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FOUR LEVELS OF SEXUAL INVOLVEMENT, AND THEIR ASSOCIATION
WITH DATING PATTERNS, FAMILY RELATIONSHIPS,
AND OTHER RELATED FACTORS

by

Bruce H. Monson

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

of

DOCTOR OF PHILOSOPHY

in

Family Life/Family and Human Development

Approved:

UTAH STATE UNIVERISTY
Logan, Utah

1999

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ABSTRACT

Four Levels of Sexual Involvement, and Their Association
with Dating Patterns, Family Relationships,
and Other Related Factors

by

Bruce H. Monson, Doctor of Philosophy

Utah State University, 1999

Major Professor: Dr. Glen O. Jenson
Department: Family Life/Family and Human Development

This study examined four levels of sexual involvement among adolescents. Levels of sexual involvement were (1) adolescents who had experienced sexual intercourse; (2) adolescents who had been involved in petting but had never had intercourse; (3) adolescents who had made out but had never petted or had sexual intercourse; and (4) adolescents who had never made out, petted, or had sexual intercourse. The sample consisted of 308 eleventh graders from a semi-rural area of the state of Utah.

Dating patterns, particularly early age at first date, were found to be significantly associated with most levels of sexual involvement. Early age at first date was associated with a high level of sexual involvement, with 90% of the adolescents who dated at age 13 or before having experienced sexual intercourse by their junior year in high school. Having a steady boyfriend or girlfriend was also associated with a higher level of

sexual involvement, with 58% of those who reported having a steady dating partner reporting sexual intercourse involvement.

Close relationships with family, father, and mother were more predictive of less female involvement in sexual activity than male. Relationship with mother was not significant for adolescent male sexual involvement. Having peers who approved of adolescent sexual involvement was more associated with male than female sexual activity. Higher frequency of church attendance was a strong predictor of less sexual involvement for both genders. More factors proved to be predictive of adolescent female than male sexual activity on all levels of sexual involvement. A history of sexual abuse and having high educational goals were significantly associated with female sexual involvement only.

(184 pages)

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I dedicate this research to all those who have helped make me into someone that I thought I could not be. In addition, I dedicate it to the young people in whom the hope of our future lies. My desire is that it might help to make their journeys less laden with burdens youth should never have to carry.

“Trust in the Lord with all thine heart; and lean not unto thine own understanding. In all thy ways acknowledge Him, and He shall direct thy paths.” (Proverbs 3:5-6)

Bruce H. Monson

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CHAPTER I

INTRODUCTION

Statement of Problem

Sexual behavior, including intercourse and sexual acts associated with intercourse, are typically regulated by the norms of society. Historically in America, societal norms were instituted in an effort to discourage sexual intercourse until after marriage. The institution of marriage has helped safeguard many aspects in the lives of family members. Safeguarding the family is important, as it is one of the most basic units of our society. Although premarital sexual behavior is not unique to our time, over the last few decades, the escalation of such behavior has been the focus of much research. Interest in such research has stemmed from societal concerns about teenage pregnancy, teen birth rates, sexually transmitted diseases, and the social problems that accompany them (White & DeBlassie, 1992).

The History of Adolescent Sexual Behavior

Age at First Intercourse and Sexual Involvement

Rises in rates of premarital sexual activity have been documented since World War I. For decades prior to 1990, there was a steady increase in the percentage of adolescents involved in sexual behavior, accompanied by a steady decline in the average age at first intercourse (Koyle, Jensen, Olsen, & Cundick, 1989). Research in the 1950s and 1960s focused mainly on attitudes towards sexual behavior and age at first

intercourse. In the late 1960s and early 1970s, when there was a significant increase in out of wedlock births, the research focused almost solely on the onset of sexual behavior and adolescent use of contraceptives (Brooks-Gunn & Furstenberg, 1989).

In 1950 about 7% of White females had experienced first intercourse by age 16. In 1971 that percentage had risen to one third of 16-year-old White females and 44% had experienced intercourse by 16 in 1982 (Brooks-Gunn & Furstenberg, 1989). The percentage of all adolescents, aged 15-19, who had experienced first intercourse rose from 29% in 1970 to 53% in 1988. In 1987 over 80% of 19-year-old males and over 70% of 19-year-old females had experienced intercourse (Alan Guttmacher Institute [AGI], 1998b; Luster & Small, 1994).

Since 1990, however, the national trend of adolescent sexual involvement has declined. Sexually experienced females declined from 53% of the adolescent population in 1988 to 50% in 1995 and in 1997 only 48% of female high school students reported ever having experienced intercourse (AGI, 1998b). The rate for adolescent males fell from 57% in 1991 to 49% in 1997. Surveys also show an increase in contraceptive use. More and more teens in the 1990s seem to feel that they should wait until they are older to have sex. Research suggests a move towards more conservative attitudes on the part of unmarried adolescents as fewer young men and women in the mid-1990s approve of premarital sex compared to the mid-1980s (AGI, 1998b).

Teenage Pregnancy and Birth Rates

There was a rapid increase in teenage pregnancy during the early part of the 1970s and the levels of teen pregnancy stayed high through the 1980s (Miller & Moore, 1990).

With the rise in rates came rising costs of health care to society associated with adolescent pregnancies (White & DeBlassie, 1992). In 1972 the teen pregnancy rate in the United States for women aged 15-19 was 95.1 per 1,000. That rate increased to 101.1 in 1975, 111.0 in 1980, and hit a high of 117.1 per 1,000 women aged 15-19 in 1990 (AGI, 1998c).

The U.S. adolescent birth rate for women of the same age was 61.7 per 1,000 in 1972. Accompanied by a steady increase in abortion rates, the birth rate declined to 50.2 in 1986, but then started to increase again until it was 62.1 in 1991 (AGI, 1998c).

There are a number of reasons to be concerned about rises in the number of teenage mothers. Studies in the 1980's showed a tendency for adolescent mothers' parenting skills to be lower in quality than older mothers problems (Miller & Moore, 1990). Young mothers are more prone to feelings of depression and worry, are more likely to see their children as problem children and their children are more likely to have later behavioral.

In this last decade, rates of teenage pregnancies and births to adolescent mothers have been falling. The rate of pregnancy for adolescent women declined from 117.1 in 1990 and to 97 per 1000 women in 1996, a 17% decline (AGI, 1999). The teen birthrate fell from 62.1 in 1991 to 54.4 per 1000 women aged 15-19 by 1996, a 12% drop. The teen birthrate fell in every state in the U.S., with declines ranging from 6% to 29% (AGI, 1998b; AGI, 1998c).

Sexually Transmitted Diseases

During the 1980s, the appearance and spread of acquired immune deficiency

syndrome (AIDS) had a large impact on adolescent sexual research (White & DeBlasie, 1992). Although AIDS was the cause of much concern for adolescent sexual behavior in the late 1980s, throughout the 80s sexually active teens had some of the highest rates of other sexually transmitted diseases (STDs) of any age group (Cates & Rauh, 1985). These STDs included gonorrhea, cytomegalovirus, chlamydia cervicitis, and pelvic inflammatory diseases. There were relatively few reported cases of AIDS in the 1980s, but in the late 80s one fifth of all AIDS cases occurred in the 20- to 29-year-old age group. Since the incubation period of AIDS is lengthy, it is likely that many of those infections began as a consequence of adolescent sexual activity (Brooks-Gunn & Furstenberg, 1989). A 1990 survey found that 20% of 10th graders and 38% of 12th graders reported having had four or more sexual partners, suggesting sexual activity that puts them at great risk for STDs (Luster & Small, 1994).

Current Concerns

Age at First Intercourse

Although there has been a decline in teen sexual activity, pregnancy rate, and birthrate since 1990, there is still cause for concern. The early onset of sexual intercourse remains a reality for many young people. Early onset of sexual intercourse is associated with less effective use of contraceptives and a large proportion of unwanted pregnancies. The younger the age at first intercourse, the greater the likelihood of becoming a parent before one is ready (National Campaign to Prevent Teen Pregnancy [NCPTP], 1999b).

Twenty percent of first teen pregnancies happen in the first month teens become sexually active and 50% in the first 6 months (NCPTP, 1999b). Those with early onset of

sexual intercourse are more likely to have older sexual partners, which increases their chances of experiencing physical and sexual abuse. They are also likely to have more sexual partners during their teen years, increasing their risk for STDs (Brewster, Cooksey, Guilkey, & Rindfuss, 1998; Miller & Moore, 1990; White & DeBlassie, 1992).

Some professionals express concern about the potential psychological effects of early sexual experience (Giovacchini, 1986, Hajcak & Garwood, 1988; White & DeBlassie, 1992). Teenagers with the earliest onset of intercourse tend to have more behavioral and emotional problems (Miller, Norton, Fan, & Christopherson, 1998; Tubman, Windle, & Windle, 1996).

One reason for this could be that nonsexual needs often drive sexual behavior for youth. Adolescents feeling anger, desiring affection and self-esteem, or wanting to escape loneliness or boredom sometimes rely on sexual gratification for escape. Some therapists believe that using sex as a coping mechanism for nonsexual needs can produce an artificially high sexual drive (Hajcak & Garwood, 1988). Sex gives immediate gratification but does not fully satisfy the nonsexual needs. As a result, the non-sexual need remains high and a hunger is created for the temporary, but immediate gratification of sexual behavior. Coping sex puts an adolescent at greater risk for depression, low self-esteem, and interpersonal problems (Hajcak & Garwood, 1988). Sexually active teens are also more likely to be involved in delinquent behavior (White & DeBlassie, 1992).

Teenage Pregnancy and Birthrate

The rate of intercourse increases significantly by age. Five to 10% of 13-year-olds have experienced intercourse compared to 70 to 80% of 19-year-olds (Miller et al.,

1998). Eleven percent (about one million) of all women in the United States aged 15-19 become pregnant each year, which costs an estimated \$17 billion annually for medical and social services (AGI, 1998a; Hovell & Sipan, 1994). Of the one million teenage pregnancies each year, half end in birth, a third in abortion, and a sixth in miscarriages (NCPTP, 1996). Of all births to women in the U.S., 13% are to teenagers, 10% to unmarried teenage mothers. Four in 10 girls will get pregnant before age 20 (AGI, 1998a; NCPTP, 1999a).

The United States of America has the highest rate of adolescent pregnancies and childbirth of any of the developed nations (AGI, 1998a; Miller et al., 1998). The U.S. has twice the pregnancy rate of England and Canada and 10 times the rate of Japan (NCPTP, 1996). Teen pregnancies that end in abortion or birth often contribute to medical and psychological problems for adolescents (White & DeBlassie, 1992).

Teen mothers are much more likely to live under the poverty line and need government assistance. They are also much less likely to finish high school or college and have lower earning power when they do finish. Their children are at greater risk for health and developmental problems (NCPTP, 1996; NCPTP, 1999a; White & DeBlassie, 1992). In 1991, \$30 billion was spent to support families started by teenage mothers (White & DeBlassie, 1992).

Sexually Transmitted Diseases

Each year, according to current statistics, one in four sexually active teens, about three million adolescents, contract an STD (AGI, 1998a; AGI, 1999). One in four high school students will have contracted an STD before graduation (Luster & Small, 1994).

In the 1990s, AIDS is one of the leading causes of death for young adults who were most likely infected during their teenage years (Brooks-Gunn, Boyer, & Hein, 1988; White & DeBlassie, 1992). In the late 1980s, the number of adolescents affected by AIDs was estimated to be doubling each year (Brooks-Gunn & Furstenberg, 1989).

Research Rationale

In an effort to better understand recent trends in teen sexual activity, pregnancies, and birthrates, more information concerning behaviors leading to first intercourse is needed. In spite of the considerable volume of research dealing with sexual behavior, there is still much that is unknown concerning the context of first intercourse (Miller & Moore, 1990). For many years, aspects of sexuality other than fertility management have been "woefully understudied" (Brooks-Gunn & Furstenberg, 1989).

Brooks-Gunn and Furstenberg (1989) pointed out that there was very little research prior to 1989 looking at the frequency and variations of sexual behavior other than intercourse. There is a real need to understand behaviors that lead to sexual intercourse, as many teens are involved sexually, despite the fact that they have never had intercourse.

Hovell and Sipan (1994) used a nine-step sexual activity scale in studying the sexual patterns of 14- to 16-year-old Anglo and Latino adolescents. They found that while most of these adolescents had not progressed, sexually, beyond petting inside the clothes, petting was the average sexual behavior of their respondents. A documented normative developmental pattern of sexual behavior has been shown to include moving

from embracing and kissing to fondling and petting prior to the subsequently more intimate act of sexual intercourse (McCabe & Collins, 1984).

Postponing Sexual Intercourse

Most adults feel that teens should not experience sexual intercourse until after they have graduated from high school, and many parents want their children to remain abstinent until marriage. More than half of today's nonmarried teens are not having sexual intercourse, and most of those who are sexually active wish they had waited until they were older (NCPTP, 1999b). While only one in five teens do not have sexual intercourse before age 20, one fourth of the girls whose first sexual experience was voluntary say that it was unwanted. Three out of every four sexually experienced girls say that they had sex only because their boyfriend wanted them to (AGI, 1998a; NCPTP, 1999b).

Many boys say that they wish they had waited longer before having sex and when asked most express the desire to "do the right thing" where sexual activity is involved (AGI, 1998a; NCPTP, 1999b). Since most adolescents are involved sexually for some time before they have intercourse, more information about these precursor activities might help young people postpone the onset of sexual intercourse.

Contraception

Because of public school policy, the data used for this research do not include contraceptive use. In a review of research, Miller and Moore (1990) reported many researchers who have studied adolescent sexual behavior make contraception a major

variable of their research. Even though a rise in the use of contraception has aided in lowering pregnancy rates for adolescents in the 90s (AGI, 1998b), justification can be made for not focusing on contraceptive use while studying adolescent sexual behavior.

First intercourse is unplanned and unforeseen for most youth who have become sexually active. They do not see it as a decision, but as something that "just happened" (Miller & Moore, 1990). While contraceptive use has increased over the past few years, its use remains inconsistent and American teenagers seem slow to initiate contraceptive use (AGI, 1998a; Brooks-Gunn & Furstenberg, 1989; Miller & Moore, 1990; NCPTP, 1999b; Thomson, 1982). Mauldon and Luker (1996) reported that emphasizing the prevention of pregnancy by contraceptive discussion produced inconsistencies in a study of the effectiveness of a relative consequences strategy for decreasing teen pregnancies.

Strategies to increase the chances of young people choosing to use contraceptives are often unsuccessful because of the age of the decision makers and because the costs of contraceptives are immediate while the benefits are delayed (Loewenstein & Furstenberg, 1991). Because of such concerns this researcher has chosen, for this study, to focus solely on those factors associated with an increased likelihood of abstinence or delay of first intercourse.

Theoretical Approach

This research has confined itself to adolescent heterosexual behavior only. There have been many theories used and proposed to explain the heterosexual behavior of adolescents. Two major paradigms to which these theories belong are first, sexuality as an emergent drive, or biologically based theories; second, that sexuality is a socially

shaped and learned behavior (Miller & Fox, 1987). Theories belonging to both paradigms have been useful in explaining and furthering the research data concerning adolescent sexuality. No one theory is adequate to explain the sexual activities of teenagers, and there is greater value in viewing many theoretical strands as useful, depending on the research interest, than in trying to create a "theoretical umbrella" that encompasses all sexual behavior (Miller & Fox, 1987).

Symbolic Interaction Theory

For this study, the theory of symbolic interaction, seeing adolescent sexuality as a socially influenced behavior, will aid in understanding the research results. Symbolic interaction (SI) theory has proven to be very useful in explaining the sexual behavior of teenagers (Stryker, 1980). One of the general principals of SI theory is that our perception of a situation is more important than the actual circumstances and that those perceptions will be real in their consequences (Miller & Fox, 1987). Another principle of SI is that the way we view ourselves and the meaning that we give the phenomena around us arises in the process of interaction with the significant others in our lives, such as our family, friends and teachers (Larossa & Reitzes, 1993).

These principles are relevant in the study of adolescent sexuality. For example, young people's views of themselves in their social and sexual roles have been shown to be predictive of their sexual behavior (Brooks-Gunn & Furstenberg, 1989; Luster & Small, 1994; Miller & Moore, 1990). Its relevance is expanded by the numerous studies which suggest that the type of relationship youth have with their families and peers is

significantly correlated to their sexual activity (Hovell & Sipan, 1994; Miller et al., 1998; White & DeBlasse, 1992).

Identities, Roles, and Salience

Important SI concepts that are significant to the discussion of sexual activity are the concepts of identities, roles and salience. "Identities" refer to the meaning that we give to the social roles that are a part of our lives. One person may assume numerous roles at one time in life, such as son, student, and boyfriend. "Salience" of an identity is the probability that we will evoke that identity in any given circumstance (LaRossa & Reitzes, 1993). These concepts aid in viewing some of the conflicts associated with adolescent sexuality.

For example, the conflict felt by an adolescent female whose boyfriend wants to be sexually involved, but who is also the daughter of parents who do not want her to be sexually involved before marriage, is apparent using the concepts of identities and salience. If her identity as a daughter is strong, she might be more likely to refuse her boyfriend's sexual advances or break off the relationship. If her identity as a girlfriend is strong, she might be more likely to become sexually involved. SI theory focuses our attention on the importance of the processes of interpersonal interaction as teenagers define their social roles and develop norms for behavior (Miller & Fox, 1987).

Differential Association Theory

Sutherland and Cressey (1978) expanded on the principles of SI theory with their differential association theory, where deviant behavior is explained by learning that takes

place in social communication within intimate groups. Adolescents who are involved in deviant behavior learn that behavior through the influence of peer association where deviant behavior is reinforced. With an integrated approach to differential association, Benda and DiBlasio (1991) suggested that some children turn to peer groups that reinforce sexual exploration because of prior weak social bonding with their families.

Research Objective

The objective of this research was to study four levels of sexual involvement and determine what factors are statistically significantly associated with these levels of adolescent sexual activity. This study used data from a survey given to 308 high school 11th graders of two high schools in a semi-rural Utah area. Students were categorized into one of four levels of sexual involvement. The four levels of sexual involvement used in this research were:

1. Eleventh graders who had experienced sexual intercourse.
2. Eleventh graders who had been involved in petting but had not had sexual intercourse.
3. Eleventh graders who had made out but had never been involved in petting and had not had sexual intercourse.
4. Eleventh graders who had never made out (kissed a person of the opposite sex for a long time), been involved in petting, or had sexual intercourse.

Research Questions

Studies have shown many factors to be related to adolescent sexual activity. The review of this research is discussed in Chapter II. In light of recent research, the

following research questions for this study were selected:

1. Are there differences in the level of sexual involvement of adolescents who are living with both biological parents when compared with those whose parents have experienced marital disruption?
- 2a. Are there differences in the level of sexual involvement of adolescents that have close relationships with their parents and siblings when compared with those who do not?
- 2b. Are there differences in the level of sexual involvement of adolescents whose parents monitor their dating behavior when compared with those whose parents do not?
- 3a. Are there differences in the level of sexual involvement of adolescents whose peers pressure them to have sex versus those whose peers do not pressure them to have sex?
- 3b. Are there differences in the level of sexual involvement of adolescents whose peers are involved sexually when compared with those whose peers are not sexually involved and who value abstinence?
- 4a. Are there differences in the level of sexual involvement of adolescents who value religion when compared with those who do not value religion?
- 4b. Are there differences in the level of sexual involvement of adolescents who attend church services regularly when compared with those who do not attend church regularly?
- 5a. Are there differences in the level of sexual involvement of adolescents who start dating early when compared with those who postpone dating until age 16 or later?
- 5b. Are there differences in the level of sexual involvement of adolescents who date often (once a week or more) when compared with those who do not date often (once a month or less)?

- 5c. Are there differences in the level of sexual involvement of adolescents who steady date compared with those who do not?
6. Are there differences in the level of sexual involvement of adolescents who have experienced sexual abuse when compared with those who have not?
- 7a. Are there differences in the level of sexual involvement of adolescents who get high grades when compared with those who receive low grades?
- 7b. Are there differences in the level of sexual involvement of adolescents who have high educational goals when compared with those who do not?

CHAPTER II
REVIEW OF LITERATURE

Gender Differences

Historically, boys have been more likely to engage in sexual behavior at an early age than have girls. While 7% of White females were estimated to have had sex by age 16 in the 1950s, more than one third of the adolescent males were estimated to have experienced intercourse by age 16 during the same time period (Brooks-Gunn & Furstenberg, 1989). The gap between male and female sexual involvement has narrowed considerably over the last few decades. In the mid-eighties, 60% of White males had experienced intercourse before age 18 and 60% of the white females had experienced first intercourse before age 19 (Brooks-Gunn & Furstenberg, 1989).

Males report more liberal attitudes about the appropriateness of different levels of sexual involvement according to dating stage and are more likely to engage in sexual behavior at earlier stages of dating commitment than are females (Roche & Ramsbey, 1993). Gagnon and Simon (1973) proposed that males, and especially adolescent males, are more likely to engage in sexual behavior for recreational reasons or for the purpose of increasing their peer group status, whereas females approach sexual behavior more from a relational perspective. If females' relationships at home are poor, they are more likely to look for relational satisfaction with a boyfriend. Young women may use sexual expression as a means of negotiating with a boy for an emotionally supportive relationship. Young women are more likely than young men to value relationship quality in their early sexual experiences (Whitbeck, Conger, & Kao, 1993; Zelnik & Shah, 1983).

Biological factors have been shown to influence male sexuality more than female, while social factors are more significant for females than for males (Crockett, Bingham, Chopak, & Vicary, 1996). Testosterone levels are associated with involvement in sexual behavior for boys while for girls, levels of testosterone are more associated with sexual interest than with behavior (Udry, Billy, Morris, Groff, & Raj, 1985).

The views of society seem to be influenced by these factors. There is a tendency for our society to put more responsibility for limiting sexual behavior on girls than on boys. Girls report that their parents give them more encouragement to abstain from premarital sexual behavior than do boys (Jensen, DeGaston, & Weed, 1994). The amount of research dealing with female sexual activity has been much greater in the past than research on male sexuality or research involving both genders (Luster & Small, 1994), which might be an indication of society's greater desire to understand and control female adolescent sexuality as compared to male.

There are a number of variables in this paper that have been shown to affect male and female adolescents differently, in terms of their sexual behavior. Research concerning changes in family structure has shown different effects for male and female children (Amato, 1996; Booth & Amato, 1994; Stern, Northman, & Van Slyck, 1984; Young, Jensen, Olsen, & Cundick, 1991). Different effects on female and male sexual behavior have been reported for peer influence (Billy & Udry, 1985; Christopher, Johnson, & Roosa, 1993; DiBlasio & Benda, 1992; Miller & Moore, 1990), dating practices (Miller & Moore, 1990; Roche & Ramsbey, 1993; Thornton, 1990), and educational factors (Day, 1992; Ohannessian & Crockett, 1993). There seems to be

ample evidence of the need to consider gender effects in the study of adolescent sexual behavior.

In summary: Boys tend to be more sexually involved, though the gap is closing. They are also more likely to desire sex in less intimate relationships and for less relational reasons than girls. Females are more likely to use sex as a bargaining chip to achieve closeness in a relationship. Biological factors, family structure, peer influence, dating factors, and educational factors appear to affect males and females differently.

Family Structure

Marital Disruption

It is estimated that about half or more of all children born in the United States will live part of their childhood in a single-parent home (Flewelling & Bauman, 1990). Most of those children will find themselves in a single-parent home because of the divorce or separation of their parents. How marital disruption influences the behavior of children has been the subject of a host of research studies. Some of those studies have tied marital disruption effects to the sexual behavior of adolescents. Although some researchers have questioned the validity and meaning of these studies (Bell & Avery, 1985), the research has consistently shown significant effects on the sexual behavior of children associated with divorce and separation (Miller & Bingham, 1989).

Even though living with both original parents does not necessarily ensure a stable home, living with both original parents has consistently been shown to be related to lower levels of sexual activity for both male and female children (Crockett et al., 1996;

Flewelling & Bauman, 1990; Forste & Heaton, 1988; Gunnell, 1995; Lauritsen, 1994; Miller, Higginson, McCoy, & Olson, 1987b; Rodgers, 1983; Stern et al., 1984). Having a father figure in the home may be more important for boys, even if it is a step-father, as boys from two-parent homes have been found to have less sexual involvement than those from single-parent homes (Young et al., 1991). However, adolescents from both single-parent families and remarried families seem to be at a greater risk of premarital sexual behavior when compared to children from intact families (Miller & Moore, 1990). The significance of these effects is lessened when controlling for age, race, religion, and social class (Miller & Bingham, 1989). In spite of the amount of research done on family disruption, a greater understanding of the mechanisms that drive this association is needed (Flewelling & Bauman, 1990).

Effects of Parental Behavior In and After Divorce

An unstable family environment promotes persistent effects on adolescents, perhaps by changing their perceptions of relationships with the adults and peers in their lives (Wu & Martinson, 1993). While some researchers emphasize the effects on male children's sexual behavior (Young et al., 1991), the female child may be more impacted by these relational changes. Wu and Martinson (1993) reported that structural change in a female child's family is associated with a greater risk of premarital birth, supporting the hypothesis that the increased risk is a response of the female child to the stresses accompanying instability and change in a divorce.

The mother's marital status and dating patterns seem to affect both the attitude and the behavior of daughters, but Whitbeck, Simons, and Kao (1994) reported that only

mother's dating patterns seem to be related to the sexual behavior of sons. Females living with a single, divorced mother have less positive attitudes towards marriage, but that does not seem to delay the onset of sexual intercourse (Kinnaird & Gerrard, 1986). One of the reasons for this could be the sexual behavior of the mother in dating after the divorce. Children who are aware of parental sexual behavior outside of marriage may view their parents as more sexually permissive, independent of expressed parental attitudes (Hovell & Sipan, 1994).

Contact between noncustodial fathers and their children tends to decline over time (Booth & Amato, 1994). The father appears to be a key figure in the transmission of values to children and as a stabilizing influence in the family structure. His absence from the home has an impact on adolescent children, particularly on male children and their sexual activity (Stern et al., 1984). Kinnaird and Gerrard (1986) also suggested that one reason for the increased sexual activity of girls from divorced families could stem from a desire to find a long-term relationship with another male to make up for the rejection she feels from her father.

Sibling Effects

Another possible family structure effect on sexual behavior has to do with the size of the family and the gender and behavior of siblings. The findings on sibling effects, however, have not been consistent. Sibling effects have been reported to have significant association with adolescent sexual activity in some studies, particularly on younger sisters of premaritally pregnant siblings (East, 1996; East, Felice, & Morgan, 1993;

Haurin & Mott, 1990; Rodgers, Rowe, & Harris, 1992; Widmer, 1997), but have been nonsignificant in other studies (Miller & Bingham, 1989; Miller et al., 1987b).

To summarize: Family structure effects appear to be most consistent in the areas of family disruption and relational changes between parent and child during and after family disruption. Children who have both biological parents living with them tend to be less sexually involved than any other type of family structure. Adolescent female sexual behavior seems to be impacted by the relational stress of divorce and the dating behavior of their mothers, while adolescent males seem to be more impacted by the absentee father after divorce.

Family Relations

From the time that we are born until the time that we die, most of us are surrounded by families, which typically involve our most intimate relationships. Our family of birth is the most powerful socialization factor in our early years of life. Parents have very important roles in the idealization and actualization of their children's sexual roles (Miller et al., 1998; White & DeBlassie, 1992). Family relationship skills and connectedness have been shown to reduce the chance of high-risk behavior (Lee & Goddard, 1989), but the role that the family plays in the development of a child's sexual behavior has not yet been fully studied (Hovell & Sipan, 1994). Numerous characteristics of the family can affect the sexual behavior of children, including family interactions and attitudes, the values and norms of the family, and personality traits of the parents (Miller, 1998; Miller & Jorgensen, 1988).

Even though the importance of the family in decisions concerning sexual activity seems obvious, some researchers have questioned the significance of the parents or family in the sexual behavior of adolescents. Moore, Peterson, and Furstenberg (1986) found little support in the 1981 National Survey of Children for the assertion that parental communication and monitoring of teenagers will discourage premarital sexual activity. Another study found no effects from social controls on adolescent White male sexual behavior (Udry & Billy, 1987).

