

Beyond Abstinence: Levels of Adolescent Sexual Maturity

and Social Competence

Moira Cullen

Distinguished Majors Thesis

University of Virginia

Advisor: Joseph P. Allen

Second Reader: Robert E. Emery

Running head: BEYOND ABSTINENCE: LEVELS OF ADOLESCENT

Abstract

Although adolescent sexual activity is a topic of much concern, research has concentrated on the negative correlates of teenage sexual activity. This paper examines the differences between adolescents who engage in risky sexual intercourse versus those who engage in mature sexual activity, using a maturity scale that encompasses frequency and type of contraceptive use, number of sexual partners, and frequency of intercourse. Analyses are based on self and peer reports of 22 male and 26 female sexually active teenagers out of a sample of 138 moderately at-risk adolescents surveyed. Results indicate that adolescents who are sexually active do not appear to be less competent than adolescents who abstain from sexual intercourse. Furthermore, adolescents who engage in more mature sexual activity are perceived as more likeable and less aggressive by their peers, as compared to teenagers engaging in risky sexual activity. Mature sexual behavior was also predicted by positive self-reports of social competence as broadly defined, although dimensions related to self esteem were not related to maturity. These findings suggest that adolescents who are sexually active are not less socially competent than abstaining teenagers, and that, among those who are sexually active, teenagers engaging in mature sexual activity are more competent than adolescents who engage in risky sexual behaviors.

Beyond Abstinence: Levels of Adolescent Sexual Maturity and Social Competence

In recent years, adolescent sexual activity has been the topic of much concern within American society. Societal interest in this phenomenon has expanded as the rate of teenagers engaging in sexual activity has risen; the percentage of adolescents, especially females, who report being sexually active has generally increased over the last 20 years (Voydanoff & Donnelly, 1990; Rodgers & Rowe, 1990; Brooks-Gunn & Furstenberg, 1989). An adolescent is considered sexually active if he or she has experienced sexual intercourse at least once (Voydanoff & Donnelly, 1990); in 1988, 81% of both white and black women in the United States were sexually active by age 19 (Voydanoff & Donnelly, 1990; Moore, 1989). For males, 82% of Hispanic teens, 85% of Caucasian teens, and 96% of African American adolescents reported being sexually active by age 19 (Sonenstein, Pleck, & Ku, 1989).

Considering the risks of early sexual activity, society's concern is not unfounded. One of the risks which generates the most concern is teenage pregnancy. Of industrialized nations, the United States has one of the highest frequencies of teenage pregnancy (Jones, Forrest, Henshaw, Silverman, & Torres, 1988; Voydanoff & Donnelly, 1993; Zabin & Hayward, 1993), with over one million adolescents becoming pregnant every year (Alan Guttmacher Institute, 1991; Children's Defense Fund, 1993). Furthermore, the majority of these pregnancies (90% among unmarried teenagers) are unexpected (Zelnik & Kantner, 1980; Forrest & Singh, 1990; AGI, 1993), and there has been a substantial increase in the number of terminated teenage pregnancies (Zabin & Hayward, 1993; Jones, Forrest, Goldman, Henshaw, Lincoln, Rosoff, Westoff & Wulf, 1985; 1986).

Popular opinion regarding the detrimental effects of teen parenthood is supported by

empirical research. Specifically, several negative outcomes have been cited, including loss of wages and career opportunities, increased welfare dependency, interrupted education, single parenthood, psychological distress, increased medical complications during childbirth, and high likelihood of further unintended pregnancies (Chilman, 1988; Voydanoff & Donnelly, 1993; McLaughlin & Micklin, 1983; Zabin & Hayward, 1993). Children born to adolescents are also at risk for various negative outcomes, including low birth weight, infant mortality, and other health risks, as well as long term difficulties such as intellectual deficits, educational achievement and problem behaviors (Makinson, 1985; Voydanoff & Donnelly, 1993). Teenage childbearing is economically expensive as well. It has been estimated that the first child born to a teenager in 1985 will cost the United States government at least \$15,000 by the time that child reaches the age of twenty (Burt, 1986).

While some of this research has been criticized for neglecting to separate the effects of poverty and unstable family structure from the specific effects of teenage parenthood, the relationship between adolescent childbirth and negative outcomes has received substantial empirical support (Brooks-Gunn & Furstenberg, 1986; Furstenberg, Brooks-Gunn & Morgan, 1987; Hayes, 1987; Hofferth, 1987). However, past research has found that potentially negative outcomes of teenage childbearing are reduced or avoided when the teen's family provides child care and financial support; this is more likely to occur in African American families (Furstenberg, Brooks-Gunn & Morgan, 1987).

Regardless of whether adolescent sexual activity results in pregnancy, the risk of procuring a sexually transmitted disease (STD) is also worthy of concern. Despite the misconceived notion that STDs are a problem concentrated within the adult population (DiClemente, 1990; Bell & Hein, 1984; Hein, 1987), national data indicates that sexually active

females between the ages of 10 - 19 years have the highest rate of gonorrheal infection, as compared to older age groups (DiClemente, 1990; Zabin & Hayward, 1993). Similar findings for syphilis and chlamydia show that these STDs also have a higher prevalence among adolescents. In fact, research indicates that the rate of STDs *decreases* exponentially after age nineteen (DiClemente, 1990; Bell & Holmes, 1984). Compared to Caucasian and Hispanic teens, African-American adolescents have an even higher rate of STDs, especially in the cases of gonorrhea, pelvic inflammatory disease, and syphilis (DiClemente, 1990). The Human Immunodeficiency Virus (HIV) is presently uncommon among adolescents (DiClemente, 1990; National Research Council (NRC), 1990); however, given the startling rates of adolescent STDs, it is a substantial concern. Furthermore, because the median incubation period of HIV may be longer than eight years, (NRC, 1990), it is likely that fewer than one half of adolescents who contract HIV at age 13, and even fewer of those who contract the virus during late adolescence, will actually be diagnosed during their teenage years (NRC, 1990). Therefore, despite the relatively few teenagers who have been diagnosed as HIV positive, AIDS is an additional risk of adolescent sexual activity that must be considered.

It is also important to consider adolescent sexual activity within the context of other deviant behaviors. There has been a growing recognition that problem behaviors, such as delinquency, teenage pregnancy, and drug use, often occur simultaneously. Donovan, Jessor, and others have found evidence that the co-occurrence of problems such as delinquent activities, drug use, and precocious sexual experiences comprises a problem behavior syndrome among junior high and high school students (Donovan, Jessor, and Costa, 1988; Allen, Aber, and Leadbeater, 1990). Problem behaviors share the characteristic that they may establish immediate difficulties for the teenager as well as leaving him or her at higher risk for future

problems in social adaptation (Allen, Aber, Leadbeater, 1990). Evidence is mixed, however, as to the role of sexual activity in this problem behavior syndrome. For example, one study reported that, for females, having intercourse was moderately related to other deviant behaviors, such as smoking, drinking, and cheating, but no such relationship was found for adolescent males (Billy, Rodgers, and Udry, 1984). Rodgers and Rowe (1990) found that there was an overall relationship between sexual behavior and deviance in both male and female adolescents, but that the two domains can also be separated. However, the question of whether or not adolescents who engage in safe and responsible sexual activity are at the same risk for displaying other problem behaviors as those who engage in risky sexual activity has yet to be examined.

