Adolescent Sexual Behavior and Identity Development

Pamela Kay King
Utah State University

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ADOLESCENT SEXUAL BEHAVIOR
AND IDENTITY DEVELOPMENT

by

Pamela Kay King

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Approved:

Randall M. Jones
Major Professor

Brent C. Miller
Committee Member

Edna Helen Berry
Committee Member

James P. Shaver
Dean of Graduate Studies

UTAH STATE UNIVERSITY
Logan, Utah

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Pamela Kay King
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The purpose of this study was to determine if there is a relationship between adolescent sexual behavior, motivations, and identity status. A review of the literature indicated that deviant behaviors covary, and that drug use and abuse and the motivations for same are related to identity status.

A questionnaire, including the Extended Objective Measure of Ego Identity Status (EOM-EIS) and a series of questions to gather information about sexual behaviors and motivations, was employed. The sample consisted of 579 university students ranging in age from 17 to 25.

The dependent variable (sexual behavior and motivation) was viewed through the categorical assignments of identity status achieved, moratorium, foreclosed, and diffused, as well as through individual scores. As anticipated there was a relationship between sexual behavior and identity status;
specifically, risky sexual behavior was positively correlated with identity diffusion, and abstinence with identity foreclosure. Adolescents in all statuses were equally consistent users of contraception, not just identity achieved as hypothesized. There was not a clear response pattern mediated by identity status as initially anticipated. Implications were discussed.
CHAPTER I
INTRODUCTION

During the late 1960s and 1970s policymakers, scholars, and the public at large began to view teen sexual behavior and pregnancy as important social issues in the United States (Furstenberg, 1991). The absolute birth rates for teens increased in the 1960s and 1970s, largely because of increased numbers of teens (those born in the baby boom era). Since the 1970s teen births have steadily decreased; however, births to unmarried adolescents have steadily increased (Furstenberg, 1991).

The problems associated with adolescent sexual behavior, including sexually transmitted diseases, pregnancy, and a myriad of social difficulties which follow, continue to be of significant concern to society today (Hayes, 1987; Harris, 1986). When adolescents engage in sexual intercourse they are likely putting themselves at risk physically, socially, and psychologically.

Physical Consequences

The National Longitudinal Survey of Youth shows that at age 15, 5% of the females and 17% of the males had experienced sexual intercourse. By age 17 these estimates increase to 44% and 64%, respectively, and at age 19, 74% of the females and 83% of the males are sexually active (Dryfoos, 1990). These figures are as of 1983; therefore, this cohort of teens was born between 1964 and 1968.
The younger adolescents are at first coitus, the more likely they are to have multiple partners and have more frequent sexual intercourse, and the likelihood of using contraception is low (Dryfoos, 1990). These factors, in turn, increase the likelihood of detrimental physical consequences such as pregnancy (Miller & Moore, 1990) and sexually transmitted diseases (Bell & Hein, 1984).

Economic Consequences

The financial resources of a teen girl faced with pregnancy are tightly linked to the financial capability of her family and to the availability of public assistance. "Teenage mothers, whether they marry or not, have a statistically higher probability of receiving welfare at some time in their lives than do women who delay child bearing" (Burt, 1986, p. 222).

Public costs (per year), including the three most relevant programs: Aid to Families with Dependent Children (AFDC), food stamps, and Medicaid, for families begun by teen mothers in 1985 were estimated at $16.6 billion, which was 53% of the total expenditure (Burt, 1986), and in 1989 $21.5 billion, which was 54% of total entitlements (Armstrong & Waszak, 1990).

It is important to interpret these findings with the understanding that there may well be preexisting factors such as poverty, varying social backgrounds, and family influences which account for some of the economic outcome.
variability of early childbearers. In fact, some researchers (Geronimus, 1991) question the traditional causal assumption of early childbearing resulting in negative outcomes and assert that the disadvantages for some populations existed prior to the pregnancy and may in fact indicate a causal relationship in that direction.

Educational Attainment

A pregnant adolescent who has not completed high school is faced with the choices of relying on others while she continues her education, ceasing her education, or seeking alternative education. Research has linked teenage pregnancy to lower levels of education. Women aged 20-26 who had not had a child by 1983 accounted for 67.8% of females who had obtained a secondary education credential (a high school diploma or a high school equivalency diploma, GED), while their proportion in the population was 63%. Women who conceived while in high school and gave birth either while attending school or after leaving school, on the other hand, accounted for only 6.5% of females who had obtained a secondary credential, though they represented 9% of the population (Mott & Marsiglio, 1985).

It is important not to assume directionality, however, in relating educational attainment and early childbearing. In other words it is not correct to say that upon becoming pregnant adolescents drop out of school. In fact, Upchurch and McCarthy (1990) reported that the relationship between
childbearing and high school graduation "exists not because young mothers are more likely to drop out of school, but because among those who drop out, for whatever reason, those with children are less likely to return to school and graduate" (p. 232).