Jorgensen, King, and Torrey (1980) proposed that the qualities of the relationship of the adolescent boy/girl dyad were more consistently and strongly related with exposure to pregnancy risk than either peer or family relationships. The predicting power of significant family variables has also been questioned. One study reported that the behavioral norms espoused by parents accounted for only 5% of the variance in whether or not adolescents had experienced intercourse (Baker, Thalberg, & Morrison, 1988).

In spite of these few findings, however, Miller (1998) found in a review of 20 years of research on adolescent pregnancy that the overwhelming majority of investigators found close parent-child relations to be associated with the reduction of teen pregnancy risk. Teens who remain close to their parents through adolescence are more likely to abstain from sexual intercourse and tend to have fewer sexual partners when they are sexually active (Miller, 1998).

Value Transmission

One of the significant roles for parents in a family setting is the transmission of societal values to their children. Attitude congruence is influenced by the parent-child

relationship. Nearly 85% of mothers feel that it is wrong for their teenage children to be sexually active, even if they are in a steady relationship (Miller, 1998). That attitude is endorsed much more readily by their teenage children when the child's relationship to mother is close. When children have close relations with their mothers, they are more likely to report attitudes and behavior consistent with their mothers' attitudes than are children who have more distant relations (Fox, 1981; Weinstein & Thornton, 1989). Many studies have found mother-daughter relationships to be the strongest of the parent-adolescent relationships in influencing the sexual behavior of teenagers (Fox, 1980; Miller et al., 1998).

Researchers have found that adolescent perceptions of parental attitudes tend to differ considerably from the actual attitudes of their parents, and that parental warmth is associated with parent-child attitude congruence (Brody, Moore, & Gleib, 1994). When parental actions are considered appropriate by the child, there is greater motivation to accept the positions and values of parents (Grusec & Goodnow, 1994).

Feelings of connectedness and supportiveness between parents and children are also associated with less sexual activity on the part of children (Benda & Corwyn, 1996; Brooks-Gunn & Furstenberg, 1989). Lower perceptions of family strength and less openness in parent-child communication are predictive of greater probability for adolescent pregnancy (Barnett, Papini, & Gbur, 1991). Whitbeck et al. (1993) found that girls with emotionally distant parents were more likely to be depressed, and girls who were depressed were more likely to be sexually active.

Parent-Child Communication

The quality of parent-child communication in general has been shown to be more significant in the sexual behavior of children than direct communication about the child's sexual activity itself. Even though not specifically sexually oriented, the quality of parent-child communications has an indirect influence on adolescent sexual behavior by having a direct influence on their sexual values and intentions (Miller et al., 1998). Quality communication has also been linked to close parent-child relationships, which are tied to attitude congruence (Brody et al., 1994).

Direct communication about sexual behavior between teens and parents is usually minimal (Hovell & Sipan, 1994; Miller et al., 1998). Parents are more likely to have sexual discussions with their female children than with male children (Nolin & Petersen, 1992), but the impact of those discussions seems to differ in its effect. Parental messages concerning sexuality were more readily accepted by girls than boys in one study, but the messages had little influence on the female's coital behavior, while boys coital behavior seemed to increase (Darling & Hicks, 1982). Results in other studies have been mixed concerning the effects of parent-child sexual discussions on the sexual behavior of children. Some studies found sexual communication to be a deterrent to sexual behavior, and others found that such communication actually increases the likelihood of sexual involvement (Miller, 1998; Miller & Moore, 1990; Newcomer & Udry, 1985; Pick & Palos, 1995).

The reason for these mixed results may have to do with a combination of genetics and the more subtle forms of family communication. Some studies have found that the

more sexually active the parent was before marriage, the more likely the parent is to talk to his/her children about sexual behavior (Hovell & Sipan, 1994). The sexual history of an adolescent's mother has been shown to be one of the most important correlates of the sexual behavior of their children (Handler, 1990; Mott, Fondell, Hu, Kowaleski-Jones, & Menaghan, 1996; Newcomer & Udry, 1984; Pick & Palos, 1995). The earlier the mother's sexual experience, the earlier the onset of sexual intercourse for her daughter. This suggests the importance of genetic influence in sexual behavior (Miller, 1993; Miller & Moore, 1990; Newcomer & Udry, 1984).

Parents may also influence their children's sexual attitudes through their non-verbal demonstrations of sexual views. Indirect sources of family influence such as the openness of physical affection, family norms of privacy for bathroom use, dressing and nudity, and parental response to sexual messages in the media may have a more powerful effect on the sexual behavior of children than direct verbal communications of parental sexual values (Fox & Inazu, 1980).

Outside programs to encourage the frequency of parent-child sexual discussions seem to have only temporary effects on the frequency of discussions (Miller et al., 1993). Middle age can be a time of uncertainty and stress for many adults. In addition to marital and other typical stresses, children's family dissatisfaction tends to peak during adolescence. This combination may make it hard for parents to feel comfortable in talking to children about sexuality (Chilman, 1990).

There are studies, however, that show that when parents are the main source for sex education, their children are less likely to engage in premarital sexual activity (Fisher, 1986; Fox & Inazu, 1980; Jensen et al., 1994; NCPTP, 1998). Virgins report that their

parents give more encouragement for abstinence than do nonvirgins (Jensen et al., 1994). Almost all young people indicate that they would like to receive information about sex from their parents before any other source, but only 15% indicated their parents were a major source of sexual information (Sanders & Mullis, 1988).

Parental Supervision

In considering parental supervision and control, Baumrind's typology is often mentioned (Smetana, 1995). Baumrind's typology classifies parenting styles along dimensions of demands and responses. When parents are both demanding of their children and responsive to their children's needs, they are considered to be authoritative. When parents are demanding but not responsive, they are authoritarian. Permissive parents are responsive but not demanding, and rejecting-neglecting parents are neither demanding nor responsive. It is interesting to note that while most parents see themselves as authoritative, most adolescents view their parents as either permissive or authoritarian (Smetana, 1995).

In a study of authoritative, authoritarian, and permissive parents and adolescent sexual behavior, Miller, McCoy, Olson, and Wallace (1986b) found that the highest rates of sexual activity were found among the children of permissive parents who lacked parental dating rules and strictness. A higher rate of sexual activity was also found among children of authoritarian parents who had very strict discipline and many rules. The lowest rates of sexual activity were among children of authoritative parents who were considered to be moderate in strictness and rules by adolescents (Miller et al., 1986b).

Other studies have shown parental supervision to postpone the onset of sexual intercourse (Benda & Corwyn, 1996; Brooks-Gunn & Furstenberg, 1989; Caldas, 1993). Parental monitoring is a strong predictor of less sexual risk taking for females (Luster & Small, 1994). Parents who have more rules and higher expectations of child behavior have been shown to have children who are less likely to be sexually active (Hovell & Sipan, 1994).

Parental use of corporal punishment has been associated with higher risk taking among teenagers (Luster & Small, 1994). Attempts by parents to control or overmanage their children's behavior seems to discourage attainment of the self-regulation necessary in delaying the onset of sexual activity. Therefore, parental overmanagement puts adolescents at greater risk for externalizing problem and risk-taking behaviors (Conger, Conger, & Scaramella, 1997). Mothers who are unwilling to relinquish control of their adolescent children put their children at greater risk for internalizing and externalizing behavior problems and their children's self-esteem seems to be negatively affected (Garber, Robinson, & Valentiner, 1997; Holmbeck & O'Donnell, 1991).

Family Relations Summary

Close family relationships, and in particular, parent-child relationships, are associated with reduced risk of sexual involvement. Close relationships help parents to share their values with children and increase the likelihood of attitude congruence between parent and child. While specific parent-child communication about adolescent sexual behavior seems to produce mixed results in some studies, quality parent-child communication in general helps adolescents abstain from sexual activity. Though few

adolescents feel that parents have been a significant source for sexual knowledge, most youth indicate that they would like parents to serve as their primary source for sex education.

Moderately strict supervision and rules on the part of parents is a greater deterrent to teenage sexual involvement when compared to very strict or permissive supervision. Studies suggest that teenagers need some regulation, as permissive parents have the highest rate of sexual activity among their adolescent children. However, self-regulation on the part of adolescents is lower among youth whose parents are overcontrolling.

Peer Influence

Friends have long been considered an important factor in the socialization of children. Being "well liked" and having close friends have been associated with better social confidence (Hartup, 1996). However, more recently, the argument has been advanced that avoidance of social deviance and its relationship to having friends depends on the identity of one's friends and the quality and characteristics of the friendship (Hartup, 1996). Adolescents' peers are significant in how they view the rewards and costs of deviant behavior. Studies show that youth who are strongly committed to conventional goals are less willing to associate with peers whose behavior violates conventional norms (DiBlasio & Benda, 1994).

High school students have listed peer pressure as one of the factors that encourages sexual experimentation (Cullari & Mikus, 1990). In a 1986 poll, 73% of the girls and 50% of the boys listed peer pressure as a reason that teenagers engaged in sexual intercourse (Miller & Moore, 1990). Nonvirgins are more likely to use friends for

models of deviant behavior than are virgins (Jessor & Jessor, 1975). Some studies have found differential peer association to be the strongest predictor of sexual intercourse for both males and females (Benda & DiBlasio, 1994; DiBlasio & Benda, 1992).

Many researchers have found adolescents' perception of the behavior of their friends to be more closely associated with their own sexual behavior than what their friends actually do (Loewenstein & Furstenberg, 1991; Miller & Moore, 1990). When teens believe their peers are sexually involved, they are more likely to become sexually involved themselves (Brooks-Gunn & Furstenberg, 1989; Furstenberg, Moore, & Peterson, 1986). Rodgers and Rowe (1990), however, found that both the perception of sexual behavior, and the actual behavior of best friends were predictive of sexual involvement. The choosing of friends is also influenced by the onset of sexual intercourse. One study showed that junior high school students who experienced early sexual intercourse were much more likely to begin friendships, after their coital experience, with others who were also sexually active (Billy, Landale, Grady, & Zimmerle, 1988).

Gender Differences in Peer Influence

Some researchers find gender differences in relation to peer influence. Girls' deviant behavior seems to be more influenced by the behavior of a best friend than boys' (Berndt & Keefe, 1995). Some studies find differential peer influence to be strong for both sexes. In contrast, a study of junior high school students found that virgin girls who had friends of both sexes who had experienced sexual intercourse were almost certain to have experienced sexual intercourse two years later, while no such effects were found for

boys (Billy & Udry, 1985). In another junior high school sample, no deviant behavior was found to be significant in friendship choice for males, but sexual behavior was very significant in friendship choice for females (Billy, Rodgers, & Udry, 1984). The researchers suggested that perhaps differences in reputational consequences could account for the difference in friendship choices.

Billy and Udry (1985) found peer influences to have different directions for adolescent males and females. White female adolescents were more likely to begin having intercourse if their friends were having intercourse, but white males were more likely to pick sexually active friends after they had engaged in sexual behavior. In an interesting twist of these findings, a study of risky sexual behavior in a national survey reported that girls sexual risk taking was more negatively influenced by discussions with their parents, and boys sexual risk taking was more negatively impacted by discussions with their peers (Holtzman & Rubinson, 1995).

The Relationship Between Family and Peer Influence

The power to explain variance in sexual activity by peer association has led some researchers to question the influence of the family in adolescent sexual activity (Christopher et al., 1993; Newcomer & Udry, 1985). Early studies have linked the onset of sexual intercourse with less parental influence and greater peer influence of peers (Jessor, Costa, Jessor, & Donovan, 1983; Jessor & Jessor, 1975). Women with views about premarital sexuality that resemble their parents have lower levels of sexual experience than those with views that resemble their friends (Shah & Zelnik, 1981). When comparing virgins with nonvirgins, virgins were found to care more about their

parents' feelings, while nonvirgins cared more about what their friends thought (Jensen et al., 1994).

Patterson (1986) theorized that adolescents find themselves in deviant associations because of weak attachment to parents. It is possible that the influence of family interactions on sexual activity is indirect by directly influencing peer association (DeBlasio & Benda, 1992, 1994; Benda & DeBlasio, 1994; Whitbeck et al., 1993). Girls with emotionally distant parents are more likely to be depressed, and depressed affect has been shown to be associated with sexually permissive attitudes and having friends who are sexually active (Whitbeck et al., 1993). Parent-child relationships seem to directly affect participation in deviant behaviors for boys, which in turn is directly related to sexual activity (Whitbeck, Hoyt, Miller, & Kao, 1992). Nurturing relationships between parents and children is considered instrumental in preparing children for similar relationships in their peer groups (Benda & DeBlasio, 1994).

Peer Influence Summary

Many researchers have found differential peer association to be a very strong factor in predicting adolescent sexual behavior. However, what adolescents think their peers are doing is more influential on behavior than the peers' actual behavior. The likelihood of female sexual activity increases when there is association with other risk-taking peers before their first coital experience. Boys, on the other hand, are more likely to allow their sexual involvement, after their first coital experience, determine peer association.

It is possible that family influences have an indirect influence on sexual behavior. Some adolescents might find themselves more influenced by peers because their familial relationships are weak. The stronger the familial relations, the less likely it is that peer relations will take precedence over family, or that peers will be deviant.

Religiosity

Churches in the United States have gotten actively involved in working to lessen the amount of adolescent sexual behavior as public standards have changed over the last few decades. In particular, they concern themselves with the transmission of values (Brewster et al., 1998). Over the last 20 years there has been a rise to prominence of conservative Christian advocacy groups who are interested in promoting a political agenda based on "family values." As it pertains to the area of adolescent sexuality, they have strongly promoted abstinence and the perspective that nonmarital sexual behavior is immoral (Brewster et al., 1998).

The importance of religiosity was underscored in a study that compared a moral-absolutes strategy with a relative-consequences strategy (Thomson, 1982). The study used perceived permissiveness of parents, religiosity, and sex-guilt to measure the moral-absolutes strategy which was focused on preventing premarital sexual intercourse. Contraceptive discussion, along with perceived access to contraceptive services, was used to measure the relative-consequences strategy, which emphasized the prevention of pregnancy for adolescents that are sexually active. The influence of the moral-absolutes strategy was supported by the data, but the effect of the relative-consequences strategy was unclear (Thomson, 1982). It would appear that adolescents respond more readily to

moral principles promoted by religion than to society's warnings of observable consequences.

The Significance of Religiosity to Sexual Behavior

In spite of the documentation of increasing secularization in the U.S., the influence of religious affiliation and religiosity continues to be apparent (Brewster et al., 1998). Numerous studies show that religious affiliation, the importance of religion, and attendance at religious services are negatively correlated with involvement in sexual behavior and positively correlated with postponement of first intercourse (Benda & Corwyn, 1996; Bingham & Crockett, 1996; Crockett et al., 1996; Jessor et al., 1983; Jessor & Jessor, 1975; Levinson, Jaccard, & Beamer, 1995; Luster & Small, 1994; Miller et al., 1997; White & DeBlassie, 1992). Children of fundamentalist Protestant parents tend to be more conservative in their sexual views and behavior than are the children of parents that belong to other churches (Brewster et al., 1998; Thornton & Camburn, 1987).

Religious affiliation and church attendance were the strongest control variables in a study of many factors related to sexual experience that included a predominantly Mormon sample similar to the sample of this study (Miller et al., 1987b). Attendance at church services tends to be one of the variables most strongly related to sexual behavior no matter what religion the adolescent belongs to (Thornton & Camburn, 1987). Even community religiosity has a negative influence on the likelihood of adolescent female premarital intercourse (Billy, Brewster, & Grady, 1994).

Premarital sexual intercourse is highest among youth who have no religious affiliation (Miller & Moore, 1990). Religious association can also be affected by sexual

involvement, as teens who are sexually involved are more likely to cut back on their church attendance (Miller & Moore, 1990; Thornton & Camburn, 1987).

Although religiosity has been shown to have a strong influence on the sexual behavior of adolescents, independent of parental attitudes (Thornton & Camburn, 1987), the influence of religion on sexuality may be indirect. In a study of over 2,400 high school students in three states, church attendance and religious affiliation had strong relationships to teenage sexual intercourse, but the strongest predictor of virginity was the adolescent's attitudes about premarital coitus (Miller, Christensen, & Olson, 1987a). It is possible that religiosity directly affects sexual attitudes and intentions, which in turn affect sexual behavior.

Religiosity in Relation to Other Factors

Religiosity works in combination with such factors as family stability and family connectedness to provide a stable environment for children, which, in turn, decreases the occurrence of first intercourse (Forste & Heaton, 1988). Boys who had higher testosterone levels and seldom or never attended church had the highest rates of sexual activity in one study with the lowest rates of sexual activity among boys who had lower testosterone rates and attended services once a week or more (Halpern, Udry, Campbell, Suchindran, & Mason, 1994). It can also be a mediating influence on factors that put the adolescent at greater risk for sexual activity. Religiosity diminished the effects of being raised by a single mother for teenage women (Miller & Bingham, 1989), and controlling for church attendance essentially eliminates the relationship between sibling effects and sexual behavior (Haurin & Mott, 1990; Miller et al., 1987b).

Gender effects are also at play in religiosity. Ellis and Wagemann (1993) found that female children tended to be more religious than male children with mothers who are religiously involved and also with mothers who are not. In addition, females' religiosity and sexual attitudes resembled their mothers' more closely than did males'.

In short, religiosity, especially attendance at religious services, is very strongly related to the delay of first intercourse. Religions have actively promoted sexual abstinence, which strategy seems more effective than warnings of the dangers of early sexual involvement. Religiosity may have an indirect influence on sexuality by directly influencing sexual attitudes. Religiosity combined with both genetic and environmental factors to influence teenage sexual behavior.

Dating Patterns

For most young people, first intercourse occurs as a part of their dating, engagement, or marriage experience. Relatively few young people experience intercourse before they start to date (Thornton, 1990). Roche and Ramsbey (1993) studied the sexual behavior of college students by five stages of dating commitment, ranging from dating with no real affection to engagement. They found that the more committed couples became in their dating, the more sexually intimate they became. They also found that reported behavior progressed more rapidly than their subjects' ideas of what was appropriate by dating stage, suggesting that dating behaviors may be more significant to sexual involvement than sexual intentions (Roche & Ramsbey, 1993).

Interestingly, the males' reported sexual behavior was much more intimate by dating stage than females' until engagement, where the percentage of males and females

having intercourse became more even. This caused Roche and Ramsbey (1993) to wonder what females the males were sexually involved with. One possibility that is pertinent to an understanding of dating patterns and sexual behavior is the suggestion that males and females have a different view of what stage they are in when they have intercourse. The Roche and Ramsbey study lends support to another study which reported that love and commitment is more important to women before they have sexual intercourse than it is to men (Carroll, Volk, & Hyde, 1985).

Early Dating

Earlier ages at first date have been linked to earlier age at first intercourse in many studies (Dorius, Heaton, & Steffen, 1993; Miller, McCoy, & Olson, 1986a; Miller, et al., 1997; Thornton, 1990). The average age of first date declined from 16 in the 1930s to 13 in the 1970s (Miller et al., 1986a). When adolescents begin dating at an early age, it gives them more time and opportunity to experience sexual intercourse in dating relationships. In one study, over half of the young men who had started dating by age 13 had experienced intercourse by age 15 compared to only 10% of the males who waited until age 16 to date (Thornton, 1990). In the same study, 30% of the young women who dated by age 13 had experienced intercourse by age 15 compared to almost none of the females who waited until age 16 to date. Early-dating adolescents also tend to steady date at young ages, be more sexually active during the late teens, have more permissive attitudes concerning premarital sex, and have more sexual partners during adolescence (Thornton, 1990).

Dating Effects for LDS Populations

The research for this dissertation was done in a predominantly Mormon area. The official name of the Mormon Church is The Church of Jesus Christ of Latter-day Saints (often referred to as the LDS Church). The link between early dating and early onset of sexual intercourse is especially strong for predominantly LDS samples such as the sample for this study. Perhaps this is because the LDS Church has institutionalized age 16 as the legitimate age to start dating. Miller et al. (1986a) compared an LDS sample with a sample of adolescents who did not belong to the LDS Church. They found that while non-LDS teens who dated before age 15 were almost twice as likely to be non-virgin than were those who waited until 16, LDS early daters were five times more likely to be non-virgin than LDS adolescents who waited until age 16. It is interesting to note that a study using a national sample reported that adolescents who began dating at age 16 were the only group to have less involvement in sexual behavior than those who had not dated (Dorius et al., 1993).

Steady and Other Dating Factors

Early dating is closely related to steady dating. In an urban sample, only one third of the females who started dating by age 14 had not gone steady before they were 16 (Thornton, 1990). Only 8% of those dating by age 14 had not by age 18, while one third of those who waited until age 16 to date had not gone steady by age 18.

Steady dating is strongly associated with sexual behavior (Brooks-Gunn & Furstenberg, 1989; Jensen et al., 1994; Miller et al., 1986a; Miller & Moore, 1990).

Women in the Roche and Ramsbey (1993) college study made the most dramatic increases in petting behaviors between stage three (dating and being in love) and stage four (dating only one person and being in love).

Initiation of steady dating in an adolescent's life causes dramatic increases in the probability of experiencing sexual intercourse immediately after steady dating starts. That likelihood increases even more in the two years following the first steady dating experience (Thornton, 1990). Sexual intercourse occurs more often in adolescent steady dating relationships than in any other context. About 75% of women experience first sexual intercourse in steady dating relationships, engagement, or marriage compared to about 50% of men (Jessor et al., 1983; Miller & Moore, 1990; NCPTP, 1997). The increased probability of having intercourse within the first year of starting to steady date is so great, that the percentage of those having intercourse by age 18, who started steady dating in their late teens, is almost as high as for those who started steady dating in their early teens (Thornton, 1990).

Miller et al. (1997) reported that while the early onset of dating was very strongly related to sexual intercourse for women, higher frequency of dating, which is closely associated with steady dating, was more significant for males in dramatically increasing the risks for having first intercourse. Another study found the most central factor in understanding dating and sexual behavior was the importance of dating to the adolescent, which included the need to be socially involved, to have companionship, and to have a dating partner (Newcomb, Huba, & Bentler, 1986).

Dating Review

Dating experiences increase the likelihood of sexual involvement, and the more committed the stage of dating, the higher the rate of sexual involvement. Early dating is very strongly related to early sexual involvement. The effects of early dating on LDS populations are more dramatic than the effects of early dating on other populations. Waiting until age 16 to date seems to be especially effective in lowering the rate of sexual activity.

Steady dating greatly increases the likelihood of sexual intercourse for both young teenagers and also for teenagers that are older. Most women experience their first experience of sexual intercourse in a committed dating relationship. Early dating has a more powerful effect on female intercourse, while frequency of dating has a more powerful effect on male intercourse.

Sexual Abuse

There is enough incidence of unwanted sexual contact in our society to warrant concern about its effect on adolescent sexual activity (Miller, Monson, & Norton, 1995). Studies show the rate of forced sexual intercourse to range from 7% to 16% for 18-year-old women (Moore, Nord, & Peterson, 1989; Russell, 1983). Twenty percent of the 7th-, 9th-, and 11th- grade females from a southwestern city reported having experienced unwanted sexual contact, with more than a third of the group that experienced unwanted contact, experiencing forced sexual intercourse and the others reporting unwanted touching. Boyfriends were most often listed as the sexual aggressor (Small & Kerns,

1993). Ten percent of over 10,000 adolescent females from one midwestern state stated that they had experienced unwanted sexual contact with an adult or older person (Luster & Small, 1997).

Attempts to describe the effects of sexual abuse on adolescents have led researchers to propose two possible reactions to the abuse. Some victims will engage in compulsive sexual behavior, while others will withdraw from sexual activity (Browning & Laumann, 1997). Browning and Laumann (1997), using a national data set, found no evidence for withdrawal, but found heightened sexual activity in the aftermath of adult-child sexual experiences.

Teenage women who have been sexually abused generally have more permissive attitudes towards premarital sex than other teen women (Miller et al., 1995). Small and Luster (1994) found sexual abuse to be one of many risk factors that were significantly related to whether or not adolescents were sexually experienced, and Miller et al. (1995) found forced sexual intercourse to be predictive of earlier first voluntary intercourse, even in the presence of multivariate control variables. Sexual abuse victims tend to have had more sexual partners in the last year than non-victims (Luster & Small, 1997).

Sexual abuse also appears to add to the risk of female adolescents becoming pregnant (Miller, 1998; Roosa, Tein, Reinholtz, & Angelini, 1997). In one study, researchers found the incidence of unwanted sexual contact to be 54% among teenage mothers (Butler & Burton, 1990), while two other studies found the incidence among these young mothers to be over 60%, more than double the national estimates for 18-year-old females (Boyer & Fine, 1992; Ounce of Prevention Fund, 1987). Of over 3,000 adolescent women in Washington state, those who had experienced sexual abuse

were 3.1 times more likely to have been pregnant and 2.3 times more likely to have experienced intercourse than the nonabused women (Stock, Bell, Boyer, & Connell, 1997).

Family factors have a mitigating influence on the history of sexual abuse. Regardless of their abuse history, teens whose parents closely monitor their activities and whose parents did not approve of teenage sexual activity had fewer sexual partners than other adolescents (Luster & Small, 1997).

Educational Factors

Academic grades and educational goals have been linked to sexual activity for adolescents, but the results often vary when the influence is considered by gender. Given Jessor and Jessor's (1975) report that non-virgins place a lower value on achievement when compared to virgins, one would expect higher academic achievement to be associated with lower sexual activity among teen students. Indeed some studies show teens who do well in school and are academically motivated tend to have less involvement in sexual activity (Hofferth, 1987; Miller & Moore, 1990).

Educational effects for males have been especially mixed. One study reported that none of the educational variables they examined predicted sexual activity for boys, but that male sexual involvement was significantly predictive of less participation, two years later, in academic activities (Ohannessian & Crockett, 1993). Some studies have reported that lower academic grades are associated with more sexual activity for boys (Billy et al., 1988; Miller et al., 1998), but another study found that older White

adolescent males who have higher educational aspirations were more likely to seek sexual partnership than their counterparts (Day, 1992).

Ohannessian and Crockett (1993) found academic grades to be a significant predictor of girls' sexual activity 2 years later, but they reported that sexual activity did not predict any of the educational variables they looked at. This was not the case with Billy et al. (1988), who reported that sexual activity negatively affected the importance placed on going to college for white females. One of the consistent findings for adolescent females is the negative association between educational goals and sexual involvement. The more important getting a college degree is for a teenage girl, the less likely she is to become sexually involved (Day, 1992; Hofferth, 1987; Miller et al., 1998; Miller & Moore, 1990).

One of the reasons for the relationship between female educational goals and sexual activity could be the cost of sexual involvement for women. Brewster (1994) found that when females of any race live in a community where the perceived costs of pregnancy are low, they are more likely to engage in sexual behavior. The cost of pregnancy is low in a community where constraints against sexual behavior by adults are lacking and when opportunities for improvement do not seem readily available. When the costs appear high, such as the challenges of pregnancy to a woman who desires to complete a college education, women appear more likely to delay the initiation of sexual intercourse (Brewster, 1994; Brewster, Billy, & Grady, 1993).

Academic involvement could also aid in other areas that are associated with less sexual involvement. Adolescents intent on receiving good grades may have less time for sexual behavior because of their studies, or they may have greater associations with more

conventional peers. In addition, the preoccupation with an educational focus may provide alternative rewards to teens (Ohannessian & Crockett, 1993).

So, the effects of educational factors on adolescent males seem to be uncertain. But for adolescent females, educational goals are related to postponement of sexual intercourse. The effects of academic involvement on sexuality may be tied to the perceived cost to the adolescent, peer association, and perceived alternative rewards for postponing sex.

LDS Doctrine

LDS doctrine places a high value on premarital sexual abstinence. Since a large percentage of this study's sample belonged to the LDS Church, an understanding of the importance of this doctrine for LDS families will be helpful. A goal stressed from birth in many LDS families is for the youth to marry in an LDS temple in order to gain important blessings, both in this life and in the afterlife, according to LDS doctrine (McConkie, 1966). In order to marry in the temple, a couple must keep themselves morally pure, either through abstinence from sexual behavior or through a repentance process to become morally clean again with the help of an ecclesiastical leader, who is usually their bishop.