In trying to determine whether or not adolescent sexual activity can be considered deviant, it is important to consider, among other things, recent changes in societal attitudes. Adolescence, characterized by a shift from childhood to adulthood, generally entails changes in autonomy; adolescents are asked to regulate more of their own behavior and be accountable for their actions (Voydanoff & Donnelly, 1990). Generally, the amount of parental monitoring that adolescents have received has decreased in recent years, as the number of single parent or two working parent families has increased, and the number of relatives in the home (other than the nuclear family) has decreased (Voydanoff & Donnelly, 1990). This increased autonomy may have had the effect of providing more opportunities for adolescents to engage in sexual activity than was the case during the 19th and early 20th centuries (Voydanoff & Donnelly, 1990; Beeghley & Sellers, 1986). Simultaneously, the perceived negative effects of sexual intercourse have decreased, as birth control has become more accessible and effective, and treatments for most STDs are available (Voydanoff & Donnelly, 1990; Beeghley & Sellers, 1986).

As adolescents have gained increased autonomy, societal attitudes towards nonmarital sexual activity have also shifted; random surveys of adults indicate that since the 1940's, there has been a significant decrease in the number of adults who disapprove of nonmarital sex (Beeghley & Sellers, 1986). Robinson and Jedlicka (1982) found at one university that, from 1965-1980, the number of students who thought that premarital intercourse was inappropriate dropped from 70% to 25% for females and 33% to 17% for males. The media also presents an accepting view of premarital sexual activity; furthermore, some researchers argue that it does so in a manner that presents sexual activity as alluring and idealistic without addressing the importance of sexual responsibility (Greenberg, Abelman, & Neuendorf, 1981; Hayes, 1987).

Given the significant number of adolescents engaging in intercourse, the increased opportunities for autonomous decision-making, and the increasingly accepting messages that society seems to be sending about premarital sexual activity, teenage sexual activity may not be as inherently deviant as it was once considered to be. Unfortunately, past research in this area has not addressed the effects of these societal shifts, but has tended to focus instead on the problem of teenage pregnancy, childbearing and abortion; thus, our knowledge about the dynamics of teenage sexual activity is limited (O'Beirne, 1994). It is necessary to examine the riskiness of adolescents' sexual activity, as well as the differences between risky and mature sexual behaviors, rather than narrowly focusing on the difference between teens who are sexually active and those who abstain.

Measures of Sexual Activity

When measuring adolescent sexual activity as a deviant behavior, age of first intercourse has been the primary measure of a teenagers' amount of sexual contact (O'Beirne, 1994); this may be problematic as it is not uncommon for adolescents to initiate sexual activity at ages 14 or

15, and then not engage in sexual activity again for a year or longer (Brooks-Gunn & Furstenberg, 1989). Furthermore, there is scant information on two figures that are considered to be indicators of the amount of risk in adolescent sexual activity -- the frequency of sexual activity and the number of partners an adolescent has had. Zabin and Hayward (1993) did find that teenagers tended to have several sequential, monogamous relationships, and that the frequency of sexual activity tends to be low; adolescent females report an average of 2.0 acts of intercourse during their most active month, while older teenage males report an average of 2.7 acts of intercourse a month (Zabin and Clark, 1981). Research has yet to be done, however, that examines the relationship of these various factors for both males and females within a single study (O'Beirne, 1994).

There are inconsistencies in the past research on the contraceptive use of adolescents as well. Zelnik and Kantner (1979) found that teenagers are aware of contraception options, and Sonenstein, Pleck, & Ku (1989) report that condom use in 1988 was two times higher than that in 1979. They also found that males who report the highest rate of condom use are the ones who have had a single partner in the last year (Sonenstein, Pleck, & Ku, 1989). Morrison (1985), however, reports that adolescents are generally uninformed about reproductive physiology and contraceptive methods, and that use of more reliable methods, such as oral contraceptives occur only as sexual experience increases. Other past research supports the conflicting ideas that contraceptive use is greater in both serious and more casual relationships (Morrison, 1985). These findings, however, are based on studies that did not clearly define seriousness of a relationship, consistency of contraceptive use, or factor in the efficacy of the method used (Morrison, 1985). Additional past research states that the lack of contraceptive use is related to an inability to predict and plan for sexual intercourse; planning for sexual activity

is associated with a stronger relationship, with contraceptive use, and the use of more effective methods of contraception (Zabin & Hayward, 1993; Zelnik and Shaw, 1983). Increased communication within the sexual dyad is also reliably associated with more effective contraceptive use (Morrison 1885; Cvetkovich & Grote, 1981; Geis & Gerrard, 1984; Herold, 1981; Herold & McNamee, 1982; Herold & Samson, 1980; Jorgensen, King & Torrey, 1980; Oskamp & Mindick, 1983).

Until recently, however, past research has only viewed contraception in terms of pregnancy prevention, and has failed to look at the important role that birth control plays in preventing STDs, including HIV. Furthermore, the frequency of intercourse in relation to the efficacy rates of different methods of birth control have not previously been studied.

Sonenstein, Pleck and Ku (1989) found that the rates of condom use are significantly lower among males who have participated in intravenous drug use, engaged in intercourse with a prostitute, or have had more than four sexual partners in the last year. Despite these findings which indicate that the way in which an adolescent engages in sexual activity is related to the degree of deviance of the behavior, past research has yet to fully explore this phenomenon. Among sexually active teenagers, some adolescents take risks in their sexual behavior, but other teenagers do not; while the literature reports that risk taking is related to less competent behaviors, the distinction between those who do and do not take risks has yet to be examined. It is evident, due to the inconsistencies of past research and the gaps that remain in the literature, that the importance of the relationships between various aspects of adolescent sexual behavior and the specific manner in which they are engaging in sexual activity must be closely examined. Furthermore, past research has failed to examine whether or not there are predictors that may indicate which teenagers will engage in mature or immature sexual activity.