When adolescent parents choose not to complete their education, they are likely jeopardizing their economic well being. In one longitudinal study, adolescent mothers reported lower income, less job satisfaction, and less prestigious jobs than their agemates at age 19, 23, and 29 (Card & Wise, 1978). Teenage fathers who leave school to obtain employment are more likely than their non-father peers to work in blue collar, nonprofessional jobs. Through their twenties adolescent fathers have a higher lifetime income because of entering the work force at an earlier age. As their agemates (after obtaining postsecondary education) enter the work force, however, they tend to catch up and usually surpass the teenage father's lifetime income (Card & Wise, 1978). Adolescent parents are likely to have a lifetime of low paying jobs if they cease their education. Chances for economic security can be enhanced for adolescent parents if they stay in school and delay subsequent births (Hofferth, 1987; Upchurch & McCarthy, 1990).

Social and Psychological Consequences

Clearly then, adolescent childbearers tend to have lower educational attainment and economic standing. If an
adolescent couple marries because of a pregnancy, they also have a higher rate of marital failure than those who delay marriage and childbirth (Furstenberg & Brooks-Gunn, 1985). Again, it is important to point out that there may be differences in these adolescents which exist before the pregnancy occurs; therefore, pregnancy may be one of many factors related to these preexisting differences.

The personal, emotional meaning individuals place on their circumstances will certainly vary, as will the course of action they choose to follow. In 1982, 47% of the pregnancies to women between the age of 15 and 19 resulted in a live birth, 40% ended in abortion, and 13% of the women had a miscarriage (Hofferth, 1987). Whatever the resolution, it is likely there will be some sort of psychological adjustment for adolescents as they go through major life changes.

Most research has focused on the direct and indirect effects of pregnancy. Consequences of sexual behavior that do not result in pregnancy are more difficult to quantify. In a study designed to assess social and psychological development of sexually active adolescents who did not become pregnant as a result of coitus, Billy, Landale, Grady, and Zimmerle (1988) found there were few affected outcomes; however, those that were impacted were worthy of note. "Having sex gives rise to more sexually permissive attitudes and expectations, which in turn may affect such
outcomes as value on academic achievement, deviance proneness, religiosity, and church attendance" (Billy et al., 1988, p. 209). Billy and associates (1988) found a negative relationship between premarital coitus and self-reported grades (for males) and desire to attend college (for females).

**Prevention/Intervention Approaches**

Most would agree that adolescent sexual intercourse is a risky behavior. Because of this attitude there have been a plethora of approaches to direct, control, or influence adolescents in their sexuality choices.

Traditional sex education emphasizes decision making and knowledge, and may or may not include value statements. The effectiveness of traditional education programs has been mixed; some have been found to be highly beneficial; others have yielded nonsignificant results (Hofferth & Miller, 1989). Effectiveness is associated with more intensive, longer lasting programs (Miller & Paikoff, 1992). Assertiveness and skills training usually have a value basis of postponement. Effectiveness of communication between parents and adolescents depends on parental values, the message, and the teen's gender (Moore, Peterson, & Furstenberg, 1986).

Family planning agencies and school-based clinics offer contraception as an integral part of their services. These efforts have been shown to increase knowledge and
contraceptive use (Dawson, 1986; Zelnik & Kim, 1982). Many programs, however, have not resulted in significant changes in sexual activity (Dryfoos, 1988; Kirby, Harvey, Claussenius, & Novar 1989).

A possible explanation to the fact that there has been no single prevention or intervention strategy which has been an overall success could be, simply, that not all adolescents need the same types of interventions. The motivations for having sexual intercourse vary (Harris, 1986), so it is natural to expect that the methods of intervention and prevention should vary accordingly.

Conceptual Framework

A sound place to focus new research on adolescent sexual behavior would be in light of known motivational differences via existing models of adolescent development. A viable developmental theory is Erik Erikson’s theory of psychosocial development (1959).

Psychosocial development is the conceptual umbrella under which this study was organized. Erikson’s concept of identity was first operationalized by Marcia (1966), and modified by Grotevant and Adams (1984) with the development of the Extended Objective Measure of Ego Identity Status (EOM-EIS). The instruments of Marcia, and Grotevant and Adams both measure dimensions of crisis and commitment to produce four identity statuses. A diffused identity status is defined by a lack of crisis (exploration) and commitment;
the foreclosed status has commitment with no crisis; the
moratorium status has crisis with no commitment; and, an
achieved identity has had crisis and has formed commitments.
Further description of Marcia’s work and the EOM-EIS follow.

Jones, Hartmann, Grochowski, and Glider (1989) and
Christopherson, Jones, and Sales (1988) have employed the
identity statuses to explain experimental substance use,
motivations, and abuse. Rather than applying a single
treatment to adolescent offenders they take into account
variability in psychosocial maturity. The empirical
relationship between identity status and substance use has
shown that motivations for substance use are theoretically
compatible with the descriptions of the four identity
statuses (Christopherson et al., 1988).