The Corporation of The Church of Jesus Christ of Latter-day Saints (1990) has a pamphlet that is often a source of religious discussions concerning moral purity, called "For the Strength of Youth." A part of the section entitled "Moral Purity" reads as follows:

In dating, treat your date with respect, and expect your date to show that same respect to you. Never treat your date as an object to be used for your own lustful desires or ego. Improper physical contact can cause a loss of self-control. Always stay in control of yourself and your physical feelings.

The Lord specifically forbids certain behaviors, including all sexual relations before marriage, (p. 15)

The above doctrine is frequently taught to youth associated with the LDS Church. Therefore, LDS youth may be less likely to participate in sexual activities than the general population of young people in the United States.

Synthesis of the Literature

Gender and Family Factors

In reviewing the literature, one would expect to find, in a study of adolescents and their levels of sexual behavior, that gender effects would appear in some of the variables of interest. Family structure, as it relates to marital dissolution, has a significant effect on the sexual activity of teenagers. When children consider their relationships to their parents and to other family members to be close, and when parents monitor their children's activities, the children will be less likely to be sexually involved.

Other Factors

When youth have friends who are sexually involved or who think that it is okay to be sexually involved, they are more likely to initiate sexual activity. When religion is important to adolescents and especially when they attend church on a regular basis, they will be less likely to have experienced sexual intercourse. If young people start to date

early and are involved in steady dating relationships, they will be significantly more involved sexually than those who are not. If there has been a history of sexual abuse for teenagers, they are at greater risk of having experienced voluntary sexual intercourse. Finally, if a post-high school education is important to an adolescent female, she will be more likely to postpone sexual intercourse. Therefore, the following null hypotheses are thought to be testable in the present study.

Null Hypotheses

1. There are no differences in the level of sexual involvement of adolescents who are living with both biological parents and the level of sexual involvement of adolescents whose parents have experienced marital disruption.
 - 2a. There are no differences in the level of sexual involvement of adolescents that have close relationships with their parents and siblings and the level of sexual involvement of adolescents who are not close to their families.
 - 2b. There are no differences in the level of sexual involvement of adolescents whose parents monitor their behavior and the level of sexual involvement of adolescents whose parents do not monitor them.
 - 3a. There are no differences in the level of sexual involvement of adolescents whose peers pressure them to have sex and adolescents whose peers do not pressure them to have sex.
 - 3b. There are no differences in the level of sexual involvement of adolescents whose peers are involved sexually and the level of sexual involvement of adolescents whose peers are not sexually involved and who value abstinence.

- 4a. There are no differences in the level of sexual involvement of adolescents who value religion and the level of sexual involvement of adolescents who do not value religion.
- 4b. There are no differences in the level of sexual involvement of adolescents who attend church services regularly and the level of sexual involvement of adolescents who do not attend church regularly.
- 5a. There are no differences in the level of sexual involvement of adolescents who start dating early and the level of sexual involvement of adolescents who postpone dating until age 16 or later.
- 5b. There are no differences in the level of sexual involvement of adolescents who date frequently (once a week or more) and the level of sexual involvement of adolescents who date less frequently (once a month or less).
- 5c. There are no differences in the level of sexual involvement of adolescents who steady date and the level of sexual involvement of adolescents who do not steady date.
6. There are no differences in the level of sexual involvement of adolescents who have experienced sexual abuse and the level of sexual involvement of adolescents who have not experienced sexual abuse.
- 7a. There are no differences in the level of sexual involvement of adolescents who get high grades and the level of sexual involvement of adolescents who receive low grades.
- 7b. There are no differences in the level of sexual involvement of adolescents who have high educational goals and the level of sexual involvement of adolescents who do not have high educational goals.

CHAPTER III

METHODS

Correlational Design

In May of 1994, Utah State University Cooperative Extension Service administered "The Utah Teen Survey" to all of the 7th, 9th, and 11th graders of two high schools in a semi-rural area of Utah. Because of this researcher's interest in comparing the effects of early dating with the effects of waiting until 16 to date, only the 11th-grade data were used for this research.

The independent variables for this study are family structure, family relationships, peer factors, dating practices, religiosity, sexual abuse history, and educational factors. Since these variables cannot, in most instances, be controlled by the researcher, a correlational study design was chosen to study the association of structural, relational, and choice related variables with the levels of sexual involvement of high school juniors. The dependent variable of this study was the four levels of sexual involvement previously described. Since the data were originally collected for other purposes, a secondary analysis of data was used for this research.

Population and Sample

The survey was administered to 308 eleventh-grade students in two public high schools. Of the 308 students surveyed, 122 were 16-year-olds, 184 were 17-year-olds, and 2 were 18-year-olds. There were 167 males and 141 females. It was a predominantly White population, with 94.5% Anglo American, 1.6% African American,

Table 1

Demographic Profile of Adolescent Sample and Their Families

Variable	Total number	Total percent
11 th grade sample	308	100.0
Gender		
Male	167	54.2
Female	141	45.8
Age		
16	122	39.6
17	184	59.7
18	2	.6
Race		
Anglo American	291	94.5
African American	5	1.6
Hispanic	4	1.3
Asian	2	.6
Native American	1	.3
Other	3	1.0
Missing	2	.6

1.3% Hispanic, and 2.6% other (see Table 1).

The sample came from an area where the predominant religion was the LDS Church. While religious affiliation was not asked in the survey, in 1992, the county in which the high schools are located reported that 77.2% of its population was affiliated with the LDS Church (Glenmary Research Center, 1992).

Data Collection Procedures

The surveys were administered by community volunteers, who distributed and collected the surveys during one school class period. Students had approximately 50 minutes to complete the survey. No parents were asked to respond in collecting information about family status and relationships; data came solely from adolescent responses. Only two of the surveys that were given out to the 11th graders came back unusable because of the unorthodox manner in which they were filled out.

No attempt was made to obtain responses from students who were absent the day that the survey was administered. Nor was there an effort to receive data from students who had dropped out of school or were in another form of schooling, such as an alternative program for problem students or who were home schooled. In missing the students who were absent that day, it is possible that the percentage of delinquent or problem students may have been underrepresented in the sample.

The number of students who were absent from school the day the survey was administered was not recorded and is unknown. Current administrators at the high schools in this area state that there probably would have been anywhere from 2-4% of the students gone on an average day in 1994. The dropout figures for grades 7-12 in this area for 1995-96 were 1.33%, and were .8% for 1996-1997 (Utah Kids Count Project, 1999). Considering these statistics, it would be safe to assume that 90-95% of the target population was reached in this survey. However, the students responding to the survey were not randomly chosen, so the sample used in this study would need to be considered a non-probability (convenience) sample.

Ethical Considerations in Data Collection

Because of the many sensitive issues asked about in the survey, precautions were taken to ensure the privacy of respondents. Respondents were assured that their answers would be anonymous and that parents and administrators would not be given access to individual responses. To ensure privacy, students did not put their names on the survey. The surveys were numbered by the researcher for later data coding verification only. In the analysis and evaluations of the surveys, it is not possible to identify individual respondents.

At the time the survey was given, a passive consent from parents was all that was required by law in order to administer a survey to children. Parents of the students were given a passive parental consent form. If the form, saying that the student was not to take the survey, was not returned, parents' permission to administer the survey was assumed. No juniors brought back forms denying permission for their participation.

The respondents were assured that their participation was purely voluntary and that if they chose not to fill out a survey, or if at any time during the survey they desired to withdraw, they could do so without consequence. They were also told that if at any time there was a question that they were uncomfortable answering, they should feel free to skip that question.

Measurement

The dependent variable of interest in this research was the level of sexual involvement of the 11th-grade students. There were four levels of sexual involvement

measured. They were students who had: (1) experienced sexual intercourse, (2) been involved in petting but had never had sexual intercourse, (3) made out but had never been involved in petting or had sexual intercourse, (4) never made out (kissed for a long time).

Independent variables in this study were analyzed by gender. Some of the previously mentioned independent variables were multifaceted. The family relationship factors included family connectedness, relationship to mother, relationship to father, and the number of dating rules their parents had. Peer factors included peer pressure, the respondent's view of their peers' sexual activities, and the respondent's view of what peers consider to be appropriate sexual behavior. Religiosity included importance of religion and attendance at church services. Dating practices included the age the respondent first started dating, dating frequency, and if the respondent dated one person steadily. Educational factors included academic grades and educational goals.

Operational Definitions

Dependent Variable

The dependent variable was operationalized using a series of five questions that asked for a yes or no answer. Questions one and two in the list below were not used to divide the sample, but have been included here in order to show that questions 3-7 were for heterosexual relations only. The dependent variable questions are listed below.

Have you ever:

1. Gone out with a person of the opposite sex (boyfriend or girlfriend)?
2. Kissed a person of the opposite sex (boyfriend or girlfriend)?
3. Made out (kissed for a long time)?

4. Fondled their body by touching their breasts?
5. Fondled their body by touching their sex organ?
6. Allowed that person to fondle your body?
7. Had sexual intercourse?

Students who answered yes to question 7 were placed into the sexual intercourse category (INT). Subjects who answered yes to 4, 5 or 6, or any combination thereof, and answered no to 7 were assigned to the petting category (PET), with one exception. Since a female touching a male breast would not typically be considered petting, and since there were no gender distinctions in these questions, females that answered yes to question 4 and no to questions 5, 6, and 7 were not assigned to the petting category. Only four female respondents answered yes to question 4 and no to questions 5, 6, and 7. All four had answered yes to question 3 and were assigned to the made-out (MO) category. Subjects who answered yes to question 3 and no to questions 4-7 were placed in the MO category. Students who answered no to questions 3-7 were assigned to a never-made-out category (NMO). Numbers for each group are as follows: INT = 94, PET = 70, MO = 50, and NMO = 86, with 8 missing. Values assigned were; NMO = 0, MO = 1, PET = 2, and INT = 3.

Independent Variables

Family structure. To operationalize the family structure variable, a question asking the marital status of the subject's parents was used. Possible responses to choose from were married, remarried, divorced, separated, widowed (one of your parents died), never married, living together. Because of the large percentage of students in the married

category, for analysis, marital status was recoded into two categories. Respondents whose parents were still in their original marriage were given a parent marital status value of 0. Students who reported any other marital status for their parents were assigned a parent marital status value of 1.

Family relationship factors. Three composite questions and a one item question were used to operationalize the family relationship factors. The first composite question used dealt with family connectedness. The sums of eight questions were used to measure family connectedness. Students were given a 5-item, Likert-like scale for answers: (1) does not describe; (2) barely describes; (3) somewhat describes; (4) generally describes; (5) very well describes. For analysis, question 6 was reverse coded to give positive family skills higher values. The family connectedness questions were as follows:

1. Members of my family express affection to each other.
2. Family members discuss their beliefs and ideas with each other.
3. Family members try to understand each other's feelings.
4. We can calmly discuss problems with each other.
5. My family is able to cope with stress.
6. A lot of arguing occurs between family members (values were reversed).
7. My family is able to resolve conflicts.
8. My family has concern for each other.

With eight questions included in this composite variable, and each question answered with a 5-item scale, the possible range for the family connectedness variable was from 8 to 40.

To measure the relationship with the subject's mother and father, a series of answers to five questions were summed. Again, a 5-item Likert-type scale was used. Possible answers were (1) very often; (2) often; (3) sometimes; (4) rarely; (5) never. For analysis, these items were reverse coded for both mother and father so that closer relationship measures were given higher scores. Questions to measure the respondent's relationship with mother were titled "Relationship with your mother." They read as follows:

1. She tells me how much she loves me.
2. She explains to me how good she feels when I do something she likes.
3. She lets me decide things for myself.
4. She likes to talk to me and be with me much of the time.
5. She shows love towards me.

Questions to measure the relationship with father were under the title of "Relationship with father," and included the same measures as the relationship with mother:

1. He tells me how much she loves me.
2. He explains to me how good she feels when I do something she likes.
3. He lets me decide things for myself.
4. He likes to talk to me and be with me much of the time.
5. He shows love towards me.

The possible range for both the mother relationship variable and the father relationship variable was from 5 to 25.

Dating Rules

Because parental monitoring has been shown in many studies to be significantly related to lower sexual activity, a question concerning parental dating rules was used in the family relationship measures. The question asked the student, "Do your parents have rules about who, when, where, or how often you date?" A 4-item scale was used: (1) no rules; (2) one or two rules; (3) several rules; (4) many rules. Because of small number of respondents for answers three and four, these answers were collapsed into categories 0 and 1; 0 = no dating rules, 1 = have dating rules.

Peer Factors

Peer pressure. The only other composite measure used in this study was a measure of the amount of peer pressure felt by the adolescent. The answers to four questions were summed to measure peer pressure. A 4-item, Likert-type scale was used for these questions. The possible answers were (1) strongly agree; (2) agree; (3) disagree; (4) strongly disagree. These questions were under the heading, "Reasons you might have sex." The four questions were:

1. Sex is a good way to get or keep a boyfriend or girlfriend.
2. I want to fit in with my friends.
3. People I admire or look up to make it seem like a "cool" thing to do.
4. There is pressure from my friends to go all the way.

The possible range of the peer pressure variable was from 4 to 16.

Subject's view of peers. Two aspects of the respondent's view of peers were measured in this study. Each was treated as a one-item variable. The "peer's values

variable” measured the respondent’s view of what their friends approved of, and the “peer’s sexual activity” variable asked about what they felt most kids their age were doing sexually. The same Likert-type scale was used here as for the peer pressure composite measure. The question measuring the respondent’s view of their peers’ values was: “Most of my friends approve of people my age having sex.” The question measuring the respondent’s view of their peers’ sexual activity was: “I think most kids my age have gone all the way (sexual intercourse).”

Religiosity

To measure the adolescent’s importance of religion variable, the question read:
Religion is important to me.

This question used a 5-item, Likert-type scale: (1) strongly agree; (2) agree; (3) not sure; (4) disagree; (5) strongly disagree. For analysis this question was reverse coded so that the higher the value of religion, the higher the score. Because of the small number of respondents for strongly disagree and disagree, those two categories were collapsed into one category. After the recode, answers were as follows: (1) strongly disagree and disagree; (2) not sure; (3) agree; (4) strongly agree.

The question measuring the respondent’s religious attendance variable read:
How often do you attend worship services?

The scale for the second question was (1) once a week or more; (2) 2 or 3 times a month; (3) once a month; (4) several times a year; (5) almost never. This was also reverse coded for analysis, so the higher scores reflected higher attendance. Again, there was a small number of respondents to answers once a month and several times a year.

These were collapsed into one category, and after the recode the answers were as follows: (1) almost never; (2) several times a year and once a month; (3) 2 or 3 times a month; (4) once a week or more.

Dating Practices

Age started dating and dating frequency. The question for dating frequency asked, "If you date, how often do you date?" The 6-item scale for this question was (1) I don't date; (2) less than once a month; (3) twice a month; (4) 2-3 times a month; (5) once a week; (6) more than once a week. The question concerning dating ages was open-ended. Subjects were asked to record the age they started to date, after the question on dating frequency.

Because the question about dating age followed and was a part of the dating frequency question, those who responded with an "I don't date" answer were missing from the age of dating question, but were later assigned a value of zero. Those who did respond had values ranging from 10, for 10-year-olds, to 17, for 17-year-olds. Because of small numbers, ages 10 through 13 were collapsed into one category of 13.

Steady dating questions. The steady dating question was a two-part question, asking, "Do you have a steady boyfriend or girlfriend? If so, how much time do you spend with this person?" This researcher's interest was for the effect of steady dating versus those who did not date steadily, rather than time spent with a steady dating partner. The response choices were (1) No, I don't have a steady boyfriend or girlfriend; (2) Yes I do. I spend about 1-5 hours with him/her each week; (3) Yes I do. I spend about 5-10 hours with him/her each week; (4) Yes I do. I spend about 10-20 hours with

him/her each week; (5) Yes I do. I spend more than 20 hours each week with him/her. In order to recode this question for analysis of steady and non-steady daters, choice 1 was given a value of 0 while choices 2-5 were all given the value of 1.

Sexual Abuse History

The number of adolescents who had experienced sexual abuse was ascertained by the survey question: "Sometimes, people use force to do sexual things to others or use force to get others to do sexual things to them. Has anyone ever done this to you?" The options were simply "yes" or "no." Values assigned: 0 = no, 1 = yes.

Educational Factors

Student's academic grades and educational goals were both measured. To determine academic grades, the respondents were asked: "What are the average grades you usually get in your classes at school?" Possible responses were: (1) Mostly A's; (2) About half A's and half B's; (3) Mostly B's; (4) About half B's and half C's; (5) Mostly C's; (6) About half C's and half D's; (7) Mostly D's; (8) Mostly below D; (9) I do not attend school. Values were reverse coded for analysis, so that higher scores meant higher grades. The reverse coded values started at 8 as there were no responses for item 9.

To determine the student's educational goals, the survey asked: "How long do you plan to go to school?" Choices included: (1) I would like to quit school as soon as I can; (2) I plan to finish high school, then stop; (3) I plan to go to trade (vocational) school when I graduate; (4) I plan to go to college; (5) I plan to get an additional degree after college (for example become a doctor or lawyer). Because so few chose items 1, 2 or 3,

these were collapsed into one category. Values were then as follows: 1 = quit school as soon as I can, finish high school and stop, and go to trade school, 2 = I plan to go to college, 3 = I plan to get an additional degree.

Table 2 is a list of the dependent and independent variables, and the level of measurement for each. In addition, the range of each variable is given.

Measurement Reliability and Validity

Although this was a one-time survey and has not been repeated, there were some

Table 2

Summary of Measures for This Study

Variables	Level of measure	Range
Dependent variable		
Level of sexual behavior	Ordinal	0-3
Independent variables		
Parent's marital status	Nominal	0-1
Family connectedness	Ordinal	8-40 (sum)
Relationship to mother	Ordinal	5-25 (sum)
Relationship to father	Ordinal	5-25 (sum)
Parental dating rules	Ordinal	0-1
Peer pressure	Ordinal	4-16 (sum)
Friends' approval of sexual activity	Ordinal	1-4
Most teens are having sex	Ordinal	1-4
Importance of religion	Ordinal	1-4
Religious meeting attendance	Ordinal	1-4
Age at first date	Ratio	0-17
Dating frequency	Ordinal	1-6
Steady dating partner	Nominal	0-1
Sexual abuse history	Nominal	0-1
Average grades	Ratio	1-8
Educational goals	Ordinal	1-3

indicators that the reliability of the instrument used for this study was fairly high. As a one-time survey, the instrument was not pre-tested on a control group prior to the time that it was given to the students in these two high schools. It was, however, patterned after other, similar instruments that have been used numerous times in studies done in many other states.

The reliability coefficients of the composite variables indicated consistent and dependable survey items. A Cronbach's alpha range was used to measure the internal reliability or consistency of the composite variables. The coefficient alpha for the eight-item family connectedness composite variable was .88. The coefficient alpha for the five-item mother relationship composite variable was .84 and for the five-item father relationship composite was .83. The four-item peer pressure composite measure had a coefficient alpha of .77. Using a generally accepted evaluation of alpha (George & Mallery, 1999) where .9 is considered excellent, .8 is good and .7 is acceptable, these composite measures were quite reliable.

Content validity, or the degree to which this instrument measured the domain of content being assessed, was difficult to determine. Since this instrument was not pre-tested and was only administered once, content validity was not assessed. There was evidence of construct validity, however. Many of the analyses done for this research provided results consistent with previous research and theoretically predicted relationships were confirmed.

Internal Validity

Threats to Internal Validity

Mortality. There is a concern about the kinds of potential subjects that were unavailable for the administration of this instrument. The 5% or so missing from the potential student population when the survey was taken would include those who had dropped out of school and those absent from school that day. This missing part of the sample would most likely have a higher percentage of problem students than the tested sample.

Students who quit school early, or are chronically absent from school, tend to be more involved in risk-taking behaviors. Students who are at risk for other problem behaviors are more likely to be involved in sexual activity (Bogenschneider, 1996; Capaldi, Crosby, & Stoolmiller, 1996; Luster & Small, 1994). Given the potential profiles of the missing students, it is likely that the percentage of 11th-grade students in the higher levels of sexual involvement is underreported.

Demand characteristics. It is possible that students were nervous about being honest concerning sensitive issues, given the authoritative nature of adults in educational situation settings. Their interpretation of the meaning of the study might have reduced their desire to be honest on this survey. In a predominantly LDS society and with a predominantly LDS sample, it is likely that the students are often talked to by adults, warning them of the dangers of sexual involvement and counseling them with the religious doctrine described in Chapter II. It is very possible that the volunteers used to administer the test were also involved with some of the subjects in their worship

activities. As a result, those subjects might have been nervous about full disclosure of their sexual involvement, and might have reported a lower level of sexual involvement. Again, this would cause an underreporting of percentages in the higher levels of sexual involvement.

Testing. It is also possible that there was a tendency for some subjects being asked in a survey about their sexual activity to exaggerate their involvement to make it appear that they have had more sexual experience than is really the case. Research has shown a tendency on the part of a few teenagers to report higher amounts of sexual activity than they have really experienced. Alexander, Somerfield, Ensminger, Johnson, and Kim (1993) reported that about 15% of surveyed students, who were surveyed for two consecutive years, reported fewer numbers of sexual experiences in their lives in 10th grade than they did in ninth grade.

This type of false reporting would cause an over-reporting of students in the higher levels of sexual involvement. Although the combination of these three validity concerns might push the reporting of sexual involvement towards a more accurate level, the relevance of other factors in the survey that are associated with sexual activity could be affected. However, these concerns were considered acceptable for the purposes of this research.

Plan of Analysis

The main purpose of this study was to determine which of the independent variables were statistically significant in their relationship to students' levels of sexual activity. Twelve of the independent variables in this study were single-item questions.

They were: Parents' marital status, parental dating rules, friends' approval of sexual activity, a belief that peers are sexually involved, importance of religion, religious meeting attendance, age at first date, dating frequency, steady dating partner, sexual abuse history, average grades and educational goals. A chi-square test of independence was used to determine if there were statistically significant differences in the observed and expected frequencies for each of these independent variables across the four levels of sexual activity.

Four of the independent variables were composite variables. Point biserial analyses were used to determine if statistically significant correlations existed between the composite independent variables and the dependent variable. Point biserial and phi correlations were used with the single-item variables as well.

CHAPTER IV

RESULTS AND DISCUSSION

Overview

This chapter includes the findings and discussion concerning the relationships between the independent variables and levels of sexual involvement discussed in chapter three. Descriptive statistics of the study variables are presented first followed by the results and discussion corresponding to each research question.

Most independent variables were measured using single-item questions. Since both the single item independent variables and dependent variable were categorical in nature, cross-tabulation tables proved to be a useful way to present the findings for single item independent variables. A chi-square test of independence was used with the cross-tabulation tables to determine if the differences between obtained and expected values were statistically significant.

Cross-tabulation tables could not be used with the four independent composite variables. The composite variables were the family relations variable, the mother and father relationship variables, and the peer pressure variable. In order to evaluate these composite variables, the dependent variable was collapsed into three different dichotomous variables and point biserial correlations were run for each composite variable. Except for the dichotomous independent variables, point biserial correlations were also run for each one-item independent variable to allow a more in-depth look at these relationships. Since the collapsed dichotomous dependent variables and dichotomous independent variables created two by two cross-tabulation tables, the more

appropriate phi coefficient, which is a test of correlation for two dichotomous variables, was used for marital status, parental dating rules, steady dating, and sexual abuse history variables. Because there is little research concerning the lesser involved levels of sexual behavior, the more conservative two-tailed point biserial correlations were used.

The dependent variable, or levels of sexual involvement, consisted of: students who have had sexual intercourse (INT); students who have petted but have not had sexual intercourse (PET); students who have made out but have never petted or had sexual intercourse (MO); and students who have never made out, petted or had sexual intercourse (NMO). Each dependent dichotomous variable was formed by an involvement/noninvolvement stipulation.

The first dependent dichotomous variable, or sexual intercourse variable, consisted of sexual intercourse involvement/non-involvement categories. These two categories included those who had experienced intercourse (INT), and those who had not (combining the never made out [NMO], made out [MO], and petting [PET] levels to make a non-intercourse category). The second dependent dichotomous variable, or petting variable, included the petting level students and the combined made out and never made out levels. The final dependent dichotomous variable, the making out variable, included the made out level students and those who have never made out.

Sexual intercourse variable: Students who had experienced sexual intercourse (INT) compared to students who had not experienced sexual intercourse (NMO + MO + PET). Petting variable: Students who had petted but not had sexual intercourse (PET) compared to students who had not petted or had sexual intercourse (NMO + MO). Making out variable: Students who had made out but not petted or had sexual intercourse

(MO) compared to students who had never made out, petted or had sexual intercourse (NMO)

An Explanation of the Cross-Tabulation Tables

Since many cross-tabulation tables are shown in this chapter and much of the discussion revolves around the information in cross-tabulation tables, an explanation of the data found in those tables is in order. Table 3, shown below, is a section of Table 6. In italics is the cell containing information about males who had never made out and whose parents had not experienced marital disruption. The first or top number in this cell, 36, is the cell count showing that 36 males fit that description. The second number tells us that 31.9% of all the males, whose parents had never experienced marital disruption, had never made out. The third number, 80.0%, means that of all the males who had never made out, 80% of them still lived with their original parents.

The bottom number, 4.2, is called the residual. It shows the difference between the count that would be expected if marital status and levels of sexual involvement were

Table 3

Cross-Tabulation Example (Section from Table 6)

Marital status	<i>NMO</i>	MO	PET	INT	Total
<i>Males</i>					
<i>Nondisrupted</i>	<i>36</i>	14	34	29	113
% within nondis.	31.9%	12.4%	30.1%	25.7%	100.0%
% within sex levels	80.0%	70.0%	75.6%	58.0%	
Residual	4.2	-0.1	2.2	-6.3	

independent of one another, and the actual or observed count. The greater the difference, the more chance of statistical significance in the chi-square test. For meaningful results, it is important to keep the number of cells with an expected count of less than 5 to fewer than 25% of the total number of cells (George & Mallery, 1999). To keep the number of cells with an expected count of less than 5 under 25%, some tables are not shown by gender and it was sometimes necessary to collapse categorical answers to which few subjects responded.

Descriptive Statistics

The means, standard deviations, and minimum and maximum scores for all study variables are given in Table 4. The means were computed from the values assigned to each variable. Values assigned to the dependent and independent variables were:

Levels of Sexual Involvement: INT = 3, PET = 2, MO = 1, NMO = 0

Marital Status: Original, never divorced parents = 0, All other types of marital status = 1

Family Connectedness: Composite variable with eight items, each valued by scores of one to five for "does not describe" to "very well describes" as explained in Chapter III

Mother and Father Relationships: Composites of five items each, which items are valued with scores of one to five for "never" to "very often" as described in Chapter III

Parental Dating Rules: No dating rules = 0, few to many dating rules = 1

Table 4

Descriptive Data for All Study Variables

Variable	N	M	SD	Minimum	Maximum
Dependent variable					
Levels of sexual inv.	300	1.57	1.20	0.00	3.00
Independent variables					
Marital status	305	0.24	0.43	0.00	1.00
Family connectedness	300	28.68	6.60	6.00	40.00
Relationship to mother	299	20.27	4.08	6.00	25.00
Relationship to father	295	18.36	4.98	5.00	25.00
Parental dating rules	300	0.78	0.41	0.00	1.00
Peer pressure	296	12.75	2.13	5.00	16.00
Friends approve of sex	294	2.78	0.89	1.00	4.00
Most teens have sex	294	2.75	0.99	1.00	4.00
Religion is important	300	3.08	1.00	1.00	4.00
Church attendance	298	3.09	1.22	1.00	4.00
Age at first date	295	15.12	1.05	13.00	16.00
Dating frequency	299	3.40	1.63	1.00	6.00
Steady dating partner	300	0.33	0.47	0.00	1.00
Sexual abuse history	300	0.12	0.33	0.00	1.00
Average grades	304	6.65	1.35	2.00	8.00
Educational goals	299	2.10	0.62	1.00	3.00

Peer Pressure: A composite of four items with values of one to four each for

“strongly agree” to “strongly disagree”

Friends Approve of Sex: Strongly agree = 1, agree = 2, disagree = 3, strongly

disagree = 4

Most Teens Have Sex: Strongly agree = 1, agree = 2, disagree = 3, strongly

disagree = 4

Religion is Important: Strongly disagree and disagree = 1, not sure = 2, agree = 3,

strongly agree = 4

Church Attendance: Almost never = 1, several times a year and once a month = 2,
2 or 3 times a month = 3, once a week or more = 4

Age at First Date: Ten to thirteen = 13, fourteen = 14, fifteen = 15, sixteen to
seventeen = 16

Dating Frequency: I don't date = 1, less than once a month = 2, twice a month
= 3, two or three times a month = 4, once a week = 5, more than once a
week = 6

Steady Dating Partner: No steady = 0, have a steady = 1

Sexual Abuse History: No abuse = 0, experienced abuse = 1

Average Grades: C to D = 3, C = 4, B to C = 5, B = 6, A to B = 7, A = 8

Educational Goals: Quit soon, finish high school and go to technical college = 1,
attend college = 2, graduate degree = 3

About 76% of the students lived with their original parents and most of these teenagers felt that their families were generally close. Most felt fairly close to their mothers and fathers, but scored themselves with a slightly stronger relationship to mother. It appeared that a large majority of the students valued religion and attended church regularly. If their families were similarly inclined, the religious nature of the community and the rural atmosphere may have aided in the feelings of close family ties.