Measures of Competence

Some research in fact suggests that the riskiness of adolescent sexual behaviors is related to competence. Consistently, it has been found that teenagers who engage in problematic behavior, such as unprotected sexual intercourse, also display social skill deficits compared to teens who do not engage in risky behaviors (Kuperminc, 1993). When rating adolescents on their social competence, however, it is important to consider the context in which the adolescent's behavior takes place. Individuals may display different levels of competence depending on the specific situation at hand, as well as the adolescent's desire to choose strategies that are not only effective, but appropriate as well (Kuperminc, 1993). It has been suggested that social skills, or the specific abilities required to perform competently at a task, may not be equivalent to social competence, which has been defined as the evaluation of an individual's overall performance on a task (McFall, 1982). One way to consider this distinction is to examine the degree of sophistication and the stylistic approach to solving problems that are employed by adolescents in their interpersonal negotiation strategies. Adolescents may differ in the extent to which they use self-transforming versus other-transforming strategies (Brion-Meisels & Selman, 1984; Leadbeater, Allen & Aber, 1989). For example, one adolescent may fight, be challenging and assertive, or may try to explain or persuade the other party in their strategies, while others may tend to ignore the problem, give in, or ask for reasons. This approach of examining the type of strategy used, and how adolescents' strategies differ in various situations, offers an additional manner by which to assess the adolescents' level of social competence (Brion-Meisels & Selman, 1984; Leadbeater, Allen & Aber, 1989). While it has been found that poor social skills are related to the existence of problem behaviors in adolescents, it has not been examined if teenagers who utilize more

competent strategies or are more outgoing and assertive in their negotiations are also more likely to engage in more responsible sexual activity.

When studying adolescent competence, it is not only important to look at how teenagers would handle specific social situations, but to also rely on measures other than adolescents' self-reports. Psychosocial factors, such as peer relationships, are related to the existence of problem behaviors (Seidman, 1991), and may influence an adolescent's competence development (Kuperminc, 1993). By examining the perspectives of an adolescent's peers, rather than relying solely on a teen's self-report, a better understanding of the role of peers in relation to competence and problem behaviors can be discerned.

The primary aim of this study is to examine the relationship between the maturity with which adolescents engage in sexual activity and their level of social competence. Information is collected on a variety of sexual behaviors that have occurred in the last six months, such as frequency of intercourse, number of partners, frequency, type, and efficacy of contraception used, and specifically, the frequency of condom use, in order to examine the relationship between these factors and whether or not the maturity of sexual activity is related to social competence. A scale was devised that rates the maturity of the teenagers' sexual behaviors. For example, an adolescent who had engaged in intercourse with only one partner, had consistently used an effective method of contraception, and had used a condom to protect against STDs, would receive a high rating of maturity. This rating is then compared to other aspects of their social development, as discerned from self-reports, descriptions on how the adolescent would manage certain social problems, and peer evaluations of the adolescent.

This study will address the following question in order to attempt to understand the relationship between adolescents' social competence and their maturity level with regards to

their sexual behaviors. Is there a difference between adolescents who exhibit mature and immature sexual activity? This study examines maturity as it relates to several aspects of social competence, including multiple domains of general social success and competence, such as social acceptance, behavioral conduct, and being perceived as likeable or aggressive by peers. In addition, maturity will be related to the strategies adolescents use to solve problems as well as specific domains related to self-esteem, such as self-worth, romantic appeal, and the ability to form close friendships. Finally, the study also addresses the question of whether maturity of teenage sexual activity differs for males and females.

Method

Subjects

Data for the analyses in this study were collected from 22 male and 26 female ninth and tenth graders, and peers whom the adolescents named as "knowing them pretty well". Subjects were selected from a sample of 138 adolescents surveyed on the basis that they had been sexually active within the last 6 months. The number of sexually active and non-sexually active subjects are reported in table 1 below.

Table 1

Number of sexually active subjects

<u>Never been sexually active</u>	<u>Have engaged in sexual intercourse, but not in the last 6 months</u>	<u>Sexually active in the last 6 months</u>
74 adolescents	16 adolescents	48 adolescents

The mean age of the adolescents was 16.1 years (S.D.= .70), with a range from 14 to 18 years. The racial/ethnic background of the sample was 69% Caucasian, 27% African

American, 2% Latino/Hispanic and 2% Other. 31% of the adolescents lived with two parents, and 69% lived in single parent families. The average family income was \$29,782, with a range from \$2500 to more than \$70,000, and parents' completed level of education ranged from eighth grade or less to completion of a doctorate. The subjects were recruited through two public school systems which encompassed both rural and urban areas. All of the ninth and tenth graders in the study were chosen on the basis of exhibiting any risk factor, including repeated absences, a history of grade retention, suspension, or a single failing grade for one marking period.

Seventeen male and 39 female peers of the adolescents in the study were also interviewed. The mean age of the peers was 16.27 years (S.D.=.97), with a range from 14 to 19 years. The racial/ethnic background of the peer sample was 70% Caucasian, 23% African American, and 4% Other. Two peers for each adolescent were chosen randomly after the teenager in the study listed the names and phone numbers of up to five friends s/he felt knew him/her well.

Procedure

After the adolescents were identified as meeting the selection criteria, letters explaining the study were sent to each adolescents' family. If both the adolescent and the parent(s) agreed to participate, the family was scheduled by telephone for two, three hour sessions at the University of Virginia. For their participation, families were paid \$105. At both sessions, informed consent was obtained from each participant; researchers stressed confidentiality issues, reminding the adolescent that their responses were confidential, even from their parents. With the exception of two interaction tasks, the interviews were conducted with each family member in a separate room and with a different researcher.

The measures completed by the subjects assessed various adolescent behaviors, such as sexual activity, family relationships, and delinquency. Subjects were told that they were not required to answer any question that made them feel uncomfortable. At the end of each session, a list of referrals was given to each family member, in case they wanted to discuss the issues examined in the study in more detail. Child care and transportation were provided as necessary.

The adolescents in the study were also asked to list the names and phone numbers of five friends whom they felt knew them well, and whom they would feel comfortable having participate in the study. The adolescents were informed that two of these peers would be contacted randomly, asked if they would like to come in for an interview, and that they would be paid \$10.00 for their time. Researchers stressed that the peers would be filling out measures on what the adolescent was like as a person, and that all information was confidential, both from the adolescent and the peers. Researchers also emphasized that the teen did not have to supply names if they did not feel comfortable in doing so.

Once the adolescent had given consent to contact his/her friends, two of the peers were chosen randomly and contacted by telephone. The peers were asked if they were interested in participating, and if so, a letter explaining the study was sent home to the peer and his/her parent(s). The peers were asked to come to the University of Virginia for a 30-45 minute interview, during which they completed four measures, two about the adolescent in the study and two about themselves. Peers had to have parental consent to participate, as well as give their own informed assent. Subjects were instructed that all information was confidential. Transportation for the peers was provided if necessary, and they were paid \$10.00 for participating.