Given the strength of these relationships, in
conjunction with Jessor and Jessor’s (1977) problem behavior
syndrome, which purports that deviant behaviors overlap in
individuals, the possibility that risky sexual behavior
might also be related to identity status warrants
investigation.

Definitions

Adolescence has been delineated with a variety of
chronological, sociological, and physiological boundaries.
Adolescents in this study are between the ages of 17 and 21,
are college students, and have never been married. Sexual
behavior is defined as any behavior regarding sexual
activity, ranging from abstinence to sexual intercourse. Risky sexual behavior, for the purposes of this study, is defined as unprotected (no contraception) sex, sexual involvement with multiple partners (promiscuity), or sex with people who are not well-known by the adolescent.

Purpose of this Study

Exploration of psychosocial development (identity status) in relation to adolescent sexuality, behaviors, and motivations is the task of this research. With the assumption that deviant behaviors covary, it would seem quite sound to apply an approach which has been successful in one deviant behavior to another deviant behavior, as encouraged by Jones et al. (1989) at the conclusion of their research on identity statuses and substance abuse.

It was anticipated that the identity statuses of promiscuous teenagers would be theoretically consistent with other findings on identity and deviant behavior. Adolescents of different identity statuses are qualitatively different from each other. Motivating factors for one adolescent may be meaningless to another. When one is attempting to alter a behavior common to each adolescent, it is reasonable to surmise that the same approach may not yield equal benefits to motivationally different adolescents. Assuming that these relations exist, efforts to alter adolescent sexual behavior would need to take into account differences in psychosocial maturity.
CHAPTER II

REVIEW OF LITERATURE

From its first appearance less than 100 years ago, the concept of adolescence has developed, grown, changed, and generated much controversy. Appropriate and inappropriate behavior of adolescents has always been a subject of interest to society. That interest is reflected in the extensive research which has been done on deviant behavior.

"Finding one's self" is considered by many to be the biggest issue of adolescence. Through the work of Erikson (1959) and Marcia (1966) a practical way of interpreting adolescent identity and behavior (deviant and nondeviant) has been devised.

The literature review that follows is divided into two major areas: identity development and problem behavior.

Identity

Erikson's (1959) stage theory of psychosocial development spurred much research, especially in the area of identity. Erikson's eight stages are as follows:

1. Basic Trust vs Mistrust
2. Autonomy vs Shame and Doubt
3. Initiative vs Guilt
4. Industry vs Inferiority
5. Identity vs Role Confusion
6. Intimacy vs Isolation
7. Generativity vs Stagnation
8. Ego Integrity vs Despair

The resolution of each stage is important to the continued psychosocial development of an individual.

Marcia (1966) generated operational definitions for the fifth stage of Erikson’s model. Marcia’s four identity statuses are identity achieved, moratorium, foreclosed, and identity diffused, based on levels of crisis or exploration and commitment. Numerous authors have detailed characteristics for each of the four identity statuses (Bourne, 1978; Jones & Hartmann, 1988; Josselson, 1987; Streitmatter, 1989; Waterman, 1988).

Adams and Jones (1983) define the statuses as follows:
An individual who has achieved an identity has made a self-defined commitment following a period of questioning and searching (crisis). An individual who is currently engaging in this questioning and searching period is defined as being in a state of moratorium. Foreclosed persons have accepted parental values and advice without question or examination of alternatives. Individuals who are diffused show no sign of
commitment nor do they express a need or desire to begin the questioning and searching process. (p. 249)

Research results pertaining to personalities and life style characteristics of the four identity statuses reveal them to be quite different from one another. Identity diffused adolescents are not actively exploring life options and they have not made commitments to ideological or interpersonal issues. They are easily influenced and tend to go along with the decisions of others, without awareness and/or exploration of their own desires. They may not have many (or any) close relationships (Josselson, 1987), tend toward lower school achievement (Streitmatter, 1989) and are most likely to participate in deviant behaviors, e.g., drug use (Jones & Hartmann, 1988).

Identity foreclosed adolescents exhibit strong commitments, having arrived at them by adopting the beliefs and life pursuits of their parents or other significant adults. The importance of approval from others often leads to improved school achievement (Streitmatter, 1989). Foreclosed adolescents tend to be less flexible than others, seeing issues in black or white. Often, strict moral codes curtail experimentation in unconventional behaviors such as sexual activity (Josselson, 1987) and drug use (Jones & Hartmann, 1988). The rigidity of foreclosed adolescents is
thought to preclude them from exploring healthy life options as well (Archer & Waterman, 1990).

Moratorium describes adolescents who are actively exploring but have not made commitments. These youths tend to be open-minded, eager to learn, and to explore different life options. Adolescents in this developmental stage view life in multiple shades of gray and are often anxious about not having arrived at any life commitments (Josselson, 1987).

Finally, identity achieved adolescents, through exploration and experimentation, have made commitments which are generally well thought out and future oriented. Independence and flexibility are common characteristics of achieved adolescents (Josselson, 1987). Furthermore, they are capable of maintaining close friendships and tend to exhibit higher academic achievement than the other statuses (Streitmatter, 1989).