Few of these teens admitted feeling much peer pressure to become sexually involved, but most felt that their friends did not approve of having sex as a teenager. LDS Church members are generally regarded as a conservative group and some of that

influence is evident in the descriptive data. Half of the students who had started dating waited until they were 16 years old or older to date, and only a third of the sample had a steady dating partner. The average grades for the sample hovered between A's and B's. Almost 80% of the juniors in this study planned to go to college.

Table 5 shows the frequencies and percentages of the subjects in each of the four levels of sexual involvement. The mean for the dependent variable for the 300 subjects (with 8 missing) was 1.57 (NMO = 0, MO = 1, PET = 2, INT = 3). There were 69% of the juniors in these two high schools who had never experienced sexual intercourse, which is significantly lower than the national average (AGI, 1998b). About equal percentages of the students in this sample had never made out (29%) or had experienced sexual intercourse (31%). Lower percentages reported themselves having petted without having intercourse (23%) and only having made out (17%).

Table 5

Frequencies for the Four Levels of Sexual Involvement

Sexual involvement	Frequency	Percent
Sexual intercourse (INT)	94	31.3
Petting (PET)	70	23.3
Made out (MO)	50	16.7
Never made out (NMO)	86	28.7
Total	300	100.0

Note. N = 300, Missing = 8

Table 6

Levels of Sexual Involvement by Gender

Gender	INT	PET	MO	NMO	Total
Males					
Frequency	50	45	21	46	162
% within males	30.9%	27.8%	13.0%	28.4%	100.0%
% within levels	53.5%	42.0%	64.3%	53.2%	
Females					
Frequency	44	25	29	40	138
% within females	29.0%	21.0%	18.1%	31.9%	100.0%
% within levels	46.5%	58.0%	35.7%	46.8%	
Total					
Frequency	86	50	70	94	300
% within levels	100.0%	100.0%	100.0%	100.0%	100.0%

Note. N = 300, Missing = 8

Table 6 shows the four levels of sexual involvement by gender. The percentages of males and females who had never made out and who had experienced sexual intercourse were almost equal. There was, however, a higher percentage of males who had petted but not had sexual intercourse, while the percentage of females who had made out without petting or having sexual intercourse was higher than for males. The percentage of males in the PET level was more than double the percentage of males in the MO level, showing an overall tendency for males in this sample to be more sexually involved than females.

Research Question Results

Research Question 1: Are There Differences in the Level of Sexual
Involvement of Adolescents Who Are Living with Both
Biological Parents Compared with Those Whose
Parents Have Experienced Marital Disruption?

A large majority, 76.1% of the sample, reported that their biological parents were still married. Table 7 shows the cross-tabulation table for marital status by levels of sexual involvement. The residuals are large in the sexual intercourse level for both boys and girls. Forty five percent of the boys (21 of 47) from the non-intact families had experienced sexual intercourse, compared to 26% of the boys (29 of 113) from intact homes. Sixty percent of the girls (15 of 25) from the non-intact homes had experienced sexual intercourse, compared to 25% of the girls (28 of 112) from intact homes. However, over all four levels of sexual involvement, the Pearson Chi-Square Test for independence showed statistical significance only for females, $\chi^2(3, N = 137) = 14.6$, $p < .01$.

The phi coefficient for marital status with the Sexual Intercourse variable showed a positive statistically significant correlation between marital disruption and having sexual intercourse for both the girls, $r(159) = .29$, $p < .01$, and the boys, $r(136) = .19$, $p < .05$. No statistically significant correlation was found between marital status and the petting variable for either gender, or for males with the making out variable. Making out was positively correlated with marital status for adolescent females, $r(68) = .24$, $p < .05$.

Table 7

Cross-Tabulation of Subject's Parental Marital Status by Levels of Sexual Involvement

Marital status	NMO	MO	PET	INT	Total
Males					
Non-disrupted	36	14	34	29	113
%within non-dis.	31.9%	12.4%	30.1%	25.7%	100.0%
%within levels	80.0%	70.0%	75.6%	58.0%	
Residual	4.2	-0.1	2.2	-6.3	
Other	9	6	11	21	47
%within other	19.1%	12.8%	23.4%	44.7%	100.0%
%within levels	20.0%	30.0%	24.4%	42.0%	
Residual	-4.2	0.1	-2.2	6.3	
Total Males	45	20	45	50	160
%within Mar. Stat.	28.1%	12.5%	28.1%	31.3%	100.0%
%within levels	100.0%	100.0%	100.0%	100.0%	100.0%
Females					
Non-disrupted	38	23	23	28	112
%within non-dis.	33.9%	20.5%	20.5%	25.0%	100.0%
%within levels	95.0%	79.3%	92.0%	65.1%	
Residual	5.3	-0.7	2.6	-7.2	
Other	2	6	2	15	25
%within other	8.0%	24.0%	8.0%	60.0%	100.0%
%within levels	5.0%	20.7%	8.0%	34.9%	
Residual	-5.3	0.7	-2.6	7.2	
Total females	40	29	25	43	137
%within marital st.	29.2%	21.2%	18.2%	31.4%	100.0%
%within levels	100.0%	100.0%	100.0%	100.0%	100.0%

Note. $N = 305$, Missing = 3. For females: $\chi^2(3, N = 137) = 14.6, p < .01$

The null hypothesis for this research question stated: There are no differences in the level of sexual involvement of adolescents who are living with both biological parents and the level of sexual involvement of adolescents whose parents have experienced marital disruption. In summary: There was statistical significance in the correlation of

parental marital disruption with more male involvement in sexual intercourse, and with more female involvement in sexual intercourse and making out. Statistically significant differences by marital disruption were found over the four levels of sexual involvement for female adolescents by the chi-square test but not for males. The null hypothesis was rejected for females, but was only rejected for male's involvement and noninvolvement in sexual intercourse. It was not rejected for male's involvement in petting or making out.

Research Question 2a: Are There Differences in the Level of
Sexual Involvement of Adolescents Who Have Close
Relationships with Their Parents and Siblings
Compared with Those Who Do Not?

Three variables were used in this research measuring the respondents' relationships with their family members, and with their mother and their father. All three variables were composite variables. Therefore the chi-square test was not used, but point biserial correlational analyses were used to determine whether or not relationships with family, mother and father were statistically significant in relation to sexual activity. The N for the family connectedness variable was 300 (8 missing), 299 for the mother relationship variable (9 missing), and 295 for the father relationship variable (13 missing).

Point biserial analyses shown in Table 8 illustrate that close family relationships are negatively related to adolescent sexual intercourse in a statistically significant way for males, $r(161) = -.25$, $p < .01$, and for females, $r(137) = -.47$, $p < .01$. Although

Table 8

Point Biserial Correlations Between the Family Connectedness, Mother Relationship, and Father Relationship Variables with the Sexual Intercourse, Petting, and Making Out Variables

Variable	Sex. Int. Variable	Petting Variable	Making Out Variable
Males			
Family connectedness	-.25**	-.09	-.17
Mother relationship	-.10	-.01	-.20
Father relationship	-.19*	-.01	.04
Females			
Family connectedness	-.47**	-.14	.15
Mother relationship	-.25**	-.25*	.09
Father relationship	-.33**	-.24*	.13

* $p < .05$, ** $p < .01$

statistically significant for both, the high negative correlation value for females in the sexual intercourse comparison with family connectedness when compared to the males³ suggests that a lack of closeness in the family has a greater association with daughter's risk for sexual involvement than for son's.

Calculating the variance by squaring the correlation value helps to understand how much of the variance in levels of sexual involvement is explained by the independent variable. Family connectedness explained 22% of the variance between sexual intercourse and no sexual intercourse for female students, but it only explained 6%

of the variance for male students. Family connectedness was not statistically significant when correlated with petting or making out variables for either gender.

Surprisingly, no statistical significance was found between the mother relationship variable and any of the dichotomous dependent variables for adolescent males. Lack of closeness with mother was statistically significant, however, for adolescent females with both the sexual intercourse, $r(137) = -.25, p < .01$, and petting, $r(93) = -.25, p < .05$, variables. Close relations between daughters and mothers looked to be statistically significant in helping these adolescent females postpone sexual activity. The mother relationship variable was not statistically significant for females with making out.

There was statistical significance between the father relationship variable and sexual intercourse for boys, $r(158) = -.19, p < .05$, and for girls, $r(135) = -.33, p < .01$. Again, much more variance was explained for females (11%) than for males (4%). The father relationship variable was also statistically significant and negatively related for females with the petting variable, $r(91) = -.24, p < .05$. The father relationship variable was not statistically significant with girls involvement in making out or with boys involvement in either petting or making out. Relationships of all kinds seem to be more important in helping teenage females postpone sexual involvement than for teenage males.

The null hypothesis for this research question stated: There are no differences in the level of sexual involvement of adolescents that have close relationships with their parents and siblings and the level of sexual involvement of adolescents who are not close to their families. In summary: There was statistical significance between close family

connectedness and less involvement in sexual intercourse for males and for females, but there was no statistical significance with male and female involvement in petting or making out. A close relationship with mother was related to less involvement in sexual intercourse and petting for girls, but not for less involvement in making out. A close relationship with mother was not statistically significant for male involvement in any level of sexual activity. A close relationship with father was statistically significant in relation to less female involvement in sexual intercourse and petting, and less male involvement in sexual intercourse, but was not significantly related with female involvement in making out or with male involvement in petting or making out.

The null hypothesis was not rejected for mother, father, or family relationships and female involvement in making out or male involvement in petting or making out. It was not rejected for mother relationship and any level of male sexual involvement. It was not rejected for family relations and female involvement in petting. It was rejected for mother and father relationships and female involvement in sexual intercourse and petting. It was also rejected for family relations and female involvement in sexual intercourse. It was rejected for the family connectedness and father relationship variables and male involvement in sexual intercourse.

Research Question 2b: Are There Differences in the Level of Sexual
Involvement of Adolescents Whose Parents Monitor Their Dating
Behavior Compared with Those Whose Parents Do Not?

The question asking about parental dating rules was recoded because of the small numbers for those who said that their parents had several and many rules. The recoded

question measured those who said their parents had rules and those who said their parents had no dating rules. A look at Table 9 shows a high number of adolescents who had no rules, having experienced sexual intercourse. More than half (58.2%) of the students who

Table 9

Cross-Tabulation of Do Your Parents Have Dating Rules by Levels of Sexual

Involvement

Dating rules	NMO	MO	PET	INT	Total
Males					
No rules	7	3	9	26	45
%within no rules	15.6%	6.7%	20.0%	57.8%	100.0%
%within levels	15.2%	14.3%	20.0%	52.0%	
Residual	-5.8	-2.8	-3.5	12.1	
Have rules	39	18	36	24	117
%within have rules	33.3%	15.4%	30.8%	20.5%	100.0%
%within levels	84.4%	85.7%	80.0%	48.0%	
Residual	5.8	2.8	3.5	-12.1	
Total Males	46	21	45	50	162
%within dating rules	28.4%	13.0%	27.8%	30.9%	100.0%
%within levels	100.0%	100.0%	100.0%	100.0%	100.0%
Females					
No rules	5	2	2	13	22
%within no rules	22.7%	9.1%	9.1%	59.1%	100.0%
%within levels	12.5%	6.9%	8.0%	29.5%	
Residual	-1.4	-2.6	-2.0	6.0	
Have rules	35	27	23	31	116
%within have rules	30.2%	23.3%	19.8%	26.7%	100.0%
%within levels	87.5%	93.1%	92.0%	70.5%	
Residual	1.4	2.6	2.0	-6.0	
Total females	40	29	25	44	138
%within dating rules	29.0%	21.0%	18.1%	31.9%	100.0%
%within levels	100.0%	100.0%	100.0%	100.0%	100.0%

Note: $N = 300$, Missing = 8. For males: $\chi^2(3, N = 162) = 21.5, p < .01$ For females: $\chi^2(3, N = 138) = 9.4, p < .05$

said their parents had no dating rules were in the INT level. The phi coefficient between dating rules and the Sexual Intercourse variable showed that rules were inversely related to involvement in sexual intercourse for both males, $r(161) = -.36, p < .01$, and females, $r(137) = -.25, p < .01$. Statistically significant correlations were not found with either the petting or making out variables.

The chi-square test of independence for dating rules by levels of sexual intercourse showed statistical significance for boys, $\chi^2(3, N = 162) = 21.5, p < .01$, and for girls, $\chi^2(3, N = 138) = 9.4, p < .05$. Dating rules were more strongly related to less sexual involvement for boys, as the chi-square value for boys is much greater than for girls. The results were mixed for those adolescents who had rules. It appears that having dating rules is no guarantee of noninvolvement in sexual activity, but those who do not have dating rules are at greater risk for sexual intercourse.

The null hypothesis for this research question stated: There are no differences in the level of sexual involvement of adolescents whose parents monitor their behavior and the level of sexual involvement of adolescents whose parents do not monitor them. In summary: The presence or absence of parental dating rules was used to test this hypothesis. The presence of dating rules was statistically significant when correlated with less involvement in sexual intercourse for male and female subjects. Statistically significant differences were found in parental dating rules for both genders over the levels of sexual involvement in a chi-square test of independence. This null hypothesis was rejected.

Research Question 3a: Are There Differences in the Level of
Sexual Involvement of Adolescents Whose Peers Pressure
Them to Have Sex Compared with Those Whose
Peers Do Not Pressure Them to Have Sex?

Similar to the other composite variables, a cross-tabulation table was not used on this variable, but point biserial correlations were used to determine statistical significance. Although the literature suggests that peers are very significant in adolescents choosing to become or not become involved sexually, the peer pressure variable used in this research was not statistically significant in most analyses. That is not to say that peers did not influence this sample's choices, as research question 3b shows. It might just mean that these adolescents, for the most part, did not feel that their peers were pressuring them to have sex. In fact, those that were in the more involved sexual levels claimed to feel slightly less peer pressure than those in the less involved levels.

Lower values for this composite variable represented greater peer pressure. Subjects in the NMO level had a mean value of 12.52 and subjects in the INT level had a mean value of 12.96. Very slight raises were consistent over all four levels of sexual involvement, from NMO to INT.

The only time that the peer pressure variable was statistically significant in correlation with sexual involvement was for girls' involvement in petting. That analysis, $r(92) = .32, p < .01$, showed a positive correlation between less peer pressure and a tendency to be in the PET level rather than NMO or MO. It appears that the more

sexually involved adolescent females are, the more they claim they are not feeling peer pressure to be sexually involved.

The null hypothesis for this research question stated: There are no differences in the level of sexual involvement of adolescents whose peers pressure them to have sex and adolescents whose peers do not pressure them to have sex. In summary: Peer pressure was not shown to be statistically significant for any correlational or chi-square analyses except for females involvement in petting, and that analysis was statistically significant in a direction that has little face validity and is not supported by other research. This null hypothesis was not rejected.

Research Question 3b: Are There Differences in the Level of
Sexual Involvement of Adolescents Whose Peers Approve
of Sexual Involvement Compared with Those
Whose Peers Who Value Abstinence?

The two variables used for this research question were analyzed separately, as one dealt with the respondents' friends' values while the other dealt with the respondents' view of their peers in general. The first variable asked students if their friends approved of having sex. The second asked them if they thought most kids their age (not just their friends) had experienced sexual intercourse.

According to the point biserial correlations, having friends that approve of sex was more statistically significant to the males' involvement in sexual activity and feeling that most of their peers are having sex was more statistically significant for the females. The lower the score on either question, the more the respondent agreed with the

statement. There was a strong negative correlation for males with both the sexual intercourse, $r(157) = -.40, p < .01$, and petting variables, $r(107) = -.37, p < .01$, for the friends approve of sex variable. Feeling that most kids their age had experienced intercourse was statistically significant for males with the sexual intercourse variable only, $r(137) = -.21, p < .05$.

For females, believing that most kids have sex was statistically significant for the sexual intercourse variable, $r(135) = -.34, p < .01$, and also for the petting variable, $r(92) = -.25, p < .05$. Only the correlation for the sexual intercourse variable, $r(157) = -.23, p < .01$, with the friends-approve-of-sex variable was statistically significant for females. The strong correlations for males indicate a stronger association between adolescent male involvement in sexual behaviors and peer factors than for adolescent females.

Since the chi-square test was so statistically significant and cross-tab cells so similar in pattern for both genders, Tables 10 and 11 show the cross-tab results without accounting for gender in order to reduce the number of cells with an expected count of less than 5. For each of the tables, 10 and 11, one cell (6.3%) had an expected count of less than 5. When the chi-square test for independence was used with cross-tabulation tables 10 and 11, statistical significance was found for having friends who approve of sex, $\chi^2(9, N = 294) = 83.8, p < .01$, and for believing that their peers were sexually involved $\chi^2(9, N = 294) = 55.6, p < .01$, over the four levels of sexual involvement. Of those teens who answered with "agree" or "strongly agree," that their friends approve of having sex, 58% had experienced sexual intercourse. For those who agreed or strongly agreed that most kids their age had experienced sexual intercourse, 47% were in the INT

Table 10

Cross-Tabulation of My Friends Approve of Having Sex by Levels of Sexual

Involvement

Friends Approve	NMO	MO	PET	INT	Total
Strongly agree	1	3	6	14	24
%within str. agree	4.2%	12.5%	25.0%	58.3%	100.0%
%within levels	1.2%	6.1%	8.7%	15.1%	
Residual	-5.8	-1.0	.4	6.4	
Agree	5	4	26	46	81
%within agree	6.2%	4.9%	32.1%	56.8%	100.0%
%within levels	6.0%	8.2%	37.7%	49.5%	
Residual	-17.9	-9.5	7.0	20.4	
Disagree	57	27	21	46	122
%within disagree	46.7%	22.1%	17.2%	13.9%	100.0%
%within levels	68.7%	55.1%	30.4%	18.3%	
Residual	22.6	6.7	-7.6	-21.6	
Strongly disagree	20	15	16	16	67
%within str. disagree	29.9%	22.4%	23.9%	23.9%	100.0%
%within levels	24.1%	30.6%	23.2%	17.2%	
Residual	1.1	3.8	.3	-5.2	
Total	83	49	69	93	294
%within friends app.	28.2%	16.7%	23.5%	31.6%	100.0%
%within levels	100.0%	100.0%	100.0%	100.0%	100.0%

Note. N = 294, Missing = 14. $\chi^2(9, N = 294) = 83.8, p < .01$

level. Believing these statements was definitely associated with being more sexually involved.

The null hypothesis for this research question stated: There are no differences in the level of sexual involvement of adolescents whose peers are involved sexually, and the level of sexual involvement of adolescents whose peers are not sexually involved and who value abstinence. In summary: Two variables were researched here, concerning the

Table 11

Cross-Tabulation of Most Kids My Age Have Had Sexual Intercourse by Levels of Sexual Involvement

Kids have sex	NMO	MO	PET	INT	Total
Strongly agree	4	3	9	12	28
%within str. agree	14.3%	10.7%	32.1%	42.9%	100.0%
%within levels	4.8%	6.1%	13.0%	12.9%	
Residual	-3.8	-1.7	2.4	3.1	
Agree	14	11	26	51	102
%within agree	13.7%	10.8%	25.5%	50.0%	100.0%
%within levels	16.9%	22.4%	37.7%	54.8%	
Residual	-14.8	-6.0	2.1	18.7	
Disagree	39	13	11	13	76
%within disagree	51.3%	17.1%	14.5%	17.1%	100.0%
%within levels	47.0%	26.5%	15.9.0%	14.0%	
Residual	17.5	.3	-6.8	-11.0	
Strongly disagree	26	22	23	17	88
%within str. disagree	29.5%	25.0%	26.1%	19.3%	100.0%
%within levels	31.3%	44.9%	33.3%	18.3%	
Residual	1.2	7.3	2.3	-10.8	
Total	83	49	69	93	294
%within have sex	28.2%	16.7%	23.5%	31.6%	100.0%
%within levels	100.0%	100.0%	100.0%	100.0%	100.0%

Note. N = 294, Missing = 14. $\chi^2(9, N = 294) = 55.6, p < .01$

values of the respondent's friends and the respondent's view of peers' sexual behavior. Friends approving of adolescent sexual involvement proved to be statistically significant when correlated with more female involvement in sexual intercourse, and with more male involvement in sexual intercourse and petting. Statistical significance was found between believing that most teens are sexually involved and greater involvement in sexual intercourse for males and more involvement in sexual intercourse and petting for females.

Statistically significant differences were found for both variables over the four levels of sexual involvement in a chi-square test of independence. This null hypothesis was rejected.

Research Question 4a: Are There Differences in the Level of
Sexual Involvement of Adolescents Who Value Religion
Compared with Those Who Do Not Value Religion?

These data show the importance of religion to be statistically significant in relation to levels of sexual involvement. Point biserial correlations showed a negative and statistically significant relationship between the feeling that religion is important and involvement in sexual intercourse for both males, $r(161) = -.28, p < .01$, and females, $r(137) = -.28, p < .01$. No statistical significance for either was shown with the petting variable or the making out variable.

Looking at cross-tabulation Table 12 shows an unexpected pattern, however. A much larger portion of those who just “agree” with this statement have experienced sexual intercourse (63%) than those that are “not sure” if they agree (29%). The residual for those who had experienced sexual intercourse and responded with “agree” had an observed count 18.5 higher than expected, while the count in the INT level of “strongly agree” was 24.4 lower than expected. It appears that the only answer statistically significant in its association with not being sexually involved was “strongly agree” for this variable.

Because of the small number of juniors that disagreed and strongly disagreed with this question, those categories were collapsed. A high number of cells had an expected

Table 12

Cross-Tabulation of Religion Is Important to Me by Levels of Sexual Involvement

Religion important	NMO	MO	PET	INT	Total
Stro. dis. & disagree	2	1	4	14	21
%within str. & disagree	9.5%	4.8%	19.0%	66.7%	100.0%
%within levels	2.3%	2.0%	5.7%	14.9%	
Residual	-4.0	-2.5	-9	7.4	
Not sure	16	13	24	22	75
%within not sure	21.3%	17.3%	32.0%	29.3%	100.0%
%within levels	18.6%	26.0%	34.3%	23.4%	
Residual	-5.5	.5	6.5	-1.5	
Agree	6	7	9	37	59
%within agree	10.2%	11.9%	15.3%	62.7%	100.0%
%within levels	7.0%	14.0%	12.9%	39.4%	
Residual	-10.9	-2.8	-4.8	18.5	
Strongly agree	62	29	33	21	145
%within str. agree	42.8%	20.0%	22.8%	14.5%	100.0%
%within levels	72.1%	58.0%	47.1%	22.3%	
Residual	20.4	4.8	-8	-24.4	
Total	86	50	70	94	300
%within religion imp.	28.7%	16.7%	23.3%	31.3%	100.0%
%within levels	100.0%	100.0%	100.0%	100.0%	100.0%

Note. N = 300, Missing = 8. $\chi^2(9, N = 300) = 69.1, p < .01$

count of less than 5 when cross-tabulations were done by gender. Since significance for both males and females was found with chi-square, to reduce the number of cells with low expected values, the cross-tabulation was not done by gender.

The null hypothesis for this question stated: There are no differences in the level of sexual involvement of adolescents who value religion and the level of sexual involvement of adolescents who do not value religion. In summary: Feeling that religion is important was statistically significant when correlated with less involvement in sexual

intercourse for males and females. Statistically significant differences were found in the importance of religion over the four levels of sexual involvement in the chi-square test. However, an examination of the cross-tabulation table reveals that the statistically significant differences came only for those who strongly feel that religion is important. This null hypothesis was rejected, but caution is merited because the factors associated with such a large difference between agreeing and strongly agreeing are uncertain.

Research Question 4b: Are There Differences in the Level
of Sexual Involvement of Adolescents Who Attend
Church Services Regularly Compared with Those
Who Do Not Attend Church Regularly?

Church attendance was also statistically significant in association with non-involvement in sexual behavior. Subjects who were very active in attending church were much less involved sexually than those who attend very little. The large differences in observed counts compared to expected counts came for those students who almost never attend church and for those that attend once-a-week or more. Table 13 shows that over two thirds (69%) of the teenagers, in this study, who almost never attend church had experienced sexual intercourse, compared to only 14% who attend church once a week or more.

However, those in the PET and MO levels, who attend church once a week or more, have a slightly higher count than expected, suggesting that church attendance is statistically significant and negatively associated with sexual intercourse but not petting or making out. The large, positive difference in expected and observed counts for the

Table 13

Cross-Tabulation of How Often Do You Attend Worship Services by Levels of Sexual

Involvement

Church attendance	NMO	MO	PET	INT	Total
Almost never	4	3	11	40	58
%within almost never	6.9%	5.2%	19.0%	69.0%	100.0%
%within levels	4.7%	6.0%	15.9%	43.0%	
Residual	-12.7	-6.7	-2.4	21.9	
Several times/yr & 1/mo.	8	5	3	18	34
%within sev. ti. & 1/mo.	23.5%	14.7%	8.8%	52.9%	100.0%
%within levels	9.3%	10.0%	4.3%	19.4%	
Residual	-1.8	-7	-4.9	7.4	
2-3 times a month	5	4	10	10	29
%within 2-3/month	17.2%	13.8%	34.5%	34.5%	100.0%
%within levels	5.8%	8.0%	14.5%	10.8%	
Residual	-3.4	-9	3.3	.9	
Once a week or more	69	38	45	25	177
%within once/week	39.0%	21.5%	25.4%	14.1%	100.0%
%within levels	80.2%	76.0%	65.2%	26.9%	
Residual	17.9	8.3	4.0	-30.2	
Total	86	50	69	93	298
%within church att.	28.9%	16.8%	23.2%	31.2%	100.0%
%within levels	100.0%	100.0%	100.0%	100.0%	100.0%

Note. N = 298, Missing = 10. $\chi^2(9, N = 298) = 78.6, p < .01$

students that have never made out who attend church very regularly shows a statistically significant association between being very active in attending church and having never made out. Again, the cross-tabulation was not done by gender to avoid low cell counts, and the categories of attending church several times per year and once a month were collapsed.

Point biserial correlations showed a statistically significant relationship between church attendance and the sexual intercourse variable for males, $r(159) = -.47, p < .01$, and females, $r(137) = -.50, p < .01$, but not for petting or making out. The Pearson correlation value for female sexual intercourse with church attendance explained more variance (25%) for the female sexual intercourse variable than any other independent variable of this study.

The null hypothesis for this research question stated: There are no differences in the level of sexual involvement of adolescents who attend church services regularly and the level of sexual involvement of adolescents who do not attend church regularly. In summary: The correlation between attendance at church and involvement in sexual intercourse was statistically significant. The chi-square test found statistically significant differences in church attendance over the four levels of sexual involvement. This null hypothesis was rejected, but differences were only great for those who attend church once a week or more.

Research Question 5a: Are There Differences in the Level
of Sexual Involvement of Adolescents Who Start
Dating Early Compared with Those Who
Postpone Dating Until 16 or Later?