*Measures*Sexual Behavior

Problem Behavior Inventory (PBI): Using a structured interview format, interviewers asked adolescents a series of questions about their sexual history. These questions were included in an interview covering multiple problem behaviors including delinquency (Elliot & Ageton, 1980), sexual behavior (Allen, Aber & Leadbeater, 1990), and school disciplinary problems (Allen, Philliber, & Hoggeson, 1990). Teenagers were asked directly whether or not they had engaged in sexual intercourse. If the adolescents responded yes, they were asked at what age they first had had sex, how frequently they had engaged in sexual intercourse within the last six months, and how many sexual partners they had had within the last six months. Subjects who indicated that they had been sexually active were also asked a series of questions about their contraceptive use; interviewers asked the teenagers to list the specific methods of birth control they had used in the last six months, and how frequently they had used it. These adolescents were specifically asked about their use of condoms as a way to protect against STDs and pregnancy. In this case, teenagers were also asked how frequently, if at all, they had used a condom when engaging in sexual activity. See Appendix A for examples of specific questions asked on this measure.

It has been suggested that when sexual activity information is sensitively collected, teens' self-reported behaviors are among the least biased sources of information and correlate with external reports (O'Beirne, 1993; Patterson & Stouthamer-Loeber, 1984).

Sexual Maturity Scale: Using the responses from the PBI, a scale measuring the sexual

maturity of the subjects was developed. Adolescents were rated from 1 (immature sexual behavior) to 4 (mature sexual behavior), according to their use of birth control, number of sexual partners, and use of a condom. Frequency of sexual activity was taken into account only when birth control was not consistently used; this decision was made under the assumption that frequency of sexual activity is not itself an indicator of maturity but only a factor when it substantially increases the risk of pregnancy. In order to be rated as exhibiting optimally mature sexual behavior, and receive a score of 4, an adolescent had to engage in consistent use of a condom and a second reliable form of birth control, and had to have had only one sexual partner in the last six months. If an adolescent had only used a condom consistently, and had had two sexual partners but had a low frequency of sexual activity, s/he was rated as a 3. An adolescent was given a 2 if birth control was not used consistently, if the subject had a low frequency of sexual activity, had displayed a lack of safe sex practices, and/or had 2 sexual partners. To receive a 1, an adolescent had to have reported having 3+ sexual partners, an inconsistent use of birth control, and/or a lack of consistent condom use. Not surprisingly, teenagers who displayed one element of sexual immaturity also tended to rate low in the other areas examined. Criteria for the maturity scale are presented in table 2. Table 3 presents the distribution of sexually active adolescents into the four classifications of maturity.

Table 2
Criteria for Maturity Scale Ratings

Maturity rating ¹	Sexual practices within the last six months		
	Method/Use of contraception	Frequency of condom use(safe sex)	Frequency # of partners
			Frequency of intercourse ²

1 (immature)	condom occasional/infrequent/no protection	occasional use	3+	12-72
2	condom always/frequently protected	occasional use	2	2-12
3	condom only always protected	always	1-2	only applicable if 2 partners (must be low)
4 (mature)	pill/condom always protected	always	1	not applicable

¹The distinguishing feature between receiving a 1 or 2 was number of partners, between receiving a 2 or 3 was frequency of contraceptive use, and between receiving a 3 or 4, the sophistication of the type of birth control used.

²Low frequency ranges from 2-12 occurrences of intercourse within the last 6 months; high frequency ranges from 12-72 acts of intercourse in the last 6 months.

Table 3
Number of subjects
in each maturity category

<u>Maturity rating</u>	<u>Number of adolescents</u>
1 (immature)	15
2	7
3	16
4 (mature)	10

Social Competence

Adolescent Self Perception Profile (ASPP): The ASPP (Harter, 1988) assesses adolescents' perceived competence in a 45-item questionnaire which touches upon teens' perceptions of their general domain-specific competence in eight areas of social interaction.

These areas include *romantic appeal*, *close friendship*, *athletic and scholastic competence*, *social acceptance*, *physical appearance*, *behavioral competence*, and *global self-worth*. See Appendix A for examples of specific questions asked on this measure.

Adolescent Problem Behavior (API): The API is a semi-structured interview in which discussions of hypothetical interpersonal dilemmas are used to assess teenagers' level of sophistication of interpersonal negotiation strategies in a variety of situations. A 9-item version of this measure was constructed by matching hypothetical problem vignettes that were corresponded to both the male and female versions of the original Adolescent Problem Behavior Inventory (Gaffney & McFall, 1981). Competence levels were reliably coded by two trained raters who were blind to all other information about the adolescents (Spearman Brown correlation of $r=.78$). See Appendix A for specific examples of the vignettes used in this measure.

Peer Measures

Pupil Evaluation Inventory (PEI): Peers completed a revised version of the PEI (Pekarik, Prinz, Liebert, Weintraub & Neale, 1976). The original 35-item measure has shown to be reliable and valid in sociometric assessments of children's social behavior (Ledingham, Younger, Schwartzman & Bergeron, 1981; Weintraub, Prinz & Neale, 1978). The revised version was adapted for use with adolescents and is given in a Q-sort format, in which peers describe the adolescents' *likability*, *withdrawal*, and *aggression*. Similar measures using the Q-sort format have been effectively used with adolescents in previous studies of teenage development (Allen, 1992; Kobak & Sceery, 1988). See Appendix A for examples of specific statements used in this measure.

The study aimed to gather peer data from two peers for each adolescent in the study.

In some cases, however, two peers could not be obtained for each subject. When two peers' ratings were obtained, a single score was composited by averaging the two sets of data. The two peers' ratings were expected to be significantly correlated, but not necessarily highly correlated, since these ratings by independent observers may include different peer perspectives. Likability ratings were significantly correlated ($r=.27$, $p < .05$), as were ratings of aggression ($r=.60$, $p < .001$).

Results

Preliminary Analyses

The association between the maturity level of adolescent sexual activity and competence was examined using simple correlations and regression analyses. Table 4 presents the means and standard deviations of all the variables used in the reported analyses.

Table 4
Means and Standard Deviations
of Variables used in Analyses

	N= 48	
	Mean	Standard Deviation
<u>Peer Reports</u>		
Aggression	2.85	.39
Likability	4.19	.81
<u>Self-Reports</u>		
Behavioral Conduct	2.63	.61
Social Acceptance	3.24	.65
Other Transforming	.52	.17

Strategies		
Self Worth	3.15	.69
Close Friendships	3.26	.73
Romantic Appeal	2.81	.63

Gender Effects

A t-test was used to examine the differences between males and females in levels of maturity. This test revealed no differences in mean levels of maturity across gender ($t = 1.00$, ns).