Problem Behavior

The dictionary definition of delinquency is, "conduct that is out of accord with accepted behavior or the law" (Merriam-Webster, 1989, p. 336). Problem behavior, delinquency, and deviant behavior (used synonymously in this discussion) are socially defined. From one society, cultural setting, organization, or family, to another, the range of acceptability for a given behavior is quite broad. In addition to distinct definitions between groups there can
also be changes in definitions over time and within one group or society.

Problem behavior for this study is defined broadly as behavior which is out of accord with societal expectations because it jeopardizes the well being, health, or future of the adolescent, or has potentially negative societal consequences (Small, Silverberg, & Kerns, 1990). Following is an historical look at problem behavior, an examination of how sexual behavior is related to other deviant behaviors, and an explanation of some of the consequences, trends, and motivations for sexual behavior.

From the beginning of World War II, public concern over delinquent youth was increasing. Gilbert (1985) summarized the number of articles about delinquency in the "Readers' Guide to Periodic Literature" from 1932 to 1970. There was an increase in articles at the end of World War II and then a substantial leap to an all time high of 124 articles concerning delinquency in the eleven-month period of April, 1953 through March, 1954. These numbers remained high for the balance of the decade, but gradually decreased in the 1960s. A major change in the delinquency profile was that it was no longer a lower class phenomenon but was moving into the middle and upper classes (Gilbert, 1985).

During the late 1940s and early 1950s Dr. Fredric Wertham was a crusader in the area of adolescent delinquency. His stance was that mass media were ruining
society's youth. The crime and violence comic books were the worst culprit in Wertham's view, followed by radio programs and films (Gilbert, 1985).

The decade of the 1960s brought about new concerns for society. Cross and Kleinhesselink (1985) summarized the stressors of the 1960s as the Vietnam War and draft, a large cohort, changes in sex-role expectations, and changing sexual attitudes and behaviors. The outcomes of these stressors were drug use, rebelliousness, protest demonstrations, protest music, cynicism, and explicit sexuality.

Society's traditional attitudes about sexuality were turned upside-down in the 1960s. This was an era of questioning, challenging, and changing social attitudes toward the family. As a result, perceptions of adolescent development were complicated and evolving. Adolescent sexual activity increased greatly in the 1960s, especially for females; drug use and other deviant behaviors increased as well (Cross & Kleinhesselink, 1985).

Sexual Behavior

Sexual behavior is associated with other deviant behaviors. There is, however, a normative increase in sexual activity as adolescents mature; therefore, sexual behaviors are less likely to be associated with other deviant behaviors in an older adolescent (Elliot & Morse, 1989). Deviation in sexual behavior for older adolescents
then would involve a behavior, as stated previously, which is jeopardizing the well being, health, or future of the individual or has potentially negative consequences for society (Small et al., 1990).

The physical consequences of sexual activity, of course, include pregnancy and sexually transmitted diseases. Contraception, number of partners, and frequency of intercourse all play into this equation. Adolescents who initiate intercourse at young ages are poor contraceptors, have higher numbers of lifetime partners, more years of nonmarital intercourse, and are thereby at greater risk for premarital pregnancy (Dryfoos, 1990; Miller & Heaton, 1991). Furthermore, nonuse of contraceptives and multiple partners have important implications for sexually transmitted diseases (Bell & Hein, 1984).

A premarital pregnancy may bring negative economic consequences into play or prolong the economic disadvantages which existed prior to the pregnancy. Young mothers have a higher incidence of needing public assistance than women who delay childbearing (Burt, 1986). Additionally, an early birth may place an adolescent’s educational opportunities at risk. Approximately 10% of the young women between the ages of 15 and 19, in Miller & Moore’s (1990) review, became pregnant each year between the years 1974 and 1985. The younger a woman is for her first child’s birth the higher her lifetime fertility is predicted to be.
It is clear that the age of initiation of premarital sexual intercourse has declined. An examination of the female birth cohort, 1938-1940 (reaching adolescence in the early 1950s), shows that 3% had sexual intercourse by age 15; whereas 12.6% of those in the birth cohort of 1965-1967 (reaching adolescence in the late 1970s) had sexual intercourse by age 15 (Hofferth, Kahn, & Baldwin, 1987). Similarly, rates of sexual activity increased during the 1980s. In 1982, 47% of women age 15-19 had experienced coitus compared to 53% in 1988 (Forrest & Singh, 1990). Rates have also increased for males age 17-19, from 66% in 1979 to 76% in 1988 (Sonnenstein, Pleck, & Ku, 1989).