The age at first date, as it related to levels of sexual involvement, was one of the most statistically significant variables in this study. The younger the subject was when dating started, the more likely it was that he or she was sexually involved. The Pearson correlation value for point biserial analyses of the age dating started with the sexual

intercourse comparison was negative and the highest for males, $r(156) = -.59, p < .01$, of all the variables of this study and second highest for females, $r(137) = -.49, p < .01$. For males, 35% of the variance in the sexual intercourse variable was explained by the age dating started and 24% of the variance was explained for females.

Point biserial correlations for females showed statistical significance for involvement in petting, $r(93) = -.37, p < .01$, and making out, $r(66) = -.35, p < .01$. For males, the petting variable had a statistically significant correlation with the age dating started, $r(110) = -.33, p < .01$, but not the making out variable. These data support the strong findings in many studies (Dorius et al., 1993; Miller et al., 1986; Miller et al., 1997; Thornton, 1990) that the earlier dating starts, the more at risk youth are to become sexually active at an early age.

It is a telling picture to look at the number of subjects represented in each cell of Table 14. Because of low numbers for those who started dating as early as age 10, ages 10 - 13 were collapsed, and cross-tabulations were not done by gender. There were two respondents who started dating at age 10, three at age 11, 10 at age 12, and 14 at age 13. Of the 29 who started dating at age 13 or younger, almost 90% of them had experienced sexual intercourse, and all but one of the 29 were in either in the PET or INT levels. Thirty of the 36 (83%) who started to date at age 14 had either been involved in petting or had experienced sexual intercourse and 47 of 64 (74%) who started to date at age 15 were in the PET or INT levels.

Looking at the numbers for the age dating began from a different direction also adds to the strength of this variable. Only 13% of the dating students that had never made out started to date before they were 16. In contrast, 33% of the students that had

Table 14

Cross-Tabulation of What Age Did You Start Dating by Levels of Sexual Involvement

Dating age	NMO	MO	PET	INT	Total
.00 Do not date	15	4	4	10	33
%within do not date	45.5%	12.1%	12.1%	30.3%	100.0%
%within levels	17.4%	8.2%	5.9%	10.9%	
Residual	5.4	-1.5	-3.6	-.3	
13.00 10-13	0	1	2	26	29
%within 10-13	.0%	3.4%	6.9%	89.7%	100.0%
%within levels	.0%	2.0%	2.9%	28.3%	
Residual	-8.5	-3.8	-4.7	17.0	
14.00 14	2	4	9	21	36
%within 14	5.6%	11.1%	25.0%	58.3%	100.0%
%within levels	2.3%	8.2%	13.2%	22.8%	
Residual	-8.5	-2.0	.7	9.8	
15.00 15	7	10	27	20	64
%within 15	10.9%	15.6%	42.2%	31.3%	100.0%
%within levels	8.1%	20.4%	39.7%	21.7%	
Residual	-11.7	-6	12.2	.0	
16.00 16-17	62	30	26	15	133
%within 16-17	46.6%	22.6%	19.5%	11.3%	100.0%
%within levels	72.1%	61.2%	38.2%	16.3%	
Residual	23.2	7.9	-4.7	-26.5	
Total count	86	49	68	92	295
%within dating age	29.2%	16.6%	23.1%	31.2%	100.0%
%within levels	100.0%	100.0%	100.0%	100.0%	100.0%

Note. N = 295, Missing = 13. $\chi^2(12, N = 295) = 119.6, p < .01$

started dating and had only made out, dated before they were 16. Of those who had started to date, 59% of the PET level, and 82% of the students who had experienced sexual intercourse, dated before they had turned 16. Waiting until age 16 to date appears to be a powerful correlate of noninvolvement in sexual behavior. The residuals for those

that waited until age 16 or later to date make a very steady decline from greater than expected counts to less than expected counts across all four levels of sexual involvement.

In the younger than 16-year-old dating categories, all of the cell counts rise across the levels of sexual involvement except for age 15, where 27 are in the PET level compared to 20 who had experienced sexual intercourse. Similar to research done with data from the National Survey of Children (Dorius et al., 1993), the subjects of this study who waited until age 16 to date had a lower rate of sexual involvement than those who said that they did not date. The chi-square value was very high for the age dating started by levels of sexual involvement, $\chi^2(12, N = 295) = 119.6, p < .01$.

The null hypothesis for this research question stated: There are no differences in the level of sexual involvement of adolescents who start dating early and the level of sexual involvement of adolescents who postpone dating until age 16 or later. In summary: Earlier first dating ages were statistically significant in relation to more male sexual involvement in sexual intercourse and petting. Earlier first dating ages were related to more female sexual involvement in sexual intercourse, petting and making out. Differences in first dating ages were statistically significant different over the four levels of sexual involvement for both genders. This null hypothesis was rejected.

Research Question 5b: Are There Differences in the Level
of Sexual Involvement of Adolescents Who Date Often
(Once a Week or More) Compared with Those Who
Do Not Date Often (Once a Month or Less)?

The frequency of dating was also quite powerful in helping to predict what level

of sexual involvement students were in. In the point biserial analyses, statistically significant correlations were found between this variable and two levels of sexual involvement for males and females. For males, frequency of dating was positively correlated to involvement in sexual intercourse, $r(159) = .41, p < .01$, and also in petting, $r(110) = .30, p < .01$.

Frequency of dating for females was positively correlated to involvement in sexual intercourse, $r(132) = .38, p < .01$, and making out, $r(65) = .50, p < .01$. While the frequency of dating was one of the more powerful associations for males in the sexual intercourse variable, it was the most powerful association, explaining 25% of the variance for females in the making out variable.

The cross-tabulation table (Table 15) for frequency of dating is not shown by gender because of the number of cells with an expected count less than 5. The chi-square value was statistically significant for both males, $\chi^2(15, N = 160) = 31.7, p < .01$, and females, $\chi^2(15, N = 133) = 57.2, p < .01$. However, a comparison of the patterns in a cross-tabulation table that accounts for gender suggests that some useful information about the distribution of effects may have been lost by combining males and females. Table 15 shows very statistically significant residuals for the NMO and INT levels for those who dated less than once a month and those who dated more than once a week. However, females seem to have less risk of sexual involvement than males in the "less than once a month" category. The number of female respondents for "less than once a month" were NMO = 19, MO = 5, PET = 7, INT = 2. For males in the same category, the number of respondents were NMO = 21, MO = 7, PET = 15, INT = 8. There were 58% of the "less than once a month" females who had never made out compared to 41%

Table 15

Cross-Tabulation of How Often Do You Date by Levels of Sexual Involvement

Dating frequency	NMO	MO	PET	INT	Total
I don't date	15	4	4	10	33
%within don't date	45.5%	12.1%	12.1%	30.3%	100.0%
%within levels	18.1%	8.2%	5.8%	10.9%	
Residual	5.7	-1.5	-3.8	-4	
Less than once a month	40	12	22	10	84
%within <once/month	47.6%	14.3%	26.2%	11.9%	100.0%
%within levels	48.2%	24.5%	31.9%	10.9%	
Residual	16.2	-2.0	2.2	-16.4	
Twice a month	13	9	8	11	41
%within twice/month	31.7%	22.0%	19.5%	26.8%	100.0%
%within levels	15.7%	18.4%	11.6%	12.0%	
Residual	1.4	2.1	-1.7	-1.9	
2-3 times a month	11	10	16	15	52
%within 2-3/month	21.2%	19.2%	30.8%	28.8%	100.0%
%within levels	13.3%	20.4%	23.2%	16.3%	
Residual	-3.7	1.3	3.8	-1.3	
Once a week	4	11	9	16	40
%within once/week	10.0%	27.5%	22.5%	40.0%	100.0%
%within levels	4.8%	22.4%	13.0%	17.4%	
Residual	-7.3	4.3	-4	3.4	
More than once a week	0	3	10	30	43
%within >once/week	0.0%	7.0%	23.3%	69.8%	100.0%
%within levels	0.0%	6.1%	14.5%	32.6%	
Residual	-12.2	-4.2	-1	16.5	
Total	83	49	69	92	293
%within dating freq.	28.3%	16.7%	23.5%	31.4%	100.0%
%within levels	100.0%	100.0%	100.0%	100.0%	100.0%

Note. $N = 293$, Missing = 15. $\chi^2(15, N = 293) = 74.5, p < .01$

for the males.

Both males and females look to be at much greater risk for sexual activity in the "more than once a week" category. For males the number of respondents were $NMO = 0$,

MO = 0, PET = 8, INT = 11. For females: NMO = 0, MO = 3, PET = 2, INT = 19.

For males who dated more than once a week, 58% had experienced sexual intercourse and for females, 79% had experienced sexual intercourse. Dating more than once a week obviously gives couples more opportunity to become sexually active. Females seem to benefit more than males from dating less frequently and be at greater risk from dating more frequently.

The null hypothesis for this research question stated: There are no differences in the level of sexual involvement of adolescents who date frequently (once a week or more) and the level of sexual involvement of adolescents who date less frequently (once a month or less). In summary: Dating more frequently was statistically significant in its associations with more female involvement in sexual intercourse and making out, and more male involvement in sexual intercourse and petting. Statistically significant differences in dating frequency were found by chi-square over the levels of sexual involvement. This null hypothesis was rejected.

Research Question 5c: Are There Differences in the Level
of Sexual Involvement of Adolescents Who Steady Date
Compared with Those Who Do Not?

Like the dating patterns in questions 5a and 5b, the data show steady dating to be closely associated with risk of sexual involvement. Steady dating was the only variable in this study that was statistically significant for males in the analyses of the making out variable. The phi coefficient showed that going steady was statistically significant and positively associated for males involvement in making out, $r(64) = .37, p < .01$, and in

sexual intercourse, $r(158) = .37, p < .01$. It was also positively associated with female involvement in the same areas, making out, $r(66) = .38, p < .01$, and sexual intercourse, $r(134) = .39, p < .01$.

As Table 16 shows, going steady greatly lessens the chance of being included in the never made out category, and enhances the likelihood of having experienced sexual intercourse. The pattern seems to be very similar for both males and females. Perhaps the most convincing statistic to look at is the overall numbers for those who said they had a steady boyfriend or girlfriend. Ninety-five students reported that they had a current steady dating status. Of the 95, 6 were in the NMO level, 18 in the MO level, 17 in the PET level, and 54 of the 95 had experienced sexual intercourse. That means that 57% of those who were going steady had experienced sexual intercourse. That compares to 31% of the whole sample who had experienced sexual intercourse and only 19% of those who were not going steady.

Unfortunately, it was not possible to get a history of steady dating for those who said they were not going steady, because the survey asked only for the respondent's current steady dating status. There were likely students who had previously steady dated, but did not have a steady dating partner at the time the survey was administered. Nevertheless, for those who were going steady, the risk of sexual involvement was statistically significant.

The survey also asked those that were currently going steady the age that they started to go steady. When this factor was studied in the biserial correlational analyses and the chi-square test, it was never statistically significant for any level of sexual involvement. These data support Thorton's (1990) findings that steady dating provides

Table 16

Cross-Tabulation of Do You Have a Steady Boyfriend or Girlfriend by Levels of SexualInvolvement

Steady status	NMO	MO	PET	INT	Total
Males					
No steady	41	12	35	21	109
%within no steady	37.6%	11.0%	32.1%	19.3%	100.0%
%within levels	91.1%	60.0%	77.8%	42.9%	
Residual	10.2	-1.7	4.2	-12.6	
Have steady	4	8	10	28	50
%within have steady	8.0%	16.0%	20.0%	56.0%	100.0%
%within levels	8.9%	40.0%	22.2%	57.1%	
Residual	-10.2	1.7	-4.2	12.6	
Total males	45	20	45	49	159
%within steady	28.3%	12.6%	28.3%	30.8%	100.0%
%within levels	100.0%	100.0%	100.0%	100.0%	100.0%
Females					
No steady	36	19	18	17	90
%within no steady	40.0%	21.1%	20.0%	18.9%	100.0%
%within levels	94.7%	65.5%	72.0%	39.5%	
Residual	10.7	-.3	1.3	-11.7	
Have steady	2	10	7	26	45
%within have steady	4.4%	22.2%	15.6%	57.8%	100.0%
%within levels	5.3%	34.5%	28.0%	60.5%	
Residual	-10.7	.3	-1.3	11.7	
Total females	38	29	25	43	135
%within Steady	28.1%	21.5%	18.5%	31.9%	100.0%
%within levels	100.0%	100.0%	100.0%	100.0%	100.0%

Note: $N = 300$, Missing = 8. For males: $\chi^2(3, N = 159) = 28.1, p < .01$ For females: $\chi^2(3, N = 135) = 28.1, p < .01$

such a statistically significant risk for sexual involvement that those who start going steady during their later teenage years quickly become as sexually involved as those who started steady dating at an early age.

The null hypothesis for this research question stated: There are no differences in the level of sexual involvement of adolescents who steady date and the level of sexual involvement of adolescents who do not steady date. In summary: Having a steady dating partner was statistically significant when correlated with more male and female involvement in sexual intercourse and making out. Statistically significant differences were found in steady dating over the levels of sexual involvement by chi-square. This null hypothesis was rejected.

Research Question 6: Are There Differences in the Level of Sexual Involvement
of Adolescents Who Have Experienced Sexual Abuse
Compared with Those Who Have Not?

This variable was statistically significant only for females in both the point biserial correlations and the chi-square analysis. There were, however, only nine males who reported having experienced sexual abuse from this sample. An accurate measure of statistical significance was hard to find with such low numbers, but the count of those nine males over the levels of sexual involvement (NMO = 1, MO = 1, PET = 3, INT = 4) seems to indicate that with a larger sample of sexually abused males, this variable would probably be statistically significant.

Along with the age dating started, this variable was one of two that was statistically significant for females over all three dichotomous dependent variable analyses. The phi coefficient showed positive correlation with involvement in sexual intercourse, $r(135) = .27, p < .01$, and in petting, $r(94) = .28, p < .01$, as well as in

making out, $r(68) = .33, p < .01$. Clearly, correlations between sexual abuse and female adolescent sexual involvement is statistically significant.

The count of those who have experienced sexual abuse in Table 17 shows a steady increase over all four levels of sexual involvement with none of the 27 females reporting sexual abuse in the NMO category. Almost 56% of the female students who had experienced sexual abuse had also experienced sexual intercourse. The most common perpetrator of sexual abuse reported for this sample was a boyfriend or dating partner and the second most common perpetrator was a friend, neighbor, or babysitter.

The null hypothesis for this question stated: There are no differences in the level

Table 17

Cross-Tabulation of Have You Experienced Sexual Abuse by Levels of Sexual Involvement

Experienced abuse	NMO	MO	PET	INT	Total
Females					
No	40	24	18	27	109
%within no abuse	36.7%	22.0%	16.5%	24.8%	100.0%
%within levels	100.0%	82.8%	72.0%	64.3%	
Residual	7.9	.8	-2.0	-6.7	
Yes	0	5	7	15	27
%within yes abuse	0.0%	18.5%	25.9%	55.6%	100.0%
%within levels	0.0%	17.2%	28.0%	35.7%	
Residual	-7.9	-8	2.0	6.7	
Total females	40	29	25	42	136
%within abuse	29.4%	21.3%	18.4%	30.9%	100.0%
%within levels	100.0%	100.0%	100.0%	100.0%	100.0%

Note. $N = 136$, Missing = 5. For females: $\chi^2(3, N = 136) = 17.7, p < .01$

of sexual involvement of adolescents who have experienced sexual abuse and the level of sexual involvement of adolescents who have not experienced sexual abuse. In summary: A history of sexual abuse was statistically significant in its correlations with more female involvement in making out, petting and sexual intercourse. No statistical significance was found for any male level of sexual involvement. Statistically significant differences in sexual abuse history were only found for females over the levels of sexual involvement. This null hypothesis was rejected for females but was not rejected for males.

Research Question 7a: Are There Differences in the Level of Sexual
Involvement of Adolescents Who Get High Grades Compared
with Those Who Receive Low Grades?

Analyses for this variable showed markedly different results for different statistical tests. The chi-square performed with a cross-tabulation table was not statistically significant for either males or females and therefore a table is not shown for this variable. Females scored themselves considerably higher in average grade attainment than did the males. There were no students that reported lower than a C to D average grade point. While almost 29% of the boys reported that their average grades were either in the C to D, C or B to C range, only 13% of the girls reported themselves in the same areas. About 75% of the girls categorized themselves either in the A or the A to B range compared to about 54% of the boys.

These differences did not translate to statistical significance for either gender over the four levels of sexual involvement when considered together for chi-square. The point

biserial correlations, on the other hand, were a different story. For males and females both, correlations showed statistically significant negative correlations for involvement in the sexual intercourse and petting levels. For males, the Pearson correlation value (159) for the sexual intercourse variable with academic grades was $-.17$, statistically significant at the $p < .05$ level. The r (109) value for male petting with grades was $-.28$ and was statistically significant at the $p < .01$ level. Females were also negatively correlated with grades for petting involvement, r (92) = $-.21$, $p < .05$, and sexual intercourse involvement, r (136) = $-.17$, $p < .05$.

The null hypothesis for this research question stated: There are no differences in the level of sexual involvement of adolescents who get high grades and the level of sexual involvement of adolescents who receive low grades. In summary: Higher grades were statistically significant when correlated with less involvement in sexual intercourse and petting for both males and females. Statistically significant differences in grades were not found for either males or females over the levels of sexual involvement. This null hypothesis was rejected for male and female involvement in sexual intercourse and petting, but was not rejected for involvement in making out for either gender.

Research Question 7b: Are There Differences in the Level of Sexual
Involvement of Adolescents Who Have High Educational Goals
Compared with Those Who Do Not?

Planning to go to college was only statistically significant for females in relation to postponing the onset of sexual activity. Therefore, Table 18 only shows cross-tabulations for the adolescent females. Educational goals were not statistically significant

Table 18

Cross-Tabulation of How Long Do You Plan to Go to School by Levels of SexualInvolvement

Educational plans	NMO	MO	PET	INT	Total
Females					
Finish H. S. & go to trade tech	0	1	0	8	9
%within H.S. & trade t.	0.0%	11.1%	0.0%	88.9%	100.0%
%within levels	0.0%	3.4%	0.0%	19.0%	
Residual	-2.6	-9	-1.6	5.2	
Go to college	25	17	20	29	91
%within go college	27.5%	18.7%	22.0%	31.9%	100.0%
%within levels	64.1%	58.6%	83.3%	69.0%	
Residual	-1.5	-2.7	3.7	.5	
Get graduate degree	14	11	4	5	34
%within grad. degree	41.2%	32.4%	11.8%	14.7%	100.0%
%within levels	35.9%	37.9%	16.7%	11.9%	
Residual	4.1	3.6	-2.1	-5.7	
Total females	39	29	24	42	134
%within edu. plans	29.1%	21.6%	17.9%	31.3%	100.0%
%within levels	100.0%	100.0%	100.0%	100.0%	100.0%

Note. N = 136, Missing = 5. $\chi^2(6, N = 134) = 22.7, p < .01$

for males either for the point biserial correlational analyses or for the chi-square test of independence. Although the residuals looked to be statistically significant in some cells, the relationships were not consistent. For example, males who planned to go to college had an observed count in the cross-tabulation table that was 4.4 higher in the NMO category and 5.8 lower in the INT category than expected. But the residuals were -1.0 for NMO and 0.0 in INT for males that expected to get a graduate degree.

For females, the chi-square test was statistically significant over the four levels of sexual involvement, $\chi^2(6, N = 134) = 22.7, p < .01$. However, a close observation of Table 18 reveals that only females who plan to get a graduate degree have residuals that look to be statistically significant in deterring their sexual activity. Females who plan to get an extended college education appear less likely to be involved in sexual activity. Point biserial correlations of educational plans for females were negative and statistically significant with involvement in sexual intercourse only, $r(133) = -.35, p < .01$.

No females in this sample wanted to quit school as soon as possible. Very few planned to quit after high school or go to a trade tech, and so these two categories were collapsed to avoid low expected cell counts. However, there were still four (33%) of the cells with an expected count of less than 5. Therefore the results of this chi-square test are less likely to be valid (George & Mallery, 1999).

The null hypothesis for this question stated: There are no differences in the level of sexual involvement of adolescents who have high educational goals and the level of sexual involvement of adolescents who do not have high educational goals. In summary: Having the educational goal of getting a college graduate degree was statistically significant when correlated with less female involvement in sexual intercourse but was not statistically significant for males with any level of sexual involvement. Statistically significant differences in educational goals over levels of sexual involvement were found by chi-square for females but not for males. This null hypothesis was rejected for females but was not rejected for males.

CHAPTER V

SUMMARY AND CONCLUSIONS

The data for this study were collected from 308 eleventh-grade students in two high schools in a semi-rural area of Utah in 1994. The sample consisted of 167 males and 141 females, ages 16 through 18. The sample was predominantly Anglo American (94. 5%) with small percentages of African American (1.6%), Hispanic (1.3%), and other (2.6%). The data were gathered in a county that reported 77.2% of its population as being affiliated with the LDS Church (Glenmary Research Center, 1992).

This research examined the following areas associated with adolescent sexual behavior: parents' marital status, parent-child and family relationships, peer factors, religiosity, dating patterns, sexual abuse history, and educational factors. The purpose of this study was to identify those factors that are not only related to adolescent sexual intercourse, but also to adolescent involvement in petting, making out, and not being sexually involved with members of the opposite sex at all. This research confined itself to adolescent heterosexual behavior only. The theoretical framework of this study was Symbolic Interaction Theory aided and expanded by differential association theory.

The 11th-grade subjects filled out The Utah Teen Survey and results came from analyses of those data. In particular, this research concerned itself with the associations between factors developed from the review of literature and four levels of sexual involvement into which subjects were placed, by associations with all four levels together and associations with three involvement/noninvolvement variations of the dependent variable. The four levels of sexual involvement were (1) those who had never made out,

petted or had sexual intercourse, (2) those who had made out but never petted or had sexual intercourse, (3) those who had petted but had never had sexual intercourse, and (4) those who had experienced sexual intercourse.

Given the lack of attention paid to the frequency and variations of adolescent sexual behavior other than intercourse in the research concerning adolescent sexual behavior (Brooks-Gunn & Furstenberg, 1989), much is still unknown about the context of first intercourse (Miller & Moore, 1990). Although there have been recent declines in rates of adolescent sexual intercourse, pregnancy, and birthrate (AGI, 1998b; AGI, 1998c), the early age at first intercourse for many young people remains a concern. A large proportion of unwanted pregnancies occurs as a result of early involvement in sexual activity (NCPTP, 1999b), and 10% of all births in the U.S. are to unmarried teenage mothers, which costs society billions of dollars annually for medical and social services (AGI, 1998a; NCPTP, 1999a). The U.S. still has one of the highest rates of adolescent pregnancies of any developed country (Miller et al., 1998).

This research has sought to gain more in-depth information about four levels of adolescent sexual involvement and associated factors and to identify potential areas of focus for future research in an effort to aid in the understanding of how society can help more adolescents postpone the onset of sexual intercourse. This would likely decrease the number of children born to unprepared adolescent mothers whose children are at greater risk for health and developmental problems (White & DeBlasse, 1992). It would also help to decrease the number of teenagers, about three million annually, who contract a sexually transmitted disease (AGI, 1998a).

Influence of Associated Factors

These data support the general principle found in SI theory that adolescents view themselves and give meaning to the phenomena around them through the process of interaction with significant others in their lives. Since most parents want their children this age to postpone sexual intercourse and feel that their children should remain sexually abstinent until marriage (Miller, 1998; NCPTP, 1999b), it is assumed that the closer adolescents are to their parents, the less likely it is that they will be sexually involved. The later dating and steady dating start, the less chance there is that a boyfriend or girlfriend will become a significant other in how adolescents give meaning to phenomena around them.

In general, adolescents in this study who were closest to their parents and families, and postponed dating and steady dating until later in adolescence, were more likely to have never made out or to have avoided petting and sexual intercourse. When the respondents' peers had more conservative views, they were much less likely to have had sexual intercourse than those whose peers viewed sexual behavior as acceptable for teenagers as suggested by differential association theory.

Research Question 1: The Comparison of Levels of Sexual Involvement of
Adolescents Living with Both Biological Parents and Adolescents
Whose Parents Have Experienced Marital Disruption

Teenagers coming from a nondisrupted marriage in this study were less involved in sexual intercourse than those who had experienced marital disruption at home. Unlike

results in some studies (Stern et al., 1984; Young et al., 1991), female adolescents of this sample had greater association with sexual involvement when not living with their original parents than did males. Not only is the nondisrupted female less likely to have experienced sexual intercourse than females from disrupted families, but she is also more likely to have never made out.

The report that females are more affected by structural changes in their families in response to stresses accompanying family instability (Wu & Martinson, 1993) is supported by these data. Perhaps the female's desire for loving relationships outside the home (Kinnaird & Gerrand, 1986) puts her at greater risk of allowing a boyfriend, who is less likely to encourage her to remain sexually abstinent, to influence her views of the attractiveness of sexual involvement at an early age.

Research Question 2a: The Comparison of Levels of Sexual Involvement
of Adolescents with Close Family Relationships and
Adolescents Whose Relationships Are Not Close

Parent-child and family relationships are more closely associated with female than male adolescent sexuality in this sample. While close family relationships were statistically significant in association with less sexual intercourse for both genders, about three and a half times as much variance was explained for female involvement in sexual intercourse (22%) than for male involvement (6%). The father relationship helps predict less sexual intercourse for males, but the mother relationship was not statistically significant for adolescent males. These results do not lend strong support to other studies that show the mother-child relationship to be the most significant family relationship in

delaying the onset of sexual intercourse (Fox, 1980; Miller et al., 1998; Weinstein & Thornton, 1989).

It is meaningful to note, however, that correlations between these three independent variables are very high. When correlations were measured between all of the independent variables, the Pearson correlation value (306) between the mother relationship variable and family connectedness was .57. The r (302) value between the father relationship variable and family connectedness was .54 and the r (301) value between the mother and father relationship variables was .56. All three correlations were statistically significant at $p < .01$.

Since the mother relationship variable and family connectedness have the highest correlation of the three combinations, and the family connectedness variable had the highest correlation values for both males' and females' involvement in sexual intercourse, it is possible that mother's influence on sexuality is indirect. Perhaps mother has a more direct influence on family connectedness, which in turn influences adolescent sexual behavior.

It is apparent that female adolescent sexuality is helped or hindered more by the quality of family relationships than is male adolescent sexuality. These data support Gagnon and Simon's (1973) findings that when relationships at home are poor, female children are more likely to look for relational satisfaction with a boyfriend. They are also more likely to use sexual expression as a means of negotiating with a boyfriend for emotional support (Whitbeck et al., 1993). Perhaps this could help explain why, from the 1950s to the 1980s, while marital disruption was becoming more prevalent, the gap

between adolescent rates of female sexual involvement and male sexual involvement narrowed (Brooks-Gunn & Furstenberg, 1989).

Most parents want their children to remain sexually abstinent while young, and attitude congruence appears more likely for this sample when relationships are close. This allows the parents more opportunity to be a significant other in the life of their adolescent (LaRossa & Reitzes, 1993). If parent-child relationships are important to an adolescent, there is greater likelihood of strong "salience" for his or her role as a member of the family in which sexual abstinence is valued.

Research Question 2b: Comparisons of the Levels of Sexual Involvement
of Adolescents Whose Parents Monitor Their Dating Behavior
and Adolescents Whose Parents Do Not

The sexual activity of teenagers in this sample who have no dating rules certainly supports studies showing that parents who have lower expectations concerning child behavior have been shown to have children who are more likely to be sexually active (Hovell & Sipan, 1994; Miller et al., 1986b). Permissive parents tend to have adolescents with the highest rates of sexual activity when compared to authoritative or authoritarian parents (Miller et al., 1986b). Adolescents in this sample whose parents had no dating rules (58%) were more than twice as likely to have had sexual intercourse as those whose parents had dating rules (24%).

Because authoritative and authoritarian parents' dating rules were combined for this study, the results for having dating rules might not be as statistically significant as if they could have been separated. Dating rules were more strongly associated with male

adolescent sexual involvement than with female. The percentage of boys who had dating rules in NMO category (33%) was much higher than the percentage of boys in the INT category (21%). The girls, on the other hand, who had dating rules were more equal between the NMO category (30%) and INT category (27%). And yet only 16% of the girls had no dating rules while 28% of the boys had no rules. Although this follows society's tendency to expect girls to abstain from sex more than boys, parents should probably rethink the importance of dating rules for their sons.