Correlates of Level of Sexual Activity

Although the primary purpose of this study was to examine differences in maturity among adolescents who are actively engaging in sexual intercourse; preliminary analyses also examined significant differences between teenagers who were currently sexually active and those in the study who were not engaging in sexual activity, so as to provide a context for interpreting the results reported below. It was examined whether engaging in sexual intercourse was related to any of the variables used in this study to predict maturity. Results revealed no differences between teenagers who were sexually active and those who were not engaging in sexual activity in relation to the variables examined, with the exception of close friendship. Those adolescents who had engaged in sexual activity in the past six months reported higher self-ratings of their capacity for close friendship than did adolescents not reporting sexual activity in the last six months. These results are summarized in table 5.

Table 5

Relationship of Sexual Activity to Variables used to Predict Maturity

Sexually active
in last 6 months

Not sexually active
in last 6 months

	Mean (s.d.) N= 48	Mean (s.d.) N= 90	t
<u>Peer reports</u>			
Aggression	2.97(.28)	2.81 (.40)	-1.95
Likability	4.25 (.77)	4.15 (.89)	-.50
<u>Self-reports</u>			
Behavioral Conduct	2.50 (.57)	2.62 (.63)	1.07
Social Acceptance	3.36 (.55)	3.15 (.67)	-1.78
Other Transforming Strategies	.50 (.17)	.53 (.17)	1.06
Self Worth	3.11 (.76)	3.09 (.66)	-.14
Close Friendships	3.46 (.57)	3.12 (.83)	-2.63*
Romantic Appeal	3.03 (.57)	2.64 (.62)	-3.44

A chi-square analysis also examined gender differences in adolescents' engagement in sexual activity during the last six months. Results revealed no difference between males and females ($\chi^2 = .54$, ns).

Primary Analyses

Primary analysis focused on whether the level of maturity of adolescent sexual activity was predictable from levels of self-reported and peer reported social competence. A series of multiple regression analyses that accounted for gender were administered with several independent variables from both peer and self-report measures that assessed teenage competence.

The study first examined whether maturity was related to multiple domains of general social success, such as peer reports of likability, aggression, behavioral conduct, and self-reports of behavioral conduct and social acceptance. Using a regression analysis, peer-reported

aggression was found to be negatively related to maturity ($\beta = -.53$ $p < .01$). Adolescents who exhibited less aggression tended to engage in more mature sexual activity. The model accounted for 30% of the variance in maturity of sexual behavior. A significant effect of gender was found suggesting that females engage in less mature sexual activity than males when aggression was accounted for in a regression model ($\beta = -.34$, $p < .05$). Results are depicted in table 6.

Table 6
Regression Analysis Predicting Maturity
from Peer-rated reports of Aggression

	r	Maturity β	R^2
Gender (male= 1 female= 2)	.06	-.34*	
Aggression	-.38*	-.53**	
Model			.30**

*** $p < .001$ ** $p < .01$. * $p < .05$. # $p < .10$

Peer ratings of likability were also significantly related to maturity ($\beta = .50$ $p < .01$). Adolescents who were seen as being more likeable by their peers tended to engage in more mature sexual activity. The model accounted for 26% of the variance. A significant effect of gender was found suggesting that females tended to engage in slightly less mature sexual activity when likability was accounted for in a regression model ($\beta = -.34$ $p < .05$). Results are depicted in table 7.

Table 7
Regression Analysis Predicting Maturity
from Peer-rated Reports of Likability

	r	Maturity β	R^2
Gender (male= 1 female= 2)	.06	-.34*	
Likability	.32#	.50**	
Model			.26*

***p < .001 **p < .01 *p < .05 #p < .10

Adolescent self-reports of behavioral conduct were significantly related to maturity ($\beta = .40$ $p < .01$). Teenagers who perceived themselves to be well behaved also engaged in more mature sexual activity. The model accounted for 14% of the variance; gender was not significantly related to maturity. Results are depicted in table 8.

Table 8
Regression Analysis Predicting Maturity
from self-reported Behavioral Conduct

	r	Maturity β	R^2
--	---	---------------------	-------

Gender (male= 1 female= 2)	.06	.04	
Behavioral Conduct	.42**	.40**	
Model			.14*

***p < .001 **p < .01 *p < .05 #p < .10

Teen self reports of social acceptance were significantly related to maturity ($\beta = .36$ $p < .05$). Adolescents who felt that they were more socially accepted engaged in more mature sexual activity. The model accounted for 13% of the variance; gender was not significantly related. Results are depicted in table 9.

Table 9
Regression Analysis Predicting Maturity
from Self-reports of Social Acceptance

		Maturity	
	r	β	R^2
Gender (male= 1 female= 2)	.06	.11	

Social Acceptance	.28#	.36*
Model		.13*

***p < .001 **p < .01 *p < .05 #p < .10

The study then examined whether maturity was related to adolescents' stylistic approach to problem solving. Using other transforming (versus self transforming) strategies to resolve interpersonal problems was significantly positively correlated with maturity ($r = .40$, $p < .05$); teenagers who were more assertive in their problem solving strategies engaged in more mature sexual activity. This correlational finding did not hold up in a multiple regression equation that accounted for gender; the overall model approached significance ($R^2 = .17$, $p < .06$). Note that even though the model was not significant, the effect of other transforming strategies was significant ($\beta = .43$, $p < .05$). Results are depicted in Table 10.

Table 10
Regression Analysis Predicting Maturity
from Other Transforming Problem Solving Techniques

	Maturity		
	r	β	R^2

Gender (male= 1 female= 2)	.06	.08
Other Transforming	.40*	.43*
Model		.17#

***p < .001 **p < .01 *p < .05 #p < .10

Finally, the study examined whether specific domains of personal competence related to self-esteem issues significantly added to the prediction of maturity after accounting for gender. Self-worth, romantic appeal, and the ability to form close friendships were not significantly related to maturity (all ps > .36).

Discussion

Results of this study provide evidence that deficits in adolescent social competence may be a predictor of problematic sexual activity. It was found that teenagers who viewed themselves, and were viewed by their peers, as socially successful were engaging in sexual activity in a responsible manner. On the other hand, adolescents who viewed themselves, and were seen by their peers, as less socially competent were engaging in more problematic sexual behaviors; these adolescents were using birth control sporadically, were not consistently protecting themselves against procuring a sexually transmitted disease, and were engaging in sexual intercourse with a number of partners. These findings, as well as the preliminary results that found no difference in competence levels between sexually active and abstaining teenagers, indicate that sexual activity may not, in and of itself, be a problematic behavior. Rather, teenagers who see themselves, and are considered by their peers, as being beneficial and successful members of the community may be sexually active, but they are engaging in mature

and responsible sexual activity. The adolescents engaging in irresponsible and problematic sexual activity seem to be those who are not seen, and do not view themselves, as socially successful.