Planned Parenthood (Harris, 1986) conducted a survey to find out why adolescents do not delay sexual activity. In a poll of 1,000 adolescents between the ages of 12 and 17 they found the most common reason to engage in sexual intercourse was social pressure from their peers. Twenty-five percent of the teens polled had felt pressure to do more sexually than they wanted to. Girls also said that their "boyfriend talked them into it," "everybody is doing it," and they were curious. Followed by social pressure, boys said they were curious and wanted sexual gratification. Small and associates' (1990) conclusions for seventh through twelfth grade adolescents were that "girls generally see fewer benefits and more costs than boys for...sexual intercourse" (p. 19). Older respondents (college students) identified
slightly different motives for sexual intercourse. In committed relationships males and females both approved of premarital sexual intercourse; males were more likely to be sexually active outside a committed relationship, however, and reported more partners than females. "Male motives more often include pleasure, fun, and physical reasons, whereas females’ motives include love, commitment and emotion" (Carroll, Volk, & Hyde, 1985, p. 136).

Additional findings from the Planned Parenthood survey (Harris, 1986) were that sexual activity started earlier among students with below average grades (a characteristic of diffusion) (Streitmatter, 1989) and they were less likely to use contraceptives. Contraceptives are likely to be used by adolescents who are involved in sports, have above average grades, those who look beyond the moment, have future aspirations, and have a lot at stake (characteristics of achievement) (Josselson, 1987).

Covariation of Deviant Behaviors

There is much empirical evidence that deviant behaviors covary (Dryfoos, 1990). Sexual behavior, for example, has been correlated with illicit drug use (including cigarette use and alcohol abuse) (Benson & Donahue, 1989; Cross & Kleinheselink, 1985; DiBlasio & Benda, 1990), low grades (DiBlasio & Benda, 1990; Harris, 1986), school absenteeism, and school failure (Benson & Donahue, 1989). With this covariation as a foundational understanding it is reasonable
to assert that successful identification of underlying motivations and treatment for one deviant behavior may be applicable to other deviant behaviors.

Jones and Hartmann (1988) and Jones et al. (1989) reported relationships between Marcia's (1966) identity statuses and experimental substance use and abuse. Likewise, Christopherson et al. (1988) have related ego identity with motivations for substance use.

Jessor and Jessor (1977) conducted a longitudinal study of youth assessing personality and social and behavioral concepts with junior and senior high school students from 1969 to 1972 and college freshmen from 1970 to 1973. The specific behaviors which were addressed include marijuana use, sexual intercourse, drinking, problem drinking, and activism. In the high school sample these behaviors were highly correlated. Jessor and Jessor (1977) stated:

This means that those who have engaged in a particular problem behavior have also engaged in various other problem behaviors at higher rates than those who have not engaged in that particular behavior. As illustration: among the males who have used marijuana, 44% are nonvirgins, whereas among males who have not used marijuana only 17% are nonvirgins; among the females who have used marijuana 67% are nonvirgins, whereas among females who have not used marijuana only 20% are nonvirgins. (p. 83-85)
The college sample shows a similar pattern of interrelatedness, though not as strong as the high school results. This work is not implying causal relationships between various deviant behaviors, but, it does support covarying relations.

With this evidence Jessor (1987), Jessor and Jessor (1977), and Donovan and Jessor (1985) pursued the notion of the existence of an underlying construct that would lend understanding to the covariation of deviant behaviors. The existence of several problem behaviors in an individual has been identified as a "problem behavior syndrome" with the underlying construct identified as unconventionality. Jessor and Jessor characterized individuals with unconventional behavior as having a "...relative lack of interest in the goals of conventional institutions...and a more tolerant attitude about transgression" (1977, p. 237) as well as "a generalized skepticism about societal values, a rejection of its norms, and a readiness for non-conformity" (Jessor, 1987, p. 339).

Rowe, Rodgers, Bushey, and St. John (1989) have developed a similar paradigm of covarying deviant behavior. They label the underlying factor "d." Genetics and familial environment account for variance in "d." Rodgers and Rowe (1990) found an "overall relationship between sexual behavior and deviance in adolescents" (p. 290).
Given the identity work with substance use (Jones & Hartmann, 1988; Jones et al., 1989; Christopherson et al., 1988) and the covariation of behaviors through Jessor (1987), Jessor and Jessor (1977), and Donovan and Jessor's (1985) work with problem behavior syndrome and Rodgers and Rowe's (1990) "d" factor, motivations for promiscuous and unprotected adolescent sex should be theoretically consistent with motivations for drug use.
CHAPTER III

METHODS

The following is a discussion of the proposed methodology for this research, including hypotheses, research design, population, sample, measurement, procedures, data reduction, and plan of analysis.

Hypotheses

From a general research question, is there a relationship between adolescent sexual behavior/motivations and identity development, the substantive hypotheses of this study were as follows:

1. There is a relationship between adolescent identity development and adolescent sexual behavior.
   (a) There is a positive relationship between diffusion scores and risky sexual behavior.
   (b) There is a positive relationship between foreclosure scores and sexual abstinence.
   (c) Among adolescents who report having had sexual intercourse there is a positive relationship between achievement subscale scores and consistent use of contraceptive methods.