Research Question 3a: Comparisons of the Levels of Sexual Involvement
of Adolescents Whose Peers Pressure Them to Have Sex and
Adolescents Whose Peers Do Not

High school students across the nation have listed peer pressure as a factor that encourages sexual activity and as a reason some adolescents do not postpone sexual intercourse (Cullari & Mikus, 1990; Miller & Moore, 1990). However, for this sample, peer pressure was not a statistically significant factor in adolescent sexual behavior. The youth in this sample were probably more conservative than the average adolescent in the U.S., and this might have contributed to the lack of statistical significance for this variable.

Research Question 3b: Comparisons of the Levels of Sexual Involvement
of Adolescents Whose Peers Are Involved Sexually and
Adolescents Whose Peers Are Not

Adolescents whose friends approve of teenage sexual involvement and who feel

that most teenagers are sexually involved are more likely to be involved sexually than those who do not. There are studies indicating that having friends who are sexually involved is more significant in teenage girls becoming sexually involved (Berndt & Keefe, 1995; Billy & Udry, 1985). But the males in this sample who were sexually involved were more likely than females to have friends that approve of adolescent sex. About 16% of the variance for the association of the male sexual intercourse variable was explained by this variable, compared to only 5% of the variance for females. This could stem, however, from boys being more likely than girls to choose sexually active friends once they have become sexually active (Billy et al., 1984; Billy & Udry, 1985).

The females of this sample were more likely than males to be sexually involved if they thought most teens their age were having sex. Girls who were involved in petting were also more likely than boys to believe that most teens their age were sexually involved. Boys who were involved in petting were more likely than girls to have friends who approve of having sex. This was one of only four factors that proved to be statistically significant in association with adolescent male involvement in petting.

One strategy to help combat the influence of believing that most teens in the U.S. are sexually involved might be to educate young people concerning the declining trend in adolescent sexual involvement. Over half of today's teenagers are not having sexual intercourse (AGI, 1998b). Strengthening family and parental ties might also lessen the likelihood of having friends that approve of sex. According to Patterson (1986), weak attachment to parents can lead to deviant associations.

Research Question 4a: Comparisons of the Levels of
Sexual Involvement of Adolescents Who Value
Religion and Adolescents Who Do Not

Placing higher value on religion was statistically significant in correlation with less involvement in sexual intercourse. What is surprising is the pattern of variability that appears in Cross-tabulation Table 11. The percentage of students who answered with “agree” that religion is important had experienced sexual intercourse (63%) at almost the same rate as those who did not feel religion was important (67%), and was much higher than those that were not sure (29%). The “agree” category of this variable had a higher percentage of sexual intercourse respondents than did those who thought most teens were having sexual intercourse (48%), those whose friends approved of having sex (57%), and those who had no dating rules (58%).

It would be expected that the adolescents who “agree” that religion is important might be less sexually involved than they are, according to many other studies (Benda & Corwyn, 1996; Bingham & Crockett, 1996; Crockett et al., 1996; Levinson et al., 1995; Miller et al., 1997). It was only the “strongly agree” category that had a significantly lower count of those who had experienced sexual intercourse than was expected. Whether or not these unusual relationships are due to the fact that this survey was done in a conservative community is uncertain.

Miller et al. (1987a) proposed that religiosity directly affects sexual intentions, which in turn directly affects sexual behaviors. It might be that only those who strongly feel that religion is important are really convinced of the importance of abstinence.

Future research might compare a predominantly LDS sample with one that is not predominantly LDS to ascertain if this is unique to predominantly LDS samples.

Research Question 4b: Comparisons of the Levels of Sexual
Involvement of Adolescents Who Attend Church
Services Regularly and Those Who Do Not

Church attendance is one of the most statistically significant variables of this study when correlated with sexual intercourse. It explained one fourth of the variance between intercourse and nonintercourse for both genders. This study's teenagers were far less likely to have intercourse when they went to church once a week or more, and far more likely to have intercourse when they almost never went to church.

However, since petting is considered a moral sin by ecclesiastical authorities of the LDS Church (Kimball, 1982), the fact that the count is higher than expected for students who have petted, who also attend church once a week or more, would not be anticipated. Thornton and Camburn (1987) reported that attendance at church services tends to be one of the strongest variables in lowering the chance of sexual involvement. They suggested that parents' attendance at religious functions may determine the amount of religious exposure children receive, and church attendance is associated with lower risk of sexual involvement, no matter which church the adolescent belongs to. While these results support those findings in the case of sexual intercourse, it may not be true for all types of sexual involvement. Religiosity effects could also be working in harmony with such factors as family stability and family connectedness here, as reported by Forste and Heaton (1988).

Research Question 5a: Comparisons of the Levels of Sexual Involvement
of Adolescents Who Start Dating Early and Adolescents
Who Postpone Dating Until 16 or Later

Along with frequency of attendance at church, the age at which dating started explained a relatively high amount of variance. This variable explained more (35%) of the variance for male involvement or noninvolvement in sexual intercourse than any other variable in this study. It also explained 25% of the variance for female involvement in sexual intercourse. Starting to date at an early age was also positively correlated with sexual intercourse and petting for both males and females. In addition, it was positively correlated with making out for females.

The highest rate of students having had sexual intercourse (90%) of any variable category was for those 11th graders who started to date at age 13 or younger. The percentage of students having had sexual intercourse dropped by almost half from those who dated at age 14 (58%) to those who dated at age 15 (31%). But the difference in percentages between these two categories, when sexual intercourse and petting counts were combined, was not as statistically significant (83% to 74%, respectively). More than two thirds (69%) of the students who waited until ages 16 or 17 to start dating were in the first two levels of sexual involvement.

The strength of these associations has important implications. Is there reason to believe that early dating has a causal relationship with sexual involvement? Future research should address this relationship with a longitudinal study that would allow a causal relationship to be investigated.

Support was found in this study for other research that links earlier ages at first date to earlier ages at first intercourse (Dorius et al., 1993; Miller et al., 1997; Thornton, 1990). Even though LDS and non-LDS students were not separated in this study, the results from this predominant LDS sample add to Miller and others' (1986) findings that the link between early dating and early onset of sexual intercourse is especially strong for LDS adolescents.

Research Question 5b: Comparisons of the Levels of Sexual
Involvement of Adolescents Who Date Often (Once a
Week or More) and Adolescents Who Do Not
Date Often (Once a Month or Less)

Students who dated less than once a month were the least likely of the dating frequency variable to be sexually involved. Respondents were almost six times as likely to have had sexual intercourse if they dated more than once a week (70%) compared to those who dated less than once a month (12%). Miller et al. (1997) reported that higher frequency of dating was more statistically significant for males in dramatically increasing their risks for having first intercourse. For this sample, dating frequency was more statistically significant for females than for males.

Females who dated more than once a week (79%) experienced sexual intercourse at a higher rate than males who dated at the same frequency (58%). There were also higher percentages of females who had never made out (58%) when they dated less than once a month, than there were males who dated less than once a month (41%). Dating

frequency was more statistically significant for adolescent females in this sample than for adolescent males.

However, dating frequency was positively associated with sexual intercourse for both males and females. Dating frequency was powerful in explaining the amount of variance between females who have made out and those who have never made out (25%). It was also statistically significant in correlation with males' involvement in petting. As one might expect, the frequency of dating variable was highly correlated with the steady partner variable, $r(292) = .62, p < .01$.

Research Question 5c: Comparisons of the Levels of
Sexual Involvement of Adolescents Who Steady
Date and Adolescents Who Do Not

Three times as many respondents who had a steady dating partner had experienced sexual intercourse than respondents who did not steady date. There were very few students (6%) in this sample, who steady dated, who had not made out. It would appear from these results that, for most adolescents, to steady date is to become sexually involved.

Students in this sample who steady dated were more involved in making out, both males and females, than those who did not steady date. Steady dating was the only variable of this study that was statistically significant in association with making out for males. Steady dating was not statistically significant in association with petting behaviors for either gender.

In other studies (Miller & Moore, 1990), committed relationships have been a more common context for first sexual intercourse for women (75%) than for men (50%). However, for this sample, the percentages of boys and girls who steady date and who have experienced sexual intercourse were almost equal (about 57%). These results supported Thornton's (1990) assertion that initiation of steady dating in an adolescent's life causes dramatic increases in the probability of experiencing sexual intercourse immediately after steady dating starts, as the age at which steady dating started was never statistically significant in any of the analyses.

In summarizing dating patterns, both steady dating and higher frequency of dating, according to SI theory, would be expected to increase the chances of a dating partner becoming more significant and taking a greater role than parents in shaping an adolescent's attitudes concerning sexual behavior. The salience of the son or daughter role might be weakened by the salience of a boyfriend or girlfriend role increasing in strength. As early dating is linked to other risk taking activities (Thornton, 1990), it probably also increases the likelihood of dating more deviant peers, which would increase the chances of sexual involvement (Benda & DiBlasio, 1991).

Research Question 6: Comparisons of the Levels of Sexual
Involvement of Adolescents Who Have Experienced
Sexual Abuse and Adolescents Who Have Not

In this study, a history of sexual abuse was positively correlated to female involvement in sexual intercourse, petting and making out. Miller et al. (1995) reported that teenage women with a history of sexual abuse tend to have more permissive attitudes

towards sexual involvement than other teens. That might be the reason that none of the 27 females who reported a history of sexual abuse were in the NMO category. The fact that 57% of the sexually abused females had experienced sexual intercourse by their 11th-grade year supports Miller and others' (1995) findings that sexual abuse is predictive of earlier sexual intercourse. Small and Kerns (1993) listed boyfriends as the most frequent sexual aggressor in sexual abuse, which was also the case in this study.

Research Question 7a: Comparisons of the Levels of Sexual
Involvement of Adolescents Who Get High Grades and
Adolescents Who Receive Low Grades

Getting lower grades explained more of the variance between involvement and noninvolvement in having petted than for having had sexual intercourse. The variance explained for males involvement in petting was 8% compared to only 3% for sexual intercourse. For females, variances explained by academic grades were 5% for petting compared to 3% for sexual intercourse. These variances were very small, which probably accounts for the fact that the chi-square test of independence was not statistically significant for academic grades.

It is important to note that the explained variance is greater for males as the research is more mixed in reported results of educational factors associated with male adolescent sexual behavior. This study supports research that has found lower academic grades to be associated with more male sexual activity (Billy et al., 1988; Miller et al., 1998).

Research Question 7b: Comparisons in the Levels of Sexual
Involvement of Adolescents Who Have High Educational
Goals and Adolescents Who Do Not

Educational aspirations were not statistically significant in relation to male adolescent sexual involvement for this study. Female college plans were negatively related to their chances of having experienced sexual intercourse, with girls desiring to get a graduate degree being half as likely to have had sexual intercourse as girls who just plan to go to college. There was a problem with cell counts being too low (33%, or four cells with an expected count of less than five) because of the low number of females who wanted to go to a trade school or quit school after high school. Therefore there is limited information concerning the adolescent females who do not plan to go to college, even though a high percentage (89%) of them had experienced sexual intercourse. It could be assumed that females are aware that an unplanned pregnancy would interfere with post-high school educational plans. However, the perceived cost of sexual involvement for educational goals (Brewster, 1994; Brewster et al., 1993) appeared to be high only for the females of this sample who planned to receive a graduate degree.

Research Question Summary

Statistically significant differences were found in 11 of the 12 single-item measures over the four levels of sexual involvement for either boys or girls or both. The only single-item independent measure that was not statistically significant in the chi-square analyses was academic grades. In the chi-square analyses, marital status, sexual

abuse history and educational plans were only statistically significant for females.

Parental dating rules, friends approve of having sex, most peers have sex, importance of religion, church attendance, age dating started, dating frequency, and going steady were statistically significant for both genders.

Fifteen of the 16 independent measures of this study were statistically significant in correlation with adolescent sexual intercourse in one way or another in the point biserial and phi coefficient correlations. As seen in Table 19, twelve of the independent measures were statistically significant in correlation with male involvement in sexual intercourse, with the highest r values for age dating started, church attendance, going steady, friends approving of sex, and dating rules. All of the measures except peer pressure were statistically significant when correlated with female involvement in sexual intercourse. The highest values for female sexual intercourse were found with church attendance, the age at first date, family connectedness, going steady, how often they dated, educational goals and believing that peers have sex.

Table 20 shows that fewer measures related with petting. Only four of the independent measures were statistically significant in relation to male involvement in petting, with friends approving of sex and age dating started. Six of the independent measures were statistically significant in association with female involvement in petting.

Table 21 shows that males had only one measure that was statistically significant when associated with making out, going steady. Females had five measures related with making out. Adolescent females had more measures that were statistically significant in relation to all levels of sexual involvement.

Table 19

Correlations for Statistically Significant Independent Variables by the Sexual Intercourse Variable

Significant factors	r value	Significant factors	r value
Males		Females	
Age dating started**	-.59	Church attendance**	-.50
Church attendance**	-.47	Age dating started**	-.49
Friends approve of sex**	-.40	Family connectedness**	-.47
Steady dating**	.37	Steady dating**	.39
Parental dating rules**	-.36	Dating frequency**	.38
Dating frequency**	.28	Educational goals**	-.35
Religion important**	-.28	Peers have sex**	-.34
Family connectedness**	-.25	Father relationship**	-.33
Peers have sex**	-.21	Parent's marital status**	.29
Father relationship*	-.19	Religion important**	-.28
Parent's marital status*	.19	Sexual abuse history**	.27
Average grades*	-.17	Mother relationship**	-.25
		Parental dating rules**	-.25
		Friends approve of sex**	-.23
		Average grades*	-.18

* p < .05, ** p < .01

Table 20

Correlations for Statistically Significant Independent Variables by the Petting Variable

Significant factors	r value	Significant factors	r value
Males		Females	
Friends approve of sex**	-.37	Age dating started**	-.37
Age dating started**	-.33	Sexual abuse history**	.28
Dating frequency**	.30	Peers have sex*	-.25
Average grades**	-.28	Mother relationship*	-.25
		Father relationship*	-.24
		Average grades*	-.21

* $p < .05$, ** $p < .01$

Limitations

There is need for caution in interpreting the data presented in this study. There are a number of limitations that should be considered. A lack of external validity, the limitations of a cross-sectional design, the drawbacks of survey methodology and its ability to address the complicated interplay of family, peers and personal behavior, and the inaccuracies of self-report are all seen as limitations of this study.

It is important to note that the nature of this sample greatly limits the generalizability of this study. This survey was administered to a semi-rural, predominantly LDS sample. This sample would most probably be very conservative when compared to youth across the United States. The high percentage of adolescents

Table 21

Correlations for Statistically Significant Independent Variables by the Making OutVariable

Significant factors	r value	Significant factors	r value
Males		Females	
Steady dating**	.37	Dating frequency**	.50
		Steady dating**	.36
		Age dating started**	-.35
		Sexual abuse history**	.33
		Parent's marital status*	.24

* $p < .05$, ** $p < .01$

living with both biological parents illustrates one aspect of that conservatism.

The sample did not include any students absent on the day the survey was administered, and the instrument was used on a one-time basis in the two high schools from which the sample was taken. Students with truancy problems and homebound students would be underrepresented in this sample. Home schooled and alternative programmed students would not be represented at all in this sample. These aspects would lessen the likelihood that this sample would be representative of adolescents in America, as a whole.

This study was cross-sectional in design. Without the benefits of longitudinal data, no baseline data were available for contrasting the relationships between

independent and dependent variables. For example, were those who had a steady dating partner at the time of the survey sexually active before they started to steady date? With many questions inquiring about events that may have occurred years before the survey, memory lapse and inattention to significant details are also a concern.

There are many drawbacks to survey methodology when it comes to understanding human behavior. The interplay of family, friends, and personal behavior is complex. For this research, those relationships were described by the respondent only. Parents' and children's views of family patterns are often very different. Both would describe events differently than an outside observer. It would be helpful to survey youth and parents and then have a chance for observation to try to access the accuracy of survey descriptions.

The surveys were administered in an educational setting by adults from the community. The surveys contained questions about sensitive personal information. Although precautions were taken to assure respondents of anonymity, there is a chance that students held back important information. Would the information be different if the survey had been taken at home or in a casual setting with other peers?

In an effort to provide valid data from statistical tests, cell counts sometimes required the collapse of categories and tables may not have been shown by gender. When such things are done, there is a possibility of missing significant information. It is becoming increasingly difficult to gather sensitive information from large samples, but future research might strive to over sample such groups as adolescent males who have experienced sexual abuse. Despite the many limitations, this study represents useful information concerning multiple levels of adolescent sexual involvement.

Implications

The sizeable number of statistically significant factors associated with sexual involvement implies that influences on the timing of sexual activity among adolescents are multifaceted. Small and Luster (1994) stated that the risk factors associated with sexual activity are not just confined to one area of a teenager's world. It stands to reason, then, that efforts to delay early sexual involvement on the part of teenagers must also be multifaceted. An effort on the part of communities, government, and religious organizations might be more effective if there is greater communication between the parties attempting to help youth postpone the onset of sexual activity.

Evidence for the usefulness of programs that have the potential to help young people make choices that will lessen the likelihood of sexual involvement, as well as programs that are aimed at strengthening family ties, is found in this research. The statistical significance of the associations between dating patterns and sexual activity is apparent in these data for both adolescent boys and girls. The importance of family and parent-child relationships is more evident for adolescent girls than for boys.

However, peer factors were among the more statistically significant associations for the males of this sample. The principles previously outlined for SI theory and differential association theory illustrate the importance of close family ties in moderating the influence of peers. Recent research has reported results that show family ties to be associated with peer association (Benda & DeBlasio, 1992; Jensen et al., 1994; Patterson, 1986; Whitbeck et al., 1993).

Family Implications

What is happening in families that might put children at greater risk for sexual involvement and what can be done about it? It is important to remember, when research is done with data such as these, what those data represent. There were 308 eleventh graders who filled out The Utah Teen Surveys in this sample. Because there are so many differing individual circumstances from subject to subject, great enough numbers are needed in order to discover the statistically significant trends. But those numbers represent more than some of the figures on the pages of this study might indicate. They represent real people, with real challenges, goals, and desires for their futures. It might be well to look at two individual case studies, chosen, not at random, but because of the comments they made at the end of their surveys.

Two open-ended questions were asked at the end of The Utah Teen Survey. One stated: Please list some of the things that are most stressful for you or that you worry about the most. The other stated: Please list some of the things that you enjoy most in your life. One 11th-grade female wrote the following to each question, respectively:

I worry about the next day, cause I don't know if I'm gonna be here or my family, so I take and do things very carefully. Plus I worry about the next time my baby brother gets the crap beat out of him by my step father, so I try to keep him out of the house and with me all the time. Cause I don't want the same stuff that happened to me [to] happen to him.

But I do enjoy spending time with my baby brother cause it gives a time to talk. And he's almost like my best friends. And I enjoy not being around my step father. It gives me a sigh of relief.

This young lady is a white female who is 16 years old. She has a mother and step-father who "rarely" show love towards her. Her family members "barely" express

affection to each other. Her parents have no dating rules. She feels that there is no way she can solve some of the problems she has, but she disagrees with the statement, "I have little control over the things that happen to me." She relies on herself more than others. She had her first date at age 14. She has made out, petted, and had sexual intercourse, but had not had intercourse in the last 3 months before the survey was administered. Religion is not important to her and she almost never attends worship services. She does not have a steady boyfriend and most of her friends approve of people her age having sex. She believes that most kids her age have had sexual intercourse. She has experienced sexual abuse and wants to go to college.

In answer to those two questions, an 11th-grade male wrote:

My mom is always stressing. She has 2 jobs and my dad bugs her and makes her feel worthless. I don't help either. But she and work and money stress me.

Being in the out open mountain air. I love being out in the open.

This young man is a white male who is 17 years old. His parents are divorced. He has a mother who "very often" shows love towards him and a father who "sometimes" shows love towards him. His family members "generally" express affection to each other. His parents have many dating rules. He feels that there are ways to solve his problems and feels that he has control over the things that happen to him. He was 13 when he first started dating. He has made out, petted, and had sexual intercourse in the last 3 months. He has a steady girlfriend and most of his friends approve of people his age having sex. He also thinks that most kids his age have had sexual intercourse. He is not sure if religion is important to him and he goes to church about two or three times a month. He has not experienced sexual abuse and wants to go to college.

These two young people do not sufficiently represent all of the students in this sample who were sexually involved, but their lives and problems are real. What can be done for families that might make a difference for young people like them?

Governmental family policies are an essential area of concern for family professionals (Pratt, 1995). Family policy can be defined as "everything that governments do that affects families" (Zimmerman, 1992). Family professionals need to "articulate a vision of families" for government and community policies (Pratt, 1995).

Pratt (1995) reported six criteria for family friendly policies. Policies should encourage and strive to reinforce parental and marital stability. Intervention should supplement and not replace family functioning. It is important to recognize that even when family ties are problematic, they still tend to have strength and persistence. Policies should look at families as partners and not just as recipients when providing family services. Policies should recognize family diversity and the families most vulnerable to breakdown should be the primary priority.

Certainly much can be done with the aid of volunteers. Churches are a vital asset in helping families, and government and communities should marshal those assets in a coordinated attempt to help families learn how to put into practice actions that will enhance family relationships. Encouraging families to get involved with whatever religious organization they might be affiliated with could be helpful, as religious affiliation can be a significant deterrent of unwise sexual involvement decisions (Brewster et al., 1998).

Adolescent Implications

Research shows that age at first intercourse has significant implications for the timing of marriage and childbearing for adolescents. The earlier the age when sexual activity begins, the more likely a teenager is to form a family through giving birth rather than through marriage (Miller & Heaton, 1991). Early dating has been shown in this study to have one of the strongest associations with sexual intercourse when compared to many other related factors in a teenager's life. The earlier the age at first date, the more likely it is that sexual activity will start at an early age (Miller et al., 1986a).

Programs aimed at adolescents, themselves, should incorporate some kind of encouragement to postpone the age at first date, and encourage non-steady dating patterns. Convincing young people to wait until they are older to start dating or to delay the formation of steady dating relationships might be more effective than trying to encourage them not to become sexually involved when they have started to date steadily at an early age. Those who start dating and have sexual experiences at an early age are more likely to include sexual experiences within whatever level of dating relationship they might be in (Thornton, 1990).

Youth need to be a part of the formation and implementation of programs aimed at helping them. When young people perceive that a value has been self-generated, they have greater motivation to accept that value into their lifestyle (Grusec & Goodnow, 1994). Many young people are already adopting more conservative views of life (AGI, 1998b) and encouragement through appropriate programs could help to solidify that trend. Young adults who have continued their virgin status past the teenage years

tend to be very conventional, especially with personal and social controls (Jessor et al., 1983). They are more involved in their religions and tend to see sexual behavior as something that follows after marriage.

The likelihood of casual sex is greater when young people perceive that engaging in sex will make them more popular and will help to reduce loneliness (Levinson et al., 1995). Young people must come to understand the significance of the wide range of emotions invoked by a sexual relationship and the potential negative consequences of such behavior. There were many more factors statistically significant when associated with adolescent female sexual behavior. This might stem from the reported greater influence of social factors for female sexuality. Adolescent male sexuality is reportedly more influenced by biological factors (Crockett et al., 1996). But that should not deter the view that programs can be influential for males as well as females. Programs should focus on the reduction of risk factors and the building of protective factors.

Conclusions

Although the generalizability of these findings is limited, and will not be applicable to the general population of adolescents in this nation, this research has helped to clarify some of the patterns associated with adolescent sexual activity. There have been new insights into the activities that lead to sexual intercourse. Females have a higher number than males of independent measures associated with all levels of sexual involvement in this study. Perhaps this is an indication that adolescent females are more influenced by external social factors than adolescent males.

There was support in this study for the position that adolescent females are more influenced by family factors than are males. Marital status, family, and father and mother relationships all have higher correlational values, and are statistically significant in more levels of sexual involvement for females than for males. Friends' approving of sexual involvement has higher values, and is statistically significant in more levels of sexual involvement for males.

Dating patterns were very statistically significant. The age dating started had the highest correlational values and most levels of statistically significant association when both genders were considered. The percentage of students who started to date at age 13 or before, and had experienced sexual intercourse (90%), had the highest percentage of students in the INT level for any category of any variable. The category of those who had a steady dating partner in the going steady variable, and the category of those who dated more than once a week in the how-often-do-you-date variable, also had very high rates of sexual intercourse.

Religiosity was an interesting factor. Although both variables, the importance of religion and church attendance, were statistically significant, both had patterns that were somewhat surprising. Attending church often was one of the strongest predictors of not having experienced sexual intercourse. Educational goals and having experienced sexual abuse were only predictive of sexual involvement for female adolescents.

Symbolic interaction theory predicted that closer family and parent-child ties would be associated with less sexual involvement, as parents are likely to desire their children to remain sexually abstinent (AGI, 1998b). Differential association theory predicted that weak family ties and strong peer associations would be associated with

greater sexual involvement. Both predictions were supported in this study. The dating patterns of early and steady dating would indicate stronger peer relationships, and were definitely predictive of greater sexual involvement. Close family ties were predictive of less sexual involvement for girls.

Encouraging young people to delay the onset of dating, and to strengthen family ties would probably not only help them to postpone sexual intercourse, but would also help young people be less involved in petting, and perhaps even less involved in making out. Since the normative developmental pattern of sexual activity includes moving from embracing and kissing to fondling and petting prior to sexual intercourse (McCabe & Collins, 1984), helping teenagers avoid less involved sexual levels would likely decrease the percentage of adolescents who have experienced sexual intercourse. This in turn would decrease the percentage of teenagers who have unwanted pregnancies and who give birth to children before they are ready.

REFERENCES

- Alan Guttmacher Institute. (1998a). Facts in brief: Teen sex and pregnancy [Brochure]. New York: Author.
- Alan Guttmacher Institute. (1998b). Falling teen pregnancy, birthrates: What's behind the declines? The Guttmacher Report, 1(5), 6-9.
- Alan Guttmacher Institute. (1998c). Special report: U.S. teenage pregnancy statistics [Brochure]. New York: Author.
- Alan Guttmacher Institute. (1999). Facts in brief: Teen sex and pregnancy [Brochure]. New York: Author.
- Alexander, C. S., Somerfield, M. R., Ensminger, M. E., Johnson, K. E., & Kim, Y. J. (1993). Consistency of adolescents' self-report of sexual behavior in a longitudinal study. Journal of Youth and Adolescence, 22, 455-465.
- Amato, P. R. (1996). Explaining the intergenerational transmission of divorce. Journal of Marriage and the Family, 58, 628-640.
- Baker, S. A., Thalberg, S. P., & Morrison, D. M. (1988). Parents' behavioral norms as predictors of adolescent sexual activity and contraceptive use. Adolescence, 90, 265-282.
- Barnett, J. K., Papini, D. R., & Gbur, E. (1991). Familial correlates of sexually active pregnant and nonpregnant adolescents. Adolescence, 26, 457-472.
- Bell, N., & Avery, A. W. (1985). Family structure and parent-adolescent relationships: Does family structure really make a difference? Journal of Marriage and the Family, 47, 503-508.

- Benda, B. B., & Corwyn, R. F. (1996). Testing a theoretical model of adolescent sexual behavior among rural families in poverty. Child and Adolescent Social Work Journal, *13*, 469-494.
- Benda, B. B., & DiBlasio, F. A. (1991). Comparison of four theories of adolescent sexual exploration. Deviant Behavior: An Interdisciplinary Journal, *12*, 235-257.
- Benda, B. B., & DiBlasio, F. A. (1994). An integration of theory: Adolescent sexual contacts. Journal of Youth and Adolescence, *23*, 403-420.
- Berndt, T. J., & Keefe, K. (1995). Friends' influence on adolescents' adjustment to school. Child Development, *66*, 1312-1329.
- Billy, J. O. G., Brewster, K. L., & Grady, W. R. (1994). Contextual effects on the sexual behavior of adolescent women. Journal of Marriage and the Family, *56*, 387-404.
- Billy, J. O. G., Landale, N. S., Grady, W. R., & Zimmerle, D. M. (1988). Effects of sexual activity on adolescent social and psychological development. Social Psychology Quarterly, *51*, 190-212.
- Billy, J. O. G., Rodgers, J. L., & Udry, J. R. (1984). Adolescent sexual behavior and friendship choice. Social Forces, *62*, 653-678.
- Billy, J. O. G., & Udry J. R. (1985). The influence of male and female best friends on adolescent sexual behavior. Adolescence, *77*, 21-32.
- Bingham, C. R., & Crockett, L. J. (1996). Longitudinal adjustment patterns of boys and girls experiencing early, middle, and late sexual intercourse. Developmental Psychology, *32*, 647-658.