Given the popular belief that adolescent sexual activity is inherently a problematic behavior, this study initially examined whether fundamental differences existed between adolescents who were sexually active and those who abstained. Preliminary analysis indicated that, on the dimensions examined in this study, there were no significant differences between these two domains, with the exception of close friendship. Adolescents who reported being sexually active reported *higher* self-ratings of their capacity to form close friendships than did adolescents who reported not being sexually active. Thus, teenagers who were sexually active viewed themselves as being more competent in forming friendships than did the abstaining adolescents. This finding indicates that sexually active teenagers are not only as socially competent as those who abstain, in some domains, adolescents who are sexually active may feel they are more competent than abstaining teenagers. This appears to contradict the popular belief that teenagers who are sexually active are inherently less competent and display more problem behaviors than those who abstain from sexual activity.

The study then examined whether differences in social functioning existed between those teenagers who were sexually active but participated in safe sexual practices versus those teenagers who engaged in risky sexual behaviors. A variable that measured the maturity level of sexual activity was created by incorporating several risk factors of sexual activity, including the number of sexual partners, frequency and type of contraceptive use, and specifically, the use of condoms to protect against sexually transmitted disease. The study used this variable to examine whether significant differences existed between teenagers who take risks in their sexual

behaviors and those who do not, and whether maturity is related to other aspects of adolescent functioning.

In order to examine the question of sexual maturity, several domains of adolescent competence were examined. First, the study looked at whether maturity level was related to multiple domains of social success and competence. Results indicate that teenagers who engage in mature sexual activity are perceived by their peers as being more likeable and less aggressive than adolescents engaging in immature sexual activity. Thus, teenagers who maintain positive social relationships with their peers engage in responsible sexual behaviors, whereas those who are hostile and disliked by their peers engage in risky sexual activity. Perhaps adolescents who maintain positive and constructive peer relationships feel more confident in stressing the importance of responsible sexual practices with their sexual partner, whereas teenagers who are disliked or aggressive are unable to communicate this need. For these two dimensions, there were gender differences in that females engaged in slightly less mature sexual activity than males after aggression and likability were accounted for in regression models.

When looking at self-reports that examined social competence, teenagers who engaged in more mature sexual activity perceived themselves as more socially accepted and better behaved than those who engaged in risky sexual activity. Thus, it was found that teenagers who viewed themselves and were viewed by their peers as socially successful were engaging in mature sexual activity. This implies that teenagers who see themselves as conforming more to society's standards of conduct are more likely to engage in mature and safe sexual practices, as that is what society considers to be good behavior. This finding also implies that engaging in sexual intercourse as an adolescent may not be viewed as a deviant behavior by adolescents, for those teenagers who see themselves as well behaved and following the rules are, in fact,

sexually active.

The relationship between sexual maturity and adolescent problem solving tactics was also examined. There was a significant correlation in that adolescents who used more assertive problem solving tactics in interpersonal negotiations also engaged in more mature sexual activity. Thus, teenagers who are able to express and explain their point of view, are not helpless and do not give in when in a conflictual situation, are more likely to engage in responsible sexual behaviors. Although this finding was not as strong when examined in a regression analysis, it still points to the importance of preparing teenagers to be assertive when resolving interpersonal conflicts.

Finally, the study looked at maturity in relation to dimensions of personal competence that are closely related to the dimension of self-esteem. Results indicate that teenagers' perceptions of their self-worth, their ability to form close friendships, and their romantic appeal were not predictors of mature sexual activity. Thus, feeling good about oneself is not a predictor of mature teenage sexual activity. This finding seems to contradict the current view that sexual activity is closely linked to adolescent self-perception in the area of self-esteem. While the results of this study do not diminish past research, they indicate that other dimensions of adolescent development may also predict adolescent sexual development.

There were several limitations to the study that need to be addressed in future research. First, the small sample size limited the power of analyses to detect significant effects in predicting levels of sexual maturity. This was especially true for the peer data; ideally, each teenager would have data from two peers, but this was not always possible in the current study.

Furthermore, due to the small sample, there may not have been adequate power to detect gender differences in sexual activity or its correlates. Although preliminary analyses revealed

that males and females did not differ significantly in their level of sexual activity or in their level of maturity, gender differences need to be examined in more detail. This is also the case with racial/ethnic differences, which this study was unable to address.

The maturity scale created for this study did not address the age of onset variable, which is an important aspect to examine when looking at the development of teenage sexual activity. Although the study contained adolescents who had engaged in sexual intercourse but had not been sexually active within the last six months, these subjects were not examined separately. The study had to rely entirely upon teens' self-reports of sexual activity, which may be subject to bias and distortion by teens. Furthermore, the peers interviewed for this study were selected by the adolescents themselves and thus may be biased as well in certain ways. For example, 5.6 % of the peers were cross-sex peers, but it is unknown whether the data was collected from the adolescents' sexual partner.

Additionally, it was not evident from the data whether sexual intercourse was considered consensual or non-consensual by the adolescent. This is an important discrepancy, as abusive sexual activity may be related to competence differently than sexual activity that results due to the adolescents' decision. Another limitation is that the sample in this study is considered to be a moderately at-risk population; therefore, these results should not be generalized to the entire adolescent population. Finally, all the data is correlational and causality cannot be implied at this time.

Adolescent sexuality is a controversial issue, involving physical, economic, and emotional ramifications. Rather than seek to diminish the severity of these consequences, the results of this study argue that a distinction must be made between adolescents who engage in mature and immature sexual practices. The focus on the issue of abstinence versus sexually

active adolescents may well have become too narrow; grouping all sexually teenagers together and predicting that they will develop other deviant behaviors clearly limits our understanding of adolescent development. Various areas of adolescent development, such as competence, should also be examined in order to identify the predictors of immature sexual intercourse; this could identify teenagers at risk for incurring the negative consequences associated with risky sexual activity. Due to the large percentage of sexually active teenagers, it may be more productive to stress the importance of mature sexual behaviors rather than just promoting abstinence as the only solution. Above all, it is hoped that this study will spur future research that will move beyond the issue of abstinence and begin to address the very important differences that exist among teenagers who have already become sexually active.