2. It was further anticipated that reported motivations for sexual behavior would vary in a theoretically interpretable way.
Design

This study utilized a correlational design; therefore, it assessed probabilities, not causality. The relationship between the independent variable (identity development-diffusion, foreclosure, moratorium, and achievement) and the dependent variables (motivations and sexual behavior-measured by abstinence, contraceptive use, frequency of sex, and number of partners) was examined at a single point in time by collecting individual level data using anonymous, group-administered questionnaires.

Sample

Never-married adolescents between the ages of 17 and 25, who were enrolled in undergraduate general education college courses, were the target participants of this study. Classes from Utah State University and the University of Arizona were selected based on the cooperation of class instructors. The classes selected to participate included a variety of undergraduate disciplines; however, they were primarily family studies courses, which may account for the sample being largely female. A convenient sample at best, the total number of respondents was 728. Elimination of those who did not meet the age and marital status requirements resulted in a sample of 579.

Of the 579 respondents, 269 were students at the University of Arizona and 309 at Utah State University. The sample is further described as ranging in age from 17 to 25
with the mean and mode age at 21; 71% are female and 29% are male. A majority (66%) of the students lived with friends or roommates, whereas 19% of the sample reported living with their parents. In terms of ethnicity, the sample was mostly white (90%), although Asian and Hispanic groups were represented with 4% and 5%, respectively. Religious preference was indicated as follows: Mormon (41%), Catholic (16%), Protestant and Jewish each with 15%, and 8% responded that they had no preference. The remaining five percent were missing or wrote a response in the "other" category.

Measurement

The subject matter of this research is one of a very personal nature. For this reason it was important to respect the privacy of the respondents. A questionnaire approach assures anonymity. The following anonymity/consent statement was read aloud.

You have been selected to participate in a multi-state survey to examine personal attitudes, beliefs, and behaviors. In order to ensure privacy and confidentiality do NOT put your name anywhere on this questionnaire. You are not required to complete this questionnaire. If you participate we assume that you have done so willingly. YOUR ANSWERS ARE VERY IMPORTANT. Please answer each question carefully and honestly. Circle your answer and fill in the blanks as
appropriate. We at Utah State University thank you for your cooperation.

The questionnaire (see appendix) consisted of, in this order, eight demographic questions, the 64 item (five-point Likert scale) Extended Version of the Objective Measure of Ego Identity Status (EOM-EIS: Grotevant & Adams, 1984), and 22 questions designed to measure sexual behavior and motivations.

Compilation of this questionnaire involved a cooperative effort by two researchers. Additional parts of this measure which were not analyzed for this study include the M. Berzonksy’s Cognitive Style Inventory and a series of sexual attitude and motivation questions adapted from the National Survey on Youth Questionnaire.

Easy to answer (demographic) questions were followed by the EOM-EIS, and the Cognitive Style Inventory; the questionnaire concluded with sexual behavior and motivation questions. This format represents a comfortable progression of personal information beginning with innocuous queries and concluding with the assessment of more private thoughts and behaviors.

**Demographics**

Eight demographic questions gathered information on age, gender, cohabitants, year in school, race, location of birth, religion, and marital status. These questions
facilitated identification of participants for this study as described in the sample section above.

Ego-Identity

As detailed previously, Erikson (1959) conceptualized psychosocial maturity into eight developmental stages. The resolution of identity versus role confusion is the stage and task associated with adolescence. Marcia (1966) developed his identity status paradigm to assess identity, and the Identity Status Interview (ISI) as a method of determining an individual's specific identity. The ISI has the advantage of thoroughness and complete classification of samples (Jones, Akers, & White, 1992). However, because of the thoroughness of the measure and its interview format it is very time consuming to administer. Additional limitations of the (ISI) include expense and low interrater reliability.

Responding to these limitations, Grotevant and Adams (1984) developed the Extended Objective Measure of Ego Identity Status (EOM-EIS), a paper-pencil instrument, which measures the identity statuses diffused, foreclosed, moratorium, and achieved, summed on four ideological and four interpersonal subscales. The self-report questionnaire is easily administered and scored with a standardized response format (Adams, Bennion, & Huh, 1987).

The EOM-EIS has been normed on college (Grotevant & Adams, 1984) and high school (Jones & Streitmatter, 1987)
samples. The measure yields a score for each status. This score is compared to cutoff scores, which are determined by distribution means and variability to place an individual in a specific status (Adams et al., 1987).

Sixty-four percent of a given sample can theoretically (lower in practice) be classified into pure statuses, assuming normal distribution and cutoffs of the mean plus one standard deviation. It is, therefore, necessary to have the additional categories of transition status (more than one score above cutoff) and low profile moratorium (all scores less than cutoff). In an attempt to classify a larger percentage of a sample, Jones et al. (1992) examined various cutoffs and found "the percent of 'pure' classification respondents...peaked when rule .50 was implemented (mean + half standard deviation)" (p. 15).