- Bogenschneider, K. (1996). Family related prevention programs: An ecological risk/protective theory for building prevention programs, policies, and community capacity to support youth. Family Relations, *45*, 127-138.
- Booth, A., & Amato, P. R. (1994). Parental marital quality, parental divorce, and relations with parents. Journal of Marriage and the Family, *56*, 21-34.
- Boyer, D., & Fine, D. (1992). Sexual abuse as a factor in adolescent pregnancy and child maltreatment. Family Planning Perspectives, *24*, 4-11.
- Brewster, K. L. (1994). Race differences in sexual activity among adolescent women: The role of neighborhood characteristics. American Sociological Review, *59*, 408-424.
- Brewster, K. L., Billy, J. O. G., & Grady, W. R. (1993). Social context and adolescent behavior: The impact of community on the transition to sexual activity. Social Forces, *71*, 713-740.
- Brewster, K. L., Cooksey, E. C., Guilkey, D. K., & Rindfuss, R. R. (1998). The changing impact of religion of the sexual and contraceptive behavior of adolescent women in the United States. Journal of Marriage and the Family, *60*, 493-504.
- Brody, G. H., Moore, K., & Gleib, D. (1994). Family processes during adolescence as predictors of parent-young adult attitude similarity. Family Relations, *43*, 369-373.
- Brooks-Gunn, J., Boyer, C., & Hein, K. (1988). Preventing HIV infection and AIDS in children and adolescents: Behavioral research and intervention strategies. American Psychologist, *43*, 958-964.

- Brooks-Gunn, J., & Furstenberg, F. F. Jr. (1989). Adolescent sexual behavior. American Psychologist, 44, 249-257.
- Browning, C. R., & Laumann, E. O. (1997). Sexual contact between children and adults: A life course perspective. American Sociological Review, 62, 540-560.
- Butler, J. R., & Burton, L. M. (1990). Rethinking teenage childbearing: Is sexual abuse a missing link. Family Relations, 39, 73-80.
- Caldas, S. J. (1993). Current theoretical perspectives on adolescent pregnancy and child bearing in the United States. Journal of Adolescent Research, 8, 4-20.
- Capaldi, D. M., Crosby, L., & Stoolmiller, M. (1996). Predicting the timing of first sexual intercourse for at-risk adolescent males. Child Development, 67, 344-359.
- Carroll, J. L., Volk, K. D., & Hyde, J. S. (1985). Differences between males and females in motives for engaging in sexual intercourse. Archives of Sexual Behavior, 14, 131-139.
- Cates, W., Jr., & Rauh, J. L. (1985). Adolescents and sexually transmitted diseases: An expanding problem. Journal of Adolescent Health Care, 6, 1-5.
- Chilman, C. S. (1990). Promoting healthy adolescent sexuality. Family Relations, 39, 123-130.
- Christopher, F. S., Johnson, D. C., & Roosa, M. W. (1993). Family, individual, and social correlates of early Hispanic adolescent sexual expression. Journal of Sex Research, 30, 54-61.
- Conger, K. J., Conger, R. D., & Scaramella, L. V. (1997). Parents, siblings, psychological control, and adolescent adjustment. Journal of Adolescent Research, 12, 113-138.

Corporation of the President of The Church of Jesus Christ of Latter-day Saints. (1990).

For the Strength of Youth [Brochure]. Salt Lake City, UT: The Church of Jesus Christ of Latter-day Saints.

Crockett, L. J., Bingham, C. R., Chopack, J. S., & Vicary, J. R. (1996). Timing of first sexual intercourse: The role of social control, social learning, and problem behavior. Journal of Youth and Adolescence, *25*, 89-111.

Cullari, S., & Mikus, R. (1990). Correlates of adolescent sexual behavior. Psychological Reports, *66*, 1179-1184.

Darling, C. A., & Hicks, M. W. (1982). Parental influence on adolescent sexuality: Implications for parents as educators. Journal of Youth and Adolescence, *11*, 231-245.

Day, R. D. (1992). The transition to first intercourse among racially and culturally diverse youth. Journal of Marriage and the Family, *54*, 749-762.

DiBlasio, F. A., & Benda, B. B. (1992). Gender differences in theories of adolescent sexual activity. Sex Roles, *27*, 221-235.

DiBlasio, F. A., & Benda, B. B. (1994). A conceptual model of sexually active peer association. Youth and Society, *25*, 351-367.

Dorius, G. L., Heaton, T. B., & Steffen, P. (1993). Adolescent life events and their association with the onset of sexual intercourse. Youth and Society, *25*, 3-23.

East, P. L. (1996). The younger sisters of childbearing adolescents: Their attitudes, expectations, and behaviors. Child Development, *67*, 267-282.

- East, P. L., Felice, M. E., & Morgan, M. C. (1993). Sisters' and girlfriends' sexual and childbearing behavior: Effects on early adolescent girls' sexual outcomes. Journal of Marriage and the Family, 55, 953-963.
- Ellis, L., & Wagemann, B. M. (1993). The religiosity of mothers and their offspring as related to the offspring's sex and sexual orientation. Adolescence, 28, 227-237.
- Fisher, T. D. (1986). Parent-child communication about sex and young adolescents' sexual knowledge and attitudes. Adolescence, 21, 517-527.
- Flewelling, R. L., & Bauman, K. E. (1990). Family structure as a predictor of initial substance use and sexual intercourse in early adolescence. Journal of Marriage and the Family, 52, 171-181.
- Forste, R. T., & Heaton, T. B. (1988). Initiation of sexual activity among female adolescents. Youth & Society, 19, 250-268.
- Fox, G. L. (1980). The mother-adolescent daughter relationship as a sexual socialization structure: A research review. Family Relations, 36, 21-28.
- Fox, G. L. (1981). The family's role in adolescent sexual behavior. In T. Ooms (Ed.), Teenage pregnancy in a family context: Implications for policy (pp. 73-130). Philadelphia: Temple University Press.
- Fox, G. L., & Inazu, J. K. (1980). Patterns and outcomes of mother-daughter communication about sexuality. Journal of Social Issues, 36, 7-29.
- Furstenberg, F. F., Moore, K. A., & Peterson, J. L. (1986). Sex education and sexual experience among adolescents. American Journal of Public Health, 75, 1221-1222.

- Gagnon, J., & Simon, W. (1973). Sexual conduct: The social sources of human sexuality. Chicago: Aldine.
- Garber, J., Robinson, N. S., & Valentiner, D. (1997). The relation between parenting and adolescent depression: Self-worth as a mediator. Journal of Adolescent Research, 12, 12-33.
- George, D., & Mallery, P. (1999). SPSS for Windows step by step: A simple guide and reference. Boston: Allyn & Bacon.
- Giovacchini, P. L. (1986). Promiscuity in adolescents and young adults. Midcal Aspects of Human Sexuality, 20, 24-31.
- Glenmary Research Center. (1992). The Glenmary Research Center abstract [Brochure]. Atlanta, GA: Author.
- Grusec, J. E., & Goodnow, J. J. (1994). Impact of parental discipline methods on the child's internalization of values: A reconceptualization of current points of view. Developmental Psychology, 30, 4-19.
- Gunnell, K. L. (1995). The effects of parents' marital type on adolescent sexual behaviors, intentions, and values. Unpublished master's thesis, Utah State University, Logan.
- Hajcak, F., & Garwood, P. (1988). What parents can do to prevent pseudo-hypersexuality in adolescents. Family Therapy, 15, 99-105.
- Halpern, C. T., Udry, J. R., Campbell, B., Suchindran, C., & Mason, G. A. (1994). Testosterone and religiosity as predictors of sexual attitudes and activity among adolescent males: A biosocial model. Journal of Biosocial Science, 26, 217-234.

- Handler, A. (1990). The correlates of the initiation of sexual intercourse among young urban Black females. Journal of Youth and Adolescence, 19, 159-170.
- Hartup, W. W. (1996). The company they keep: Friendships and their developmental significance. Child Development, 67, 1-13.
- Haurin, R. J., & Mott, F. L. (1990). Adolescent sexual activity in the family context: The impact of older siblings. Demography, 27, 537-557.
- Hofferth, S. L. (1987). Factors affecting initiation of sexual intercourse. In S. L. Hofferth and C. D. Hayes (Eds.), Risking the future: Adolescent sexuality, pregnancy, and childbearing (Vol. 2, pp. 7-35). Washington, DC: National Academy Press.
- Holmbeck, G. N., & O'Donnell K. O. (1991). Discrepancies between perceptions of decision making and behavioral autonomy. In R. L. Paikoff (Ed.), Shared views in the family during adolescence (pp. 51-70). San Francisco: Jossey-Bass.
- Holtzman, D., & Rubinson, R. (1995). Parent and peer communication effects on AIDS-related behavior among U.S. high school students. Family Planning Perspectives, 27, 235-240, & 268.
- Hovell, M., & Sipan, C.. (1994). Family influences on Latino and Anglo adolescents' sexual behavior. Journal of Marriage and the Family, 56, 973-986.
- Jensen, L., C., DeGaston, J. F., & Weed, S. E. (1994). Societal and parental influences on adolescent sexual behavior. Psychological Reports, 75, 928-930.
- Jessor, R., Costa, F., Jessor, L., & Donovan, J. E. (1983). Time of first intercourse: A prospective study. Journal of Personality and Social Psychology, 44, 608-626.
- Jessor, S. L., & Jessor, R. (1975). Transition from virginity to nonvirginity among youth: A social-psychological study over time. Developmental Psychology, 11, 473-484.

- Jorgensen, S. R., King, S. L., & Torrey, B. A. (1980). Dyadic and social network influences on adolescent exposure to pregnancy risk. Journal of Marriage and the family, 42, 141-155.
- Kimball, S. W. (1982). The teachings of Spencer W. Kimball. Salt Lake City, UT: Deseret Book.
- Kinnaird, K. L., & Gerrard, M. (1986). Premarital sexual behavior and attitudes toward marriage and divorce among young women as a function of their mothers' marital status. Journal of Marriage and the Family, 48, 757-765.
- Koyle, P. F. C., Jensen, L. C., Olsen, J., & Cundick, B. (1989). Comparison of sexual behaviors among adolescents having an early, middle, and late first intercourse experience. Youth & Society, 20, 461-476.
- LaRossa, R., & Reitzes, D. C. (1993). Symbolic interactionism and family studies. In P. G. Boss, W. J. Doherty, R. LaRossa, W. R. Schumm, & S. K. Steinmetz (Eds.), Sourcebook of family theories and methods: A contextual approach (pp. 135-166). New York: Plenum Press.
- Lauritsen, J. L. (1994). Explaining race and gender differences in adolescent sexual behavior. Social Forces, 72, 859-884.
- Lee, T. R., & Goddard, W. G. (1989). Developing family relationship skills to prevent substance abuse among high risk youth. Family Relations, 38, 301-305.
- Levinson, R. A., Jaccard, J., & Beamer, L. (1995). Older adolescents' engagement in casual sex: Impact of risk perception and psychosocial motivations. Journal of Youth and Adolescence, 24, 349-364.

- Loewenstein, G., & Furstenburg, F. (1991). Is teenage sexual behavior rational? Journal of Applied Social Psychology, 21, 957-986.
- Luster, T., & Small, S. A. (1994). Factors associated with sexual risk-taking behaviors among adolescents. Journal of Marriage and the Family, 56, 622-632.
- Luster, T., & Small, S. A. (1997). Sexual abuse history and number of sex partners among female adolescents. Family Planning Perspectives, 29, 204-211.
- Mauldon, J., & Luker, K. (1996). The effects of contraceptive education on method use at first intercourse. Family Planning Perspectives, 28, 19-24 & 41.
- McCabe, M. P., & Collins, J. K. (1984). Measurement of depth of desired and experienced sexual involvement at different stages of dating. Journal of Sex Research, 20, 377-390.
- McConkie, B. R. (1966). Mormon doctrine. Salt Lake City, UT: Bookcraft.
- Miller, B. C. (1993). Families, science, and values: Alternative views of parenting effects and adolescent pregnancy. Journal of Marriage and the Family, 55, 7-21.
- Miller, B. C. (1998). Families matter: A research synthesis of family influences on adolescent pregnancy. Washington DC: National Campaign to Prevent Teen Pregnancy.
- Miller, B. C., & Bingham, C. R. (1989). Family configuration in relation to the sexual behavior of female adolescents. Journal of Marriage and the Family, 51, 499-506.
- Miller, B. C., Christensen, R. B., & Olson, T. D. (1987a). Adolescent self-esteem in relations to sexual attitudes and behavior. Youth & Society, 19, 93-111.
- Miller, B. C., & Fox, G. L. (1987). Theories of adolescent heterosexual behavior. Journal of Adolescent Research, 2, 269-282.

- Miller, B. C., & Heaton, T. B. (1991). Age at first sexual intercourse and the timing of marriage and childbirth. Journal of Marriage and the Family, *53*, 719-732.
- Miller, B. C., Higginson, R., McCoy, J. K., & Olson, T. D. (1987b). Family configuration and adolescent sexual attitudes and behavior. Population and Environment, *9*, 111-123.
- Miller, B. C., & Jorgensen, S. R. (1988). Adolescent fertility-related behavior and its family linkages. In D. Klein and J. Aldous (Eds.), Social stress and family development (pp. 210-233). New York: Guilford Press.
- Miller, B. C., McCoy, J. K., & Olson, T. D. (1986a). Dating age and stage as correlates of adolescent sexual attitudes and behavior. Journal of Adolescent Research, *1*, 361-371.
- Miller, B. C., McCoy, J. K., Olson, T. D., & Wallace, C. M. (1986b). Parental discipline and control attempts in relation to adolescent sexual attitudes and behavior. Journal of Marriage and the Family, *48*, 503-512.
- Miller, B. C., Monson, B. H., & Norton, M. C. (1995). The effects of forced sexual intercourse on white female adolescents. Child Abuse & Neglect, *19*, 1289-1301.
- Miller, B. C., & Moore, K. A. (1990). Adolescent sexual behavior, pregnancy, and parenting: Research through the 1980s. Journal of Marriage and the Family, *52*, 1025-1044.
- Miller, B. C., Norton, M. C., Curtis, T., Hill, E. J., Schvaneveldt, P., & Young, M. H. (1997). The timing of sexual intercourse among adolescents: Family, peer, and other antecedents. Youth and Society, *29*, 54-83.

- Miller, B. C., Norton, M. C., Fan, X., & Christopherson, C. R. (1998). Pubertal development, parental communication, and sexual values in relation to adolescent sexual behaviors. Journal of Early Adolescence, 18, 27-52.
- Miller, B. C., Norton, M. C., Jenson, G. O., Lee, T. R., Christopherson, C., & King, P. K. (1993). Pregnancy prevention programs. Family Relations, 42, 392-400.
- Moore, K. A., Nord, C. W., & Peterson, J. L. (1989). Nonvoluntary sexual activity among adolescents. Family Planning Perspectives, 21, 110-114.
- Moore, K. A., Peterson, J. L., & Furstenberg, F. F. (1986). Parental attitudes and the occurrence of early sexual activity. Journal of Marriage and the Family, 48, 777-782.
- Mott, F. L., Fondell, M. M., Hu, P. N., Kowaleski-Jones, L., & Menaghan, E. G. (1996). The determinants of first sex by age 14 in a high-risk adolescent population. Family Planning Perspectives, 28, 13-18.
- National Campaign to Prevent Teen Pregnancy. (1996). A prospectus for the National Campaign to Prevent Teen Pregnancy [Brochure]. Washington, DC: Author.
- National Campaign to Prevent Teen Pregnancy. (1997). Press release: Teen girls with father at home less likely to be sexually active and give birth [Brochure]. Washington, DC: Author.
- National Campaign to Prevent Teen Pregnancy. (1998). Press release: Parents and teens on love, sex, and relationships: Research, parent tips, and polling data released today [Brochure]. Washington, DC: Author.
- National Campaign to Prevent Teen Pregnancy. (1999a). Facts and stats [Brochure]. Washington, DC: Author.

- National Campaign to Prevent Teen Pregnancy. (1999b). It only takes once and other key messages [Brochure]. Washington, DC: Author.
- Newcomb, M. D., Huba, G. J., & Bentler, P. M. (1986). Determinants of sexual and dating behaviors among adolescents. Journal of Personality and Social Psychology, 50, 428-438.
- Newcomer, S. F., & Udry, J. R. (1984). Mothers' influence on the sexual behavior of their teenage children. Journal of Marriage and the Family, 46, 477-485.
- Newcomer, S. F., & Udry, J. R. (1985). Parent-child communication and adolescent sexual behavior. Family Planning Perspectives, 17, 169-174.
- Nolin, M. J., & Petersen, K. K. (1992). Gender differences in parent-child communication about sexuality. Journal of Adolescent Research, 7, 59-79.
- O'hannessian, C. M., & Crockett, L. J. (1993). A longitudinal investigation of the relationship between educational investment and adolescent sexual activity. Journal of Adolescent Research, 8, 167-182.
- Ounce of Prevention Fund. (1987). Child sexual abuse: A hidden factor in adolescent sexual behavior: Findings from a statewide survey of teenage mothers in Illinois. Chicago: Illinois Department of Children and Family Services.
- Patterson, G. R. (1986). Performance models for antisocial boys. American Psychology, 41, 432-444.
- Pick, S., & Palos, P. A. (1995). Impact of the family on the sex lives of adolescents. Adolescence, 30, 667-675.
- Pratt, C. C. (1995). Family professionals and family policy: Strategies for influence. Family Relations, 44, 56-62.

- Roche, J. P., & Ramsbey, T. W. (1993). Premarital sexuality: A five-year follow-up study of attitudes and behavior by dating stage. Adolescence, *28*, 67-80.
- Rodgers, J. L. (1983). Family configuration and adolescent sexual behavior. Population and Environment, *6*, 73-83.
- Rodgers, J. L., & Rowe, D. C. (1990). Adolescent sexuality and mildly deviant behavior: Sibling and friendship effects. Journal of Family Issues, *11*, 274-293.
- Rodgers, J. L., Rowe, D. C., & Harris, D. F. (1992). Sibling differences in adolescent sexual behavior: Inferring process models from family composition patterns. Journal of Marriage and the Family, *54*, 142-152.
- Roosa, M. W., Tein, J., Reinholtz, C., & Angelini, P. J. (1997). The relationship of childhood sexual abuse to teenage pregnancy. Journal of Marriage and the Family, *59*, 119-130.
- Russell, D. (1983). Incidence and prevalence of intra and extra familial sexual abuse of female children. Child Abuse & Neglect, *7*, 133-146.
- Sanders, G., & Mullis, R. (1988). Family influences on sexual attitudes and knowledge as reported by college students. Adolescence, *23*, 837-845.
- Shah, F., & Zelnik, M. (1981). Parent and peer influence on sexual behavior, contraceptive use, and pregnancy experience of young women. Journal of Marriage and the Family, *43*, 339-348.
- Small, S. A., & Kerns, D. (1993). Unwanted sexual activity among peers during early and middle adolescence: Incidence and risk factors. Journal of Marriage and the Family, *55*, 941-952.

- Small, S. A., & Luster, T. (1994). Adolescent sexual activity: An ecological, risk-factor approach. Journal of Marriage and the Family, *56*, 181-192.
- Smetana, J. G. (1995). Parenting styles and conceptions of parental authority during adolescence. Child Development, *66*, 299-316.
- Stern, M., Northman, J. E., & Van Slyck, M. R. (1984). Father absence and adolescent problem behaviors: Alcohol consumption, drug use, and sexual activity. Adolescence, *74*, 307-312.
- Stock, J. L., Bell, M. A., Boyer, D. K., & Connell, F. A. (1997). Adolescent pregnancy and sexual risk-taking among sexually abused girls. Family Planning Perspectives, *29*, 200-203 & 227.
- Stryker, S. (1980). Symbolic interactionism: A structural version. Menlo Park, CA: Benjamin/Cummings.
- Sutherland, E. H., & Cressey, D. R. (1978). Principles of criminology (10th ed.). Chicago, IL: Lippincott.
- Thomson, E. (1982). Socialization for sexual and contraceptive behavior: Moral absolutes versus relative consequences. Youth and Society, *14*, 103-128.
- Thornton, A. (1990). The courtship process and adolescent sexuality. Journal of Family Issues, *11*, 239-273.
- Thornton, A., & Camburn, D. (1987). The influence of the family on premarital sexual attitudes and behavior. Demography, *24*, 323-340.
- Tubman, J. G., Windle, M., & Windle, R. C. (1996). The onset and cross-temporal patterning of sexual intercourse in middle adolescence: Prospective relations with behavioral and emotional problems. Child Development, *67*, 327-343.

- Udry, J. R., & Billy, J. O. G. (1987). Initiation of coitus in early adolescence. American Sociological Review, *52*, 841-855.
- Udry, J. R., Billy, J. O. G., Morris, N. M., Groff, T. R., & Raj, M. H. (1985). Serum androgenic hormones motivate sexual behavior in adolescent human males. Fertility and Sterility, *43*, 90-94.
- Utah Kids Count Project. (1999). Measures of child well-being in Utah. Salt Lake City, UT: Utah Children.
- Weinstein, M., & Thornton, A. (1989). Mother-child relations and adolescent sexual attitudes and behavior. Demography, *26*, 563-577.
- Whitbeck, L. B., Conger, R. D., & Kao, M. (1993). The influence of parental support, depressed affect and peers on the sexual behaviors of adolescent girls. Journal of Family Issues, *14*, 261-278.
- Whitbeck, L. B., Hoyt, D., Miller, M., & Kao, M. (1992). Parental support, depressed affect, and sexual experiences among adolescents. Youth and Society, *24*, 166-177.
- Whitbeck, L. B., Simons, R. L., & Kao, M. (1994). The effects of divorced mothers' dating behaviors and sexual attitudes on the sexual attitudes and behaviors of their adolescent children. Journal of Marriage and the Family, *56*, 615-621.
- White, S. D., & DeBlasse, R. R. (1992). Adolescent sexual behavior. Adolescence, *27*, 183-191.
- Widmer, E. D. (1997). Influence of older siblings on initiation of sexual intercourse. Journal of Marriage and the Family, *59*, 928-938.

- Wu, L. L., & Martinson, B. C. (1993). Family structure and the risk of a premarital birth. American Sociological Review, *58*, 210-232.
- Young, E. W., Jensen, L. C., Olsen, J. A., & Cundick, B. P. (1991). The effects of family structure on the sexual behavior of adolescents. Adolescence, *26*, 977-986.
- Zelnik, M., & Shah, F. K. (1983). First intercourse among young Americans. Family Planning Perspectives, *15*, 64-70.
- Zimmerman, S. (1992). Family policies and family well-being: The role of political culture. Thousand Oaks, CA: Sage.

APPENDIX

THE UTAH TEEN SURVEY

The Utah Teen Survey

Welcome to the 1994 Utah Teen Survey in your county. We thank you for your help in filling out this survey.

We would like to know what you do and how you feel about some things in your life. **Your answers are very important to us.**

Please be completely honest in your answers. Your parents and teachers will NOT see them.

You may be confused about some questions. You may ask your teacher for help or give your best answer.

You will probably be able to complete this survey in about 30 minutes. It may take you longer if you like to think a lot about each question. Please answer each question carefully.

**THANK YOU FOR HELPING US LEARN MORE
ABOUT YOU AND UTAH'S OTHER TEENAGERS!**

The Utah Teen Survey

Directions: For each question, please mark a T or an X on the line that best describes you or what you think. There are questions on BOTH sides of the page, so please be sure to answer every question.

ABOUT YOURSELF

Please check the answer that best describes you.

1. What is your sex?

Male
 Female

2. To what racial group do you belong?

African-American (Black)
 White
 Native American Indian
 Hispanic
 Asian
 Other

3. How old are you?

12 16
 13 17
 14 18
 15 19 or older

4. What grade are you in?

6th grade 10th grade
 7th grade 11th grade
 8th grade 12th grade
 9th grade I am not in school

5. What is the marital status of your parents? **Mark only ONE.**

Married
 Remarried
 Divorced
 Separated
 Widowed (One of your parents died)
 They never married
 Not married but living together

6. Who are the people who take care of you? **Mark only ONE.**

Both my parents (biological)
 Remarried or step parents (one biological parent)
 One parent only
 Other relative
 Foster parents
 Other _____

7. Does your father work?

He has a full time job.
 He has a part time job.
 He is unemployed, but looking for work.

8. How much education did your father get?

Give your best guess if you are not sure.

He finished elementary or junior high school.
 He finished high school.
 He finished some college or technical school.
 He graduated from a 2 year college or technical school.
 He has a college degree.
 He has a graduate degree (such as masters, Ph.D., M.D.).

9. Does your mother work?

She has a full time job.
 She has a part time job.
 She is unemployed, but looking for work.
 She is a homemaker/does not work outside the home.

10. How much education did your mother get?

Give your best guess if you are not sure.

She finished elementary or junior high school.
 She finished high school.
 She finished some college or technical school.
 She graduated from 2 year college or technical school.
 She has a college degree.
 She has a graduate degree (such as masters, Ph.D., M.D.)

11. Do you currently have a job for which you are paid? Y N
If yes, how many hours do you work per week _____ hours

12. As you look to the future, how important is it to you to get a good job or be successful in a career?
- a. Not important at all
 - b. Not very important
 - c. Somewhat important
 - d. Very important
13. What are the average grades you usually get in your classes at school?
- ___ Mostly A's
 - ___ About half A's and half B's
 - ___ Mostly B's
 - ___ About half B's and half C's
 - ___ Mostly C's
 - ___ About half C's and half D's
 - ___ Mostly D's
 - ___ Mostly below D
 - ___ I do not attend school.
14. Generally, how well do you like the academic (learning) part of school?
- ___ Dislike it very much
 - ___ Generally dislike it
 - ___ Neutral
 - ___ Generally like it
 - ___ Like it very much
15. Generally, how well do you like the social (friends) part of school?
- ___ Dislike it very much
 - ___ Generally dislike it
 - ___ Neutral
 - ___ Generally like it
 - ___ Like it very much
16. My teachers really care about me.
- ___ Strongly disagree
 - ___ Disagree
 - ___ Not sure
 - ___ Agree
 - ___ Strongly agree
17. During the past 4 weeks, how often have you skipped a class? (sluffed)
- a. 0
 - b. 1 - 2 times
 - c. 3 - 5 times
 - d. 6 - 10 times
 - e. more than 10 times

18. How important is it to your parents that you continue your education?
- Not important at all
 - Somewhat important
 - Quite important, but up to me
 - Very important
19. As you look to the future, how important is it to you to continue your education?
- Not important at all
 - Somewhat important
 - Very important
20. How long do you plan to go to school?
- ___ I would like to quit school as soon as I can
- ___ I plan to finish high school, then stop
- ___ I plan to go to trade (vocational) school when I graduate
- ___ I plan to go to college
- ___ I plan to get an additional degree after college (for example become a doctor or lawyer)

FEELINGS ABOUT YOUR FAMILY

For each of the following statements, tell how well it describes your family by marking the appropriate column.

		Does describe at all	Barely describes	Somewhat describes	Generally describes	Very Well describes
1.	Members of my family express affection to each other.	1.	___	___	___	___
2.	Family members discuss their beliefs and ideas with each other.	2.	___	___	___	___
3.	Family members try to understand each other's feelings.	3.	___	___	___	___
4.	We can calmly discuss problems with each other.	4.	___	___	___	___
5.	My family is able to cope with stress.	5.	___	___	___	___
6.	A lot of arguing occurs between family members.	6.	___	___	___	___
7.	My family is able to resolve conflicts.	7.	___	___	___	___
8.	My family has concern for each other.	8.	___	___	___	___

9. As you look at the future, how important is it to you to have a good marriage and a happy family life?
- Not important at all
 - Somewhat important
 - Quite important
 - Very important

RELATIONSHIP WITH YOUR MOTHER

Please indicate the following about the relationship between you and your mother or adult female who takes care of you.