References

- Alan Guttmacher Institute (AGI). (1991). Teenage sexual and reproductive behavior (Facts in Brief). New York: Author.
- Allen, J.P. (1992). *Prediction of young adult depression from prior adolescent-family interactions and current working models of attachment relationships*. Paper presented at the biennial meeting of the Society for Research on Adolescence, Washington, D.C.
- Allen, J.P., Aber, J.L., & Leadbeater, B.J. (1990). Adolescent problem behaviors: The influence of attachment and autonomy. Psychiatric Clinics of North America, 13, 455-467.
- Allen, J.P., Leadbeater, B., & Aber, L. (1990). The relationship of adolescents' expectations and values to delinquency, hard drug use, and unprotected sexual intercourse. Development and Psychopathology, 2, 85-98.
- Allen, J.P., Philliber, S., & Hoggson, N. (1990). School-based prevention of teenage pregnancy and school dropout: Process evaluation of the national replication of the teen outreach program. American Journal of Community Psychology, 8, 505-524.
- Beeghley L., & Sellers, C. (1986). Adolescents and sex: A structural theory of premarital sex in the United States. Deviant Behavior, 7, 313-336.
- Bell, T.A., & Hein, K. (1984). The adolescent and sexually transmitted disease. In K.K. Holmes, P. Mardh, P.F. Sparling, & P.J. Weisner (Eds.), Sexually Transmitted Diseases. (pp. 73-84). New York: McGraw-Hill.
- Bell, T.A. & Holmes, K.K. (1984). Age-specific risks of syphilis, gonorrhea, and hospitalized pelvic inflammatory disease in sexually experienced U.S. women. Sexually Transmitted Diseases, 11, 291-295.
- Billy, J.O., Rodgers, J.L., & Udry, R.J. (1984). Adolescent sexual behavior and friendship

- choice. Social Forces, 62(3), 653-675.
- Brion-Meisels, S. & Selman, R. (1984). Age specific manifestations in changing psychosocial risk. In D.C. Farran & J.D. McKinney (Eds.), The concept of risk in intellectual and psychosocial development (pp. 169-185). New York: Academic Press.
- Brooks-Gunn, J., & Furstenberg, F.F. (1989). Adolescent sexual behavior. American Psychologist, 44, 249-257.
- Burt, M.R. (1986). Estimate of public costs for teenage childbearing: A review of recent studies and estimates of 1985 public costs. Report prepared for Center for Population Options.
- Children's Defense Fund. (1993). Special Report: Birth to teens. Washington, DC: Author.
- Chilman, C.S. (1988). Never-married, single, adolescent parents. In C.S. Chilman, E.W. Nunnally & F.M. Cox (Eds.), Variant Family Forms (pp. 17-37).
- Cvetkovich, G. & Grote, B. (1981). Psychosocial maturity and teenage contraceptive use: An investigation of decision-making and communication skills. Population and Environment, 4, 211-226.
- DiClemente, R.J. (1990). The emergence of adolescents as a risk group for human immunodeficiency virus infection. Journal of Adolescent Research, 5, 7-17.
- Donovan, J. E., Jessor, R., & Costa, F.M. (1988). Syndrome of problem behavior in adolescence: A replication. Journal of Consulting and Clinical Psychology, 56, 762-765.
- Elliot, D.S., & Ageton, S.S. (1980). Reconciling race and class differences in self-reported and official estimates of delinquency. American Sociological Review, 45, 95-110.
- Forrest, J.D., & Singh, S. (1990). The sexual and reproductive behavior of American women, 1982-1988. Family Planning Perspectives, 22, 206-214.
- Geis, B.D., & Gerrard, M. (1984). Predicting male and female contraceptive behavior: A

discriminant analysis of groups high, moderate, and low in contraceptive effectiveness. Journal of Personality and Social Psychology, 46, 669-680.

Greenberg, B.S., Adelman R., & Neuendorf K. (1981). Sex on the soap operas: Afternoon delight. Journal of Communication, 83-89.

Harter, S. (1988). Manual: Self-perception profile for adolescents. University of Denver.

Hayes, C.D. (Ed.). (1987). Risking the future: Adolescent sexuality, pregnancy and childbearing (Vol. I). Washington, DC: National Academy Press.

Hein, K. (1987). AIDS in adolescents: A rationale for concern. New York State Journal of Medicine, 88, 290-295.

Herold, E.S. (1981). Measurement issues involved in examining contraceptive use among young single women. Population and Environment, 4, 128-144.

Herold, E.S., & McNamee, J.E. (1982). An explanatory model of contraceptive use among young single women. Journal of Sex Research, 18, 289-304.

Herold, E.S., & Samson, L.M. (1980). Differences between women who begin the pill before and after first intercourse: Ontario, Canada. Family Planning Perspectives, 12, 304-305.

Hofferth, S.L. (1987). The children of teen childbearers. In S.L. Hofferth & C.D. Hayes (Eds.), Risking the future: Adolescent sexuality, pregnancy and childbearing. Vol. II, pp. (Vol. II, pp. 174-206). Washington DC: National Academy Press.

Jones, E.F., Forrest, J.D., Goldman, N., Henshaw, S., Lincoln, R., Rosoff, J.I., Westoff, C.F., & Wulf, D. (1985). Teenage pregnancy in developed countries: Determinants and policy implications. Family Planning Perspectives, 17, 53-63.

Jones, E.F., Forrest, J.D., Goldman, N., Henshaw, S., Lincoln, R., Rosoff, J.I., Westoff, C.F., & Wulf, D. (1986). Teenage pregnancy in industrialized countries. New Haven, CT:

Yale University Press.

Jones, E.F., Forrest, J.D., Henshaw, S., Silverman, J., & Torres, A. (1988). Unintended pregnancy, contraceptive practice and family planning services in developed countries. Family Planning Perspectives, *20*, 53-67.

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.

Kobak, R.R., & Sceery, A. (1988). Attachment in late adolescence: Working models, affect regulation, and representations of self and others. Child Development, *59*, 135-146.

Kuperminc, G.P. (1993). *Proposed study: Social orientation and social competence in adolescence*. Dissertation proposal presented to the graduate committee of the department of psychology at the University of Virginia.

Leadbeater, B.J., Allen, J.P., & Aber, J.L. (1989). Assessment of interpersonal negotiation strategies in youth engaged in problem behaviors. Developmental Psychology, *25*(3), 465-472.

Leadingham, J.E., Younger, A., Schwartzman, A., & Bergeron, G. (1981). Agreement among teacher, peer and self ratings of children's aggression, withdrawal, and likability. Journal of Abnormal Child Psychology, *10*, 363-372.

Makinson, C. (1985). The health consequences of teenage fertility. Family Planning Perspectives, *17*, 132-139.

McFall, R.M. (1982). A review and reformulation of the concept of social skills. Behavioral Assessment, *4*, 1-33.

McLaughlin, S.D., & Micklin, M. (1983). The timing of the first birth and changes in personal efficacy. Journal of Marriage and the Family, *45*, 47-55.