Traditionally, the Extended Object Measure of Ego-Identity Status (EOM-EIS) has been used to categorically place individuals into one of the four identity statuses (diffusion, foreclosure, moratorium, and achievement). Although the EOM-EIS has been used to classify individuals in this manner, it also yields a numerical score on each of the four subscales. In accordance with scoring procedures outlined by Adams et al. (1987) the scaled scores will be treated as interval level data. In addition to viewing identity development as continuous scores on the four statuses, the traditional nominal classification will be
employed to examine motivational differences of individuals who fall into each of the four pure identity statuses (hypothesized above). These cutoffs, however, will consist of the mean plus one-half standard deviation in order to classify as many individuals as possible (Jones et al., 1992).

Established estimates of reliability on the EOM-EIS are generally acceptable. Adams et al. (1987) summarized 13 studies which estimated internal consistency using Cronbach alphas. The median alpha for all of the studies for each of the four subscales was .66. Studies assessing test-retest reliability had a median correlation of .76.

Sexual Behavior

Sexual behavior was measured by a Guttman-type scale with the common stem "have you ever." The respondent was asked to reply yes or no to behaviors, beginning with, "kissed" and progressing through, "had sexual intercourse," "had sex on the first date," and concluding with a question on frequency of intercourse (revised from Miller, 1992). There were three additional questions on frequency of sexual intercourse and number of partners. Contraceptive behavior was assessed by questions regarding use of contraception, methods of contraception (revised from Brindis), and frequency of contraceptive use. Frequency, number of partners, and contraceptive use comprised a risky sexual
behavior scale. Concurrent validity was assessed as a part of the results of this study.

**Sexual Motivation**

Motivations for sexual intercourse, abstinence, and contraceptive use are important to this study as they can be theoretically compared across identity statuses. There were four open-ended motivation questions, e.g., "In general why do you think never-married people your age have sexual intercourse?" with similar questions on abstinence, contraceptive use, and nonuse. Two additional questions concerning motivations associated with contraception include "what are the reasons you have not used...?" and "why do you use...?"

**Procedures**

The questionnaire was administered in classroom settings. Passive consent was implied by willingness of the respondents to complete the questionnaire. The paper and pencil measure took approximately 35 to 45 minutes to complete.

This study used human subjects and was of a personal nature. Because of this, the research proposal was submitted to the Internal Review Board (IRB) at Utah State University for research on human subjects. Approval was granted.
CHAPTER IV

RESULTS

Data Reduction and Transformation

The first step in data reduction and transformation consisted of preparing (coding) questionnaires for data entry. The survey includes several forced choice questions with open-ended "other" response options, and there were open-ended questions to assess motivations. The open-ended responses were further coded as were the "other" responses. All variables were coded numerically and entered into a data file for SPSSPC analysis.

Plan of Analysis

Despite much literature reviewing the validity and reliability of the EOM-EIS, psychometric estimates were generated from these data to ensure that interitem correlations from this sample paralleled those of past data sets. In particular, internal consistency was estimated for each of the EOM-EIS subscales using Cronbach alphas (Table 1, diagonal). As shown, achievement was .66, moratorium .75, foreclosure .83, and diffusion .72.

Interscale correlations were generated as evidence of convergent-discriminant relations (construct validity) between EOM-EIS subscales. These coefficients are also presented in Table 1. According to Adams et al. (1987) the achievement score (crisis and commitment) and the diffusion
Table 1

Reliabilities and Interscale Correlations for the EOM-EIS

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.66</td>
<td>-.14</td>
<td>.12</td>
<td>-.26</td>
</tr>
<tr>
<td>2</td>
<td>.75</td>
<td>.15</td>
<td></td>
<td>.57</td>
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<tr>
<td>3</td>
<td></td>
<td></td>
<td>.83</td>
<td>.18</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td>.72</td>
</tr>
</tbody>
</table>

Note. The diagonal elements are Cronbach alpha coefficients; the off diagonal are Pearson correlations.

score (no crisis or commitment) should yield low to zero correlations because they are theoretically unrelated. The correlations generated from these data generally support Adams' speculation. A notable exception, however, is the significant r between achievement and diffusion, resulting in a correlation of $r = -.26 \ p < .001$. Theoretically, the other subscale scores could be somewhat correlated as each set share either a crisis or commitment dimension. For example, the diffusion and moratorium scales both lack commitment ($r = .57$), diffusion and foreclosure both lack crisis ($r = .18$), moratorium and achievement share crisis ($r = -.14$), and foreclosure and achievement share commitment ($r = .12$). These interscale relationships compare favorably with Adams et al.'s (1987) findings, specifically that "the diffusion subscale is often found to be correlated with the moratorium
subscale, yet it is usually negatively correlated or uncorrelated with the foreclosure subscale" (p. 48).

Hypotheses a, b, and c were tested with Pearson Product Moment Correlations (r).

(a) There is a positive relationship between diffusion scores and risky sexual behavior.

Pearson correlation coefficients were calculated between the diffusion score and seven risk factors: (1) total number of partners; (2) number of partners in the last six months; (3) ever used contraception; (4) sex on first date; (5) sex with someone known less than 24 hours; (6) sex with more than one person in 24 hours; (7) risk composite #4-#6. The far right column of Table 2 displays this information.