		Very Often	Often	Sometimes	Rarely	Never
10.	She gives me as much freedom as I want.	10. _____	_____	_____	_____	_____
11.	She tells me how good I should feel when I do what is right.	11. _____	_____	_____	_____	_____
12.	She tells me how much she loves me.	12. _____	_____	_____	_____	_____
13.	She lets me go out with my friends about any time I want.	13. _____	_____	_____	_____	_____
14.	She explains to me how good she feels when I do something she likes.	14. _____	_____	_____	_____	_____
15.	She wants to control whatever I do.	15. _____	_____	_____	_____	_____
16.	She lets me decide things for myself.	16. _____	_____	_____	_____	_____
17.	She likes to talk to me and be with me much of the time.	17. _____	_____	_____	_____	_____
18.	She shows love toward me.	18. _____	_____	_____	_____	_____

RELATIONSHIP WITH YOUR FATHER

Please indicate the following about the relationship between you and your father or adult male who takes care of you.

		Very Often	Often	Sometimes	Rarely	Never
19.	He gives me as much freedom as I want.	19. _____	_____	_____	_____	_____
20.	He tells me how good I should feel when I do what is right.	20. _____	_____	_____	_____	_____
21.	He tells me how much he loves me.	21. _____	_____	_____	_____	_____

- | | | | | | | | |
|-----|---|-----|-----|-----|-----|-----|-----|
| 22. | He lets me go out with my friends about any time I want. | 22. | ___ | ___ | ___ | ___ | ___ |
| 23. | He explains to me how good he feels when I do something he likes. | 23. | ___ | ___ | ___ | ___ | ___ |
| 24. | He wants to control whatever I do. | 24. | ___ | ___ | ___ | ___ | ___ |
| 25. | He lets me decide things for myself. | 25. | ___ | ___ | ___ | ___ | ___ |
| 26. | He likes to talk to me and be with me much of the time. | 26. | ___ | ___ | ___ | ___ | ___ |
| 27. | He shows love toward me. | 27. | ___ | ___ | ___ | ___ | ___ |

RELIGION

- | | | Strongly Agree | Agree | Not Sure | Disagree | Strongly Disagree | |
|-----|---|----------------|-------|----------|----------|-------------------|-----|
| 28. | Religion is important to me. | 28. | ___ | ___ | ___ | ___ | ___ |
| 29. | How often do you attend worship services? | | | | | | |
| | ___ once a week or more | | | | | | |
| | ___ about 2 or 3 times a month | | | | | | |
| | ___ about once a month | | | | | | |
| | ___ several times a year | | | | | | |
| | ___ almost never | | | | | | |

Please indicate how strongly you agree or disagree with each statement.

- | | | Strongly Agree | Agree | Disagree | Strongly Disagree | |
|----|---|----------------|-------|----------|-------------------|-----|
| 1. | There is really no way I can solve some of the problems I have. | 1. | ___ | ___ | ___ | ___ |
| 2. | Sometimes I feel that I'm being pushed around in life. | 2. | ___ | ___ | ___ | ___ |
| 3. | I have little control over the things that happen to me. | 3. | ___ | ___ | ___ | ___ |
| 4. | I can do just about anything I really set my mind to. | 4. | ___ | ___ | ___ | ___ |
| 5. | I often feel helpless in dealing with the problems of life. | 5. | ___ | ___ | ___ | ___ |
| 6. | What happens to me in the future mostly depends on me. | 6. | ___ | ___ | ___ | ___ |
| 7. | There is little I can do to change many of the important things in my life. | 7. | ___ | ___ | ___ | ___ |

8. I am curious and exploring, open to new experiences. 8. _____
9. I am active, energetic, and lively. 9. _____
10. I rely on myself more than others. 10. _____
11. I hate to wait for things I want. 11. _____
12. I quickly change moods. 12. _____
13. I am easily irritated by little things. 13. _____
14. I go against what people ask me to do. 14. _____
15. There is nobody I can talk to about my problems. 15. _____
16. Most of the time I feel it doesn't pay to try hard because things never turn out. 16. _____
17. How often in the last few months did you feel so depressed, worthless or discouraged that you were not able to do your work?
- _____ Never
_____ Once or twice
_____ A few times
_____ Many times
_____ Very often
18. Have you ever seriously considered killing yourself?
- _____ Never
_____ Once or twice
_____ Several times
_____ Many times
_____ All of the time
19. Have you ever actually tried to kill yourself?
- _____ Never
_____ Once
_____ Two or three times
_____ Four or five times
_____ Other

ALCOHOL AND OTHER DRUG USE

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

- | | | | | | | | |
|----|---|----------------|------------------|-----------------------|------------------------|-----------------------|--------------------|
| 1. | Smoking Tobacco
(cigarettes) | Never
_____ | Used to
_____ | 2-3 per year
_____ | 1-3 per month
_____ | 1-2 per week
_____ | Every day
_____ |
| 2. | Chewing Tobacco
or Snuff _____ | Never
_____ | Used to
_____ | 2-3 per year
_____ | 1-3 per month
_____ | 1-2 per week
_____ | Every day
_____ |
| 3. | Beer/Wine
(other than a few
sips for religion) | Never
_____ | Used to
_____ | 2-3 per year
_____ | 1-3 per month
_____ | 1-2 per week
_____ | Every day
_____ |
| 4. | Hard Liquor | Never
_____ | Used to
_____ | 2-3 per year
_____ | 1-3 per month
_____ | 1-2 per week
_____ | Every day
_____ |
| 5. | Marijuana | Never
_____ | Used to
_____ | 2-3 per year
_____ | 1-3 per month
_____ | 1-2 per week
_____ | Every day
_____ |
| 6. | Cocaine, Crack,
or Ice | Never
_____ | Used to
_____ | 2-3 per year
_____ | 1-3 per month
_____ | 1-2 per week
_____ | Every day
_____ |
| 7. | Other Drugs
(uppers, downers,
"ludes", valium,
LSD, heroin, steroids,
nitrous oxide, inhalants,
paint thinner, glue) | Never
_____ | Used to
_____ | 2-3 per year
_____ | 1-3 per month
_____ | 1-2 per week
_____ | Every day
_____ |
- PLEASE LIST:** _____

8. What is your experience with cigarettes?

- | | |
|---------------------------------------|--|
| _____ I have never tried a cigarette. | _____ I first tried smoking at 13-14 |
| _____ Less than 9 years old. | _____ I first tried smoking at 15-16 |
| _____ I first tried smoking at 9-10 | _____ I first tried smoking at 17 or older |
| _____ I first tried smoking at 11-12 | |

9. What is your experience with alcohol (beer, wine, or hard liquor), not counting a few sips for religious purposes?

- | | |
|--------------------------------------|--|
| _____ I have never tried alcohol. | _____ I first tried alcohol at 13-14 |
| _____ Less than 9 years old. | _____ I first tried alcohol at 15-16 |
| _____ I first tried alcohol at 9-10 | _____ I first tried alcohol at 17 or older |
| _____ I first tried alcohol at 11-12 | |

10. At what age did you first smoke marijuana?
- I have never tried marijuana.
 Less than 9 years old. 13-14
 9-10 15-16
 11-12 17 or older
11. If you drink, how often do you drink to get drunk?
- I don't drink.
 I never drink to get drunk.
 I rarely drink to get drunk.
 I sometimes drink to get drunk.
 I drink to get drunk most of the time.
12. If you drink alcohol, where do you most often do it?
- I don't drink
 At my home without parents' permission
 At my home with parents' permission
 At a friend's home without their parents' permission
 At a friend's home with their parents' permission
 At a party
 In a car, truck, or van
 Outside in a park or hangout
 In a bar, tavern or restaurant

WHY YOU DON'T DRINK ALCOHOL

Which of the following reasons would cause you NOT to drink alcohol? If not sure, give your best answer.

REASONS <u>NOT</u> TO DRINK...		Strongly Agree	Agree	Disagree	Strongly Disagree
13.	I don't want to mess up my body.	13.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.	My parents won't approve.	14.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.	It's against the law and I might get in trouble.	15.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.	If I am caught, I may not be able to participate in athletics or extra-curricular activities.	16.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17.	I don't feel old enough to handle it.	17.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18.	I would feel guilty if I did.	18.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19.	It might mess up my future plans for college, school or a career.	19.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- | | | | | | | |
|-----|---|-----|-----|-----|-----|-----|
| 20. | I don't like how it makes me feel. | 20. | ___ | ___ | ___ | ___ |
| 21. | I think it is morally wrong or against my religion. | 21. | ___ | ___ | ___ | ___ |
| 22. | Most of my friends <u>don't</u> drink. _____ | 22. | ___ | ___ | ___ | ___ |

WHY YOU DRINK ALCOHOL

Which of the following are reasons that you MIGHT drink alcohol?

Strongly Agree Agree Disagree Strongly Disagree

REASONS TO DRINK...

- | | | | | | | |
|-----|---|-----|-----|-----|-----|-----|
| 23. | It helps me relax or deal with stress. | 23. | ___ | ___ | ___ | ___ |
| 24. | People I admire or look up to make it seem like a "cool" thing to do. | 24. | ___ | ___ | ___ | ___ |
| 25. | Drinking makes me feel good. | 25. | ___ | ___ | ___ | ___ |
| 26. | My friends want me to. | 26. | ___ | ___ | ___ | ___ |
| 27. | It makes me feel more grown up. | 27. | ___ | ___ | ___ | ___ |
| 28. | Drinking helps me forget my problems. | 28. | ___ | ___ | ___ | ___ |
| 29. | Drinking helps me have more fun. | 29. | ___ | ___ | ___ | ___ |
30. Does your father or an adult male live with you?
- ___ Yes
___ No (skip to question 33)
31. How would you describe his use of alcohol?
- ___ He never drinks alcohol.
___ He drinks alcohol only rarely.
___ He drinks alcohol sometimes.
___ He drinks alcohol often.
___ He drinks alcohol so much that it seriously disrupts his work and family.
32. How would you describe his use of drugs (prescription or illegal)?
- ___ He only uses them when necessary or as prescribed by a doctor.
___ Occasionally uses them more than necessary.
___ Sometimes uses them more than necessary.
___ Often uses them more than necessary.

33. Does your mother or an adult female live with you?
- Yes
 No (skip to next section)
34. How would you describe her use of alcohol?
- She never drinks alcohol.
 She drinks alcohol only rarely.
 She drinks alcohol sometimes.
 She drinks alcohol often.
 She drinks alcohol so much that it seriously disrupts her work and family.
35. How would you describe her use of drugs (prescription or illegal)?
- She only uses them when necessary or as prescribed by a doctor.
 Occasionally uses them more than necessary.
 Sometimes uses them more than necessary.
 Often uses them more than necessary.

PERSONAL ISSUES AND PROBLEMS

1. If I were having a serious personal problem, there is an adult in my school who I would feel OK talking to.
- Strongly Agree
 Agree
 Disagree
 Strongly Disagree
2. If I had a problem, there are neighbors who I could count on to help me.
- Strongly Agree
 Agree
 Disagree
 Strongly Disagree
3. If you were having a personal problem and needed someone to talk to, which of the following people would you be willing to talk to?
- MARK ALL** of those that you would talk to about a personal problem.
- | | |
|--|--|
| <input type="checkbox"/> Teacher or coach | <input type="checkbox"/> Older brother/sister |
| <input type="checkbox"/> Employer/boss | <input type="checkbox"/> Grandparent or other adult relative |
| <input type="checkbox"/> School counselor | <input type="checkbox"/> Adult friend |
| <input type="checkbox"/> Parent or stepparent | <input type="checkbox"/> One of my friends |
| <input type="checkbox"/> Minister, priest or rabbi | |

4. If you were having a personal problem and needed someone to talk to, which of the following people would you MOST likely go to?
MARK ONLY ONE.

- | | |
|--|--|
| <input type="checkbox"/> Teacher or coach | <input type="checkbox"/> Older brother/sister |
| <input type="checkbox"/> Employer/boss | <input type="checkbox"/> Grandparent or other adult relative |
| <input type="checkbox"/> School counselor | <input type="checkbox"/> Adult friend |
| <input type="checkbox"/> Parent or stepparent | <input type="checkbox"/> One of my friends |
| <input type="checkbox"/> Minister, priest or rabbi | |

SEXUALITY

1. Does your mother or adult female live with you?

- Yes
 No (skip to question 6)

- | | Strongly Agree | Agree | Not Sure | Disagree | Strongly Disagree |
|--|----------------|-------|----------|----------|-------------------|
| 2. She is willing to answer any questions I have about sexual matters. | _____ | _____ | _____ | _____ | _____ |
| 3. She is too embarrassed to talk to me about sex. | _____ | _____ | _____ | _____ | _____ |
| 4. She starts discussions with me about sex. | _____ | _____ | _____ | _____ | _____ |
| 5. I start discussions with her about sex. | _____ | _____ | _____ | _____ | _____ |
| 6. Does your <u>father</u> or <u>adult male</u> live with you? | | | | | |

- Yes
 No (skip to question 11)

- | | Strongly Agree | Agree | Not Sure | Disagree | Strongly Disagree |
|--|----------------|-------|----------|----------|-------------------|
| 7. He is willing to answer any questions I have about sexual matters. | _____ | _____ | _____ | _____ | _____ |
| 8. He is too embarrassed to talk to me about sex. | _____ | _____ | _____ | _____ | _____ |
| 9. He starts discussions with me about sex. | _____ | _____ | _____ | _____ | _____ |
| 10. I start discussions with him about sex. | _____ | _____ | _____ | _____ | _____ |
| 11. Some of the questions use the term sexual intercourse or having sex. This is also called going all the way, and is the sexual act by which babies are created. Here are some things you may or may not have done with a person of the opposite sex. For questions A-J, circle your response at the right of each question. | | | | | |

Have you ever:		<u>Yes</u>	<u>No</u>
A.	Gone out alone with a person of the opposite sex (boyfriend or girlfriend)? At what age _____?	Y	N
B.	Kissed a person of the opposite sex? (boyfriend or girlfriend)	Y	N
C.	Made out (kissed for a long time)?	Y	N
D.	Fondled their body?	Y	N
	Touch Their Breasts	Y	N
	Touch Their Sex Organ	Y	N
E.	Allowed that person to fondle your body?	Y	N
F.	Had sexual intercourse?	Y	N
G.	Have you had sexual intercourse during the <u>past three months</u> ? Y	Y	N
12.	If you date, how often do you date?		
	a. I don't date		
	b. Less than once a month		
	c. Twice a month		
	d. 2 - 3 times a month		
	e. Once a week		
	e. More than once a week		
12a.	At what age did you start dating? _____		
13.	Do your parents have rules about who, when, where or how often you date?		
	a. No rules		
	b. One or two		
	c. Several rules		
	d. Many rules		
14.	Do you feel the rules your parents have set about dating are fair?		
	a. Not fair at all		
	b. Somewhat fair		
	c. Reasonable, but negotiable		
	d. Very fair		
15.	Do you feel most of your peers have similar dating rules?	Y	N

16. Do you have a steady boyfriend or girlfriend? If so, how much time do you spend with this person?

- No, I don't have a steady boyfriend or girlfriend.
 Yes, I do. I spend about 1-5 hours with him/her each week.
 Yes, I do. I spend about 5-10 hours with him/her each week.
 Yes, I do. I spend about 10-20 hours with him/her each week.
 Yes, I do. I spend more than 20 hours each week with him/her.

- 16a. At what age did you start going steady? _____

REASON WHY NOT TO HAVE SEX

Which of the following reasons would cause you **NOT** to have sex? If not sure, give your best answer.

REASONS <u>NOT</u> TO HAVE SEX...		Strongly Agree	Agree	Disagree	Strongly Disagree
1.	I don't want to get a disease like AIDS or VD.	1.	_____	_____	_____
2.	I think it is morally wrong.	2.	_____	_____	_____
3.	It is against my religion.	3.	_____	_____	_____
4.	My parents don't approve.	4.	_____	_____	_____
5.	I don't feel old enough to handle it.	5.	_____	_____	_____
6.	My friends won't approve.	6.	_____	_____	_____
7.	My partner or I might get pregnant.	7.	_____	_____	_____
8.	I am not in love with anyone yet.	8.	_____	_____	_____
9.	I would feel guilty.	9.	_____	_____	_____
10.	It might mess up my future plans for college, school or a career.	10.	_____	_____	_____
11.	I have decided to wait until I am married.	11.	_____	_____	_____
12.	I feel that having sex as a teenager would make it harder to have a good marriage in the future.	12.	_____	_____	_____
13.	Even if there is no pregnancy, having sex can cause a lot of other problems for unmarried teenagers.	13.	_____	_____	_____
14.	The best way to avoid unwanted teen pregnancies and STD Sexual Transmitted Diseases is to save sex for marriage.	14.	_____	_____	_____

15. Most of my friends will wait until marriage before having sexual intercourse. 15.

WHY YOU MIGHT HAVE SEX

Which of the following are reasons that you MIGHT have sex?

REASONS YOU MIGHT HAVE SEX...

- | | | Strongly Agree | Agree | Disagree | Strongly Disagree |
|-----|---|------------------------------|--------------------------|--------------------------|--------------------------|
| 16. | It would help me forget my problems. | 16. <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 17. | I <u>want</u> to get pregnant or become a father. | 17. <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 18. | Sex is a way to get or keep a boyfriend or girlfriend. | 18. <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 19. | It would make me feel good. | 19. <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 20. | It would make me feel loved. | 20. <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 21. | I want to fit in with my friends. | 21. <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 22. | To show my parents that I can do what I want. | 22. <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 23. | I want to see what it's like. | 23. <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 24. | It would make me feel more confident and sure of myself. | 24. <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 25. | People I admire or look up to make it seem like a "cool" thing to do. | 25. <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 26. | It is okay for unmarried teenagers to have sexual intercourse as long as they use birth control. | 26. <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 27. | I just don't believe that all the bad things that people say could happen would happen to me if I had sex. | 27. <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 28. | Most of my friends approve of people my age having sex. | 28. <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 29. | I think most kids my age have gone all the way (sexual intercourse). | 29. <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 30. | There is pressure from my friends to go all the way. | 30. <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 31. | Sometimes, people use force to do sexual things to others or use force to get others to do sexual things to them. Has anyone ever done this to you? | | | | |

No (If no, please go to question 34)

Yes

32. When were you forced to do sexual things with another person? (Mark ALL that apply.)
- I am currently being forced to do sexual things.
 In the past 2 years.
 2-5 years ago.
 More than 5 years ago.
33. Who has forced you to do sexual things? (Mark ALL that apply.)
- | | |
|--|---|
| <input type="checkbox"/> My mother | <input type="checkbox"/> Other relative (Grandparent/aunt/uncle) |
| <input type="checkbox"/> My father | <input type="checkbox"/> Friend, neighbor, caretaker (babysitter) |
| <input type="checkbox"/> My stepmother | <input type="checkbox"/> A stranger |
| <input type="checkbox"/> My stepfather | <input type="checkbox"/> Teacher |
| <input type="checkbox"/> Brother or sister | <input type="checkbox"/> Boyfriend or girlfriend |
34. Have you ever been physically abused by an adult (for example, beat up, hit with an object, kicked, or some other form of physical force)?
- No (If no, skip #35 and #36)
 Yes
35. When were you physically abused? (Mark ALL that apply.)
- I am currently being physically abused.
 In the past 2 years.
 2-5 years ago.
 More than 5 years ago.
36. Who has physically abused you? (Mark ALL that apply.)
- | | |
|--|---|
| <input type="checkbox"/> My mother | <input type="checkbox"/> Other relative (Grandparent/aunt/uncle) |
| <input type="checkbox"/> My father | <input type="checkbox"/> Friend, neighbor, caretaker (babysitter) |
| <input type="checkbox"/> My stepmother | <input type="checkbox"/> A stranger |
| <input type="checkbox"/> My stepfather | <input type="checkbox"/> Teacher |
| <input type="checkbox"/> Brother or sister | <input type="checkbox"/> Boyfriend or girlfriend |
37. Have you received information about sex from any of the following? (Check ALL that apply)
- Parents
 Boy/Girl friend
 Other kids at school
 Class teacher at school (other than formal class)
 Printed educational material (book, pamphlet, etc.)
 Family doctor or nurse
 Public Family Planning Clinic
 Brother, sister or other family member
 Who _____
39. If someone your age wanted to get birth control, how difficult do you think it would be?
- a. Not difficult at all
 b. Somewhat difficult
 c. Very difficult

40. Do you believe sexual urges can be controlled?
- Never
 - Sometimes
 - Most of the time
 - Always
41. If someone tried to get you to go all the way with them during the next year, you would
- Definitely not do it
 - Not sure what I would do
 - Probably would do it
 - Definitely do it
42. How likely is it that you will have sexual intercourse at any given time before you get married?
- I am certain I won't
 - I probably won't
 - Probably will
 - I am certain that I will
43. How important is it to you to become a parent someday?
- Very important
 - Somewhat important
 - Haven't thought about it
 - Not important at all
44. Would you consider having a child even if you were not married?
- Definitely not consider it
 - I am not sure
 - Probably would consider it
 - Definitely would consider it
45. If you did have a child while unmarried, how would this effect your life?
- Would make my life more difficult
 - Would not change my life from what it is now
 - I would be better off than I am now
46. If I had a friend who became sexually involved, I would:
- Tell them to stop having sex now and wait until marriage
 - Tell them to use birth control and precautions
 - Not say anything to them

OTHER BEHAVIORS

Please let us know how much you are involved in the following activities.

During the **past year** have you:

	Never	One time	Two times	Three times	More than four times
1. Taken something from a store on purpose without paying for it (shoplifting)?	1. _____	_____	_____	_____	_____
2. Stolen anything worth <u>less</u> than \$50.00 (not counting shoplifting)?	2. _____	_____	_____	_____	_____
3. Stolen anything worth <u>more</u> than \$50.00 (not counting shoplifting)?	3. _____	_____	_____	_____	_____
4. Broken into another person's house or business to do something illegal?	4. _____	_____	_____	_____	_____
5. Used any weapons (e.g., a gun, club or knife) on another person to hurt them?	5. _____	_____	_____	_____	_____
6. Used any part of your body (e.g., fists or feet) on another person to hurt them?	6. _____	_____	_____	_____	_____
7. Used any weapon to frighten or hurt someone so they would give you money or something you wanted?	7. _____	_____	_____	_____	_____
8. Used any part of your body to frighten or hurt someone so that they would give you something you wanted?	8. _____	_____	_____	_____	_____
9. Used force or threats to make another person have sex with you?	9. _____	_____	_____	_____	_____
10. Taken an automobile, truck, bus or motorcycle without the owner's permission?	10. _____	_____	_____	_____	_____
11. Been picked up (not just stopped) by the police?	11. _____	_____	_____	_____	_____
12. Run away from home?	12. _____	_____	_____	_____	_____
13. Purposely damaged or destroyed public or private property that didn't belong to you?	13. _____	_____	_____	_____	_____
14. During the last four weeks , how many times have you missed school because you skipped or "cut"?	14. _____	_____	_____	_____	_____
15. How many times have you been sent to the principal's office at school during the past six months?	15. _____	_____	_____	_____	_____
16. How many times have you got in trouble at school and your parents were called during the past six months ?	16. _____	_____	_____	_____	_____

17. How many times have you been suspended or expelled from school during the **past six months**? 17. _____
18. Are you involved with a gang?
____ No (If no, skip to #20)
____ Yes
19. How often do you do things with this gang?
____ I rarely do things with them.
____ I sometimes do things with them.
____ I often do things with them.
____ I always do things with them.
20. Have you ever brought a gun to school?
____ Yes
____ No
21. Have you ever brought other weapons to school?
____ Yes
____ No
22. Do any of your friends bring guns or other weapons to school?
____ Yes
____ No
23. As far as you are concerned, is the number of things for teenagers to do in your community: (**Mark only ONE.**)
____ Extremely limited (nothing to do)
____ Limited (not much to do)
____ Some things to do
____ There's mostly enough to do
____ There's plenty to do
24. I am concerned about the violence and problems in my community and elsewhere. I feel my attitude and actions can make a difference in stopping the problems.
- a. I strongly agree
b. I somewhat agree
c. I don't know if I can make a difference
d. I strongly disagree
e. I don't think anyone can make a difference

25. Which adult has had the most influence on your life, all things considered? (Mark **ONLY one**)

<input type="checkbox"/> Mother	<input type="checkbox"/> Grandparent
<input type="checkbox"/> Father	<input type="checkbox"/> Other relative _____
<input type="checkbox"/> Stepmother	<input type="checkbox"/> Teacher, coach, or school counselor
<input type="checkbox"/> Stepfather	<input type="checkbox"/> Minister, priest or rabbi
<input type="checkbox"/> Aunt or Uncle	<input type="checkbox"/> Other _____

- | | | | Strongly
Agree | Agree | Disagree | Strongly
Disagree |
|-----|---|-----|-------------------|-------|----------|----------------------|
| 26. | In my life, people have been sensitive to my needs. | 26. | _____ | _____ | _____ | _____ |
| 27. | I feel safe in my community. | 27. | _____ | _____ | _____ | _____ |
| 28. | I feel safe in my home. | 28. | _____ | _____ | _____ | _____ |
| 29. | I feel safe at school. | 29. | _____ | _____ | _____ | _____ |
| 30. | My life has been very painful. | 30. | _____ | _____ | _____ | _____ |
| 31. | I think most people care about each other. | 31. | _____ | _____ | _____ | _____ |
| 32. | I would help a stranger. | 32. | _____ | _____ | _____ | _____ |
| 33. | Sometimes I feel angry enough to destroy things. | 33. | _____ | _____ | _____ | _____ |

YOUR TURN TO TALK

Please list some of the things that are most stressful for you or that you worry about the most:

Please list some of the things that you enjoy most in your life.

You have now completed the survey. Thank you very much!

VITA

BRUCE HALL MONSON

PERSONAL

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EDUCATION

Doctor of Philosophy, Family Life/Family and Human Development. Utah State University, Logan, Utah, 1999.

Master of Education, Secondary Education. Utah State University, Logan, Utah, 1983.

Bachelor of Science, Secondary Education, Cum Luade. Utah State University, Logan, Utah, 1979.

Associate of Science, Magna Cum Laude. Snow College, Ephraim, Utah, 1976.

PROFESSIONAL EMPLOYMENT

LDS Seminary Instructor. Religion instructor, Richmond LDS Seminary, Richmond, Utah, 1997 – present.

LDS Seminary Instructor. Religion instructor, Hyrum LDS Seminary, Hyrum, Utah, 1992 – 1997.

LDS Institute Instructor. Religion instructor, LDS Institute of Religion, Pullman, Washington, 1991-1992.

LDS Seminary Principal and Institute Instructor. Religion instructor Moses Lake LDS Seminary and Institute, Moses Lake, Washington, 1987 – 1991.

LDS Seminary Instructor. Religion instructor, Garland LDS Seminary, Garland, Utah, 1979 – 1987.

SCHOLARLY PUBLICATIONS

Monson, B.H. (1999). Four levels of sexual involvement, and their association with dating patterns, family relationships, and other related factors. Doctoral Dissertation, Department of Family Life/Family and Human Development, Utah State University, Logan, Utah.

Miller, B.C., Monson, B.H., & Norton, M.C. (1995). The effects of forced sexual Intercourse on white female adolescents. Child Abuse & Neglect, 19, 1289-1301.

LECTURES/PRESENTATIONS

“Teaching Morality and Marriage: Helping Young People Avoid the Pitfalls of Immorality”. Presentation given at LDS Church Education Symposium to approximately 1400 Seminary and Institute instructors on dating and marriage, Brigham Young University, Provo, Utah, 1999.

COMMUNITY SERVICE

Sigma Gamma Chi Fraternity Advisor. Advisor of LDS Fraternity at Utah State University, 1995 – present.

Assistant Tennis Coach. Sky View High School, Smithfield, Utah, 1999.

Cache Valley Mentoring Program Evaluator. Involved in creating a demonstration program, designed to address anti-social problems associated with at-risk youth and their families. Involved in developing a mentoring program, training mentors and doing a preliminary evaluation of the Cache Valley Mentoring program. This program has since evolved into the “Youth and Families with Promise Program” that is now functioning in 8 of Utah’s counties. Served from 1993-1996.