- Moore, K.A. (1989). Facts at a glance: August. Washington DC; Child Trends.
- Morrison, D.M. (1985). Adolescent contraceptive behavior: A review. Psychological Bulletin, 98, 538-568.
- National Research Council, Aids: the second decade. Eds: Heather G. Miller, Charles F. Turner, and Lincoln E. Moses (1990). National Academy Press: Washington, DC.
- O'Beirne, H.A. (1994). *Differential correlates of male and female adolescents' sexual activity*. Thesis presented to the graduate faculty of the University of Virginia in candidacy for the degree of Master of Arts.
- Oskamp, S. & Mindick, B. (1983). Personality and attitudinal barriers to contraception. In D. Byrne & W.A. Fisher (Eds.), Adolescents, sex, and contraception (pp. 65-107). Hillsdale, NJ: Erlbaum.
- Patterson, G.R., & Stouthamer-Loeber, M. (1984). The correlation of family management practices and delinquency. Child Development, 55, 1299-1307.
- Pekarik, E.G., Prinz, R.J., Liebert, D.E., Weintraub, S., & Neale, J.M. (1976). The Pupil Evaluation Inventory; A sociometric technique for assessing children's social behavior. Journal of Abnormal Child Psychology, 4(1), 83-97.
- Robinson I.E., and Jedlicka D. (1982). Change in sexual attitudes and behavior of college students from 1865 to 1980: A research note. Journal of Marriage and the Family, 44, 237-240.
- Rodgers, J.L. & Rowe, D.C. (1990). Adolescent sexual activity and mildly deviant behavior: Sibling and friendship effects. Journal of Family Issues, 11(3), 274-293.
- Seidman, E. (1991). Growing up the hard way: Pathways of urban adolescents. American Journal of Community Psychology, 19, 173-201.

- Sonenstein, F.L., Pleck, J.H., & Ku, L.C. (1991). Levels of sexual activity among adolescent males in the United States. Family Planning Perspectives, 23, 162-167.
- Voydanoff, P. & Donnelly, B.W. (1990). Adolescent sexuality and pregnancy. Newbury Park, CA: Sage.
- Weintraub, S., Prinz, R.J., & Neale, J.M. (1978). Peer evaluations of the competence of children vulnerable to psychopathology. Journal of Abnormal Child Psychology, 6, 461-473.
- Zabin, L.S., & Clark, S.D. (1981). Why they delay: A Study of teenage family planning clinic patients. Family Planning Perspectives, 13, 205-217.
- Zabin, L.S., & Hayward, S.C. (1993). Adolescent sexual behavior and childbearing. Newbury Park, CA: Sage.
- Zelnik, M., & Kantner, J.F. (1980). Sexual activity, contraceptive use and pregnancy among metropolitan-area teenagers: 1971 - 1979. Family Planning Perspectives, 12, 230-237.
- Zelnik, M. and Kantner, J.F. (1979). Reasons for non-use of contraception by sexually active women aged 15-19 in 1976. Family Planning Perspectives, 11, 289-296.
- Zelnik, M., & Shah, F.K. (1983). First intercourse among young Americans. Family Planning Perspectives, 15, 64-72.

Appendix A

Selected Items from each Measure

Problem Behavior Inventory

1. Have you ever had sexual intercourse with anyone?
2. During the past six months, how many different people have you had sexual intercourse with?
 - (1) I have had sexual intercourse, but not during the past six months.
 - (2) One person
 - (3) Two people
 - (4) Three people
 - (5) Four people
 - (6) Five people
 - (7) Six or more people
3. How often have you had sexual intercourse in the past six months?
 - (1) not at all
 - (2) about once or twice
 - (3) about once a month
 - (4) about once every two to three weeks
 - (5) about once a week
 - (6) about two to three times a week
 - (7) about once a day
 - (8) more than once a day

Appendix A (continued)

4. How often have you used protection against pregnancy or AIDS?

- (1) never
- (2) once or twice
- (3) occasionally
- (4) frequently
- (5) always
- (6) not sure, partner may have

5. If once or more, which kind(s) of protection did you use? (Interviewer: check all that apply)

- (1) none
- (2) pill
- (3) IUD
- (4) spermicidal cream, jelly, foam, suppository, sponge
- (5) diaphragm
- (6) rhythm (sexual intercourse only during safe time of the month)
- (7) withdrawal/pulling out
- (8) other (please specify)
- (9) not sure
- (10) condom/rubber

If condom was checked: when you engage in sexual activity, about how often did you or your partner engage in "safe sex" by using a condom?

Appendix A (continued)

- (1) never
- (2) once or twice
- (3) occasionally
- (4) frequently
- (5) always
- (6) not sure, partner may have

The Self-Perception Profile for Adolescents

For each question, read the two statements. Decide which statement you think is most like you.

Then, decide whether you think the statement is **really true**, or **sort of true** for you, and put

an "**X**" in the box for that choice. Put an "**X**" in only one box for each set of statements.

Really	Sort of	Sort of	Really
True	True	True	True
<u>for Me</u>	<u>for Me</u>	<u>for Me</u>	<u>for Me</u>

1. Some teenagers feel that	BUT	Other teenagers wish that
they are socially accepted		people their age accepted
		them

2. Some teenagers usually don't		Other teenagers do go out
go out with the people they		the people they really want
would really like to date		to date

Appendix A (continued)

3. Some teenagers usually act the way they know they are supposed to

Other teenagers often don't act the way they know they are supposed to

Adolescent Problem Inventory

1. You've been hassling a young substitute teacher all week, and all week she's been sending you up to the principal's office. It's sort of fun, because it's so easy to make her lose her cool.

You're up at the principal's office again, and he meets you at the door, and says, "This is the third time this week you've been sent up here. I'm suspending you this time! What do you have to say about that?"

What would you say or do now?

2. It's Thursday night, and your home studying for a math final exam you'll have the next day, on Friday. The phone rings, and it's your friend Marie. She tells you that her cousin just gave her two tickets to a sell-out concert that very night. She's really excited about going and asks you to come with her, for free. Now this is a problem. You're sick of studying and you'd love to go, but if you go, you won't have enough time to study math. It's your worst course, and if you don't do well on the exam, there is a good chance you'll flunk. She says, "I'll be over in half an hour to pick you up."

What would you say or do now?

Appendix A (continued)

3. Your father has been hassling you for months about getting home by midnight. Sometimes that's a drag, because none of your friends have to be home before 1:00 a.m., and you feel like an idiot always leaving places early. One night you walk into the house at 1:30 a.m. and your father is sitting in the living room. He yells at you, "Where have you been? Do you have any idea what time it is? Or don't kids know how to tell time anymore?"

What would you say or do now?

Pupil Evaluation Inventory

Subjects are asked to sort 35 cards into piles that describe his/her peer The Least, Not Very Well, Sometimes, Pretty Well, and The Most. Cards are sorted by using the structured Q-sort format.

1. Acts stuck up and thinks s/he's better than everybody else.
2. Is usually chosen last in group activities
3. Makes fun of people
4. Is mean and cruel to other teenagers
5. Always seems to understand things