

45. We have the skill to communicate effectively.

Questions on survey regarding adolescent tobacco, alcohol, and marijuana use:

Please mark each item to show how often you use the following substances:

	A Never have used	B Have tired or use less than monthly	C 1-3 times a week	D 1-2 times a week	E Every day
68. Tobacco	A	B	C	D	E
69. Alcohol	A	B	C	D	E
70. Marijuana	A	B	C	D	E

Question on survey regarding parents marital status:

What is the marital status of you parents?
a. Married (first marriage for both parents)
b. Remarried
c. Divorced/separated
d. Widowed (One of your parents died)
e. They never married
f. Not married but living together

Question on survey regarding gender:

What is your sex?
a. Male
b. Female

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