Significant, positive relationships were found for the diffusion score with the questions, "have you ever had sex with someone on the first date" \( r = .14 \ p < .001 \), "have you ever had sex with someone you have known less than 24 hours" \( r = .11 \ p < .01 \), and the three-item risk composite which includes the two questions previously stated along with "have you ever had sex with more than one person in a 24 hour period" \( r = .12 \ p < .01 \).

These relationships provide significant, albeit weak, support for the hypothesis that the identity diffusion score and risky sexual behavior are positively correlated.
### Table 2

Pearson Correlations for Risk Factors

<table>
<thead>
<tr>
<th></th>
<th>Ach</th>
<th>Mor</th>
<th>Fore</th>
<th>Dif</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Total number of partners</td>
<td>-.02</td>
<td>-.01</td>
<td>-.16**</td>
<td>.01</td>
</tr>
<tr>
<td>2. Number of partners in last six months</td>
<td>.00</td>
<td>.05</td>
<td>-.01</td>
<td>.05</td>
</tr>
<tr>
<td>3. Ever used contraceptives</td>
<td>.07</td>
<td>.01</td>
<td>.24**</td>
<td>-.03</td>
</tr>
<tr>
<td>4. Sex on first date</td>
<td>-.06</td>
<td>.01</td>
<td>-.19**</td>
<td>.14**</td>
</tr>
<tr>
<td>5. Sex with someone known less than 24 hours</td>
<td>-.07</td>
<td>.03</td>
<td>-.14</td>
<td>.11*</td>
</tr>
<tr>
<td>6. Sex with more than one in 24 hours</td>
<td>-.06</td>
<td>-.06</td>
<td>-.13*</td>
<td>.03</td>
</tr>
<tr>
<td>7. Risk composite #4-#6</td>
<td>-.08</td>
<td>.00</td>
<td>-.18**</td>
<td>.12*</td>
</tr>
</tbody>
</table>

Note. *p<-.01; **p<.001; *** recoded to binary digit

It is interesting to note that foreclosure scores (Table 2 second column from the right) yielded negative correlations with six out of seven risk factors. In other words, the higher the foreclosure score the less likely individuals were to participate in the various sexual risk behaviors.

(b) There is a positive relationship between identity foreclosure scores and sexual abstinence.

The question "have you ever had sexual intercourse?" was used to determine abstinence. Responses were recoded to form a binary digit (1=yes, 0=no) and a Pearson correlation coefficient was generated to relate foreclosure scores to
the measure of abstinence. As expected, there was a significant, inverse relationship between foreclosure and sexual intercourse ($r=-.21; p<.001$). Interestingly, when intercourse was correlated with the remaining EOM-EIS subscales, nonsignificant relationships emerged for each ($r=-.06; -.01; \text{ and } .06$ for achievement, moratorium, and diffusion, respectively). Hence the hypothesis purporting a relationship between foreclosure and abstinence was supported by the analyses.

(c) There is a positive relationship between the achievement scores and consistent use of contraceptive methods.

The question "how often do you use contraception" was asked of those who indicated having had sexual intercourse and use of a contraceptive method. The responses "often" and "always" were combined to represent consistent use (recoded as 1,2=0); likewise, "rarely" and "sometimes" were combined as inconsistent use (recoded as 3,4=1) and a correlation was calculated on achieved scores and contraception frequency. The analysis did not support this hypothesis ($r=.05 \ p=\text{ns}$).

Four open-ended questions addressing motivations for sexual choices were asked. There was a possibility of three responses from each individual to each question. Respondents were classified into statuses using the mean plus one-half standard deviation cutoff criterion. This
procedure reduced the sample from 579 to 188 (33% of the sample was classified into a "pure" status). Among the 188 respondents who met the classification criteria there were 71 achieved (38%), 40 moratorium (21%), 49 foreclosed (26%), and 28 diffused (15%).

The first question was "Why do you think never-married people your age have sexual intercourse?" Responses were coded into 52 categories which were subsequently collapsed into 10 composite answers. The most common response was "it feels good, they want to" (54%) followed by "they're in love, committed" (40%), and/or "social pressure" (34%) as shown in Table 3.

Achieved individuals had the highest percentage of any of the statuses for the response "they're in love, committed" (45%) and "it feels good, they want to" (65%). Diffused respondents were the most likely of all statuses to say it was because of "curiosity/experimentation" (36%) (see Table 3).

The second open-ended question, "Why do you think never-married people your age abstain from having sexual intercourse?" had 43 different responses which were subsequently collapsed into 10 composite categories. The most frequently occurring answer was "religion" (59%), followed by "values, beliefs, morals" (45%), and/or "to avoid STD/AIDS" (28%) (see Table 3).
<table>
<thead>
<tr>
<th>Why people have sexual intercourse</th>
<th>Tot</th>
<th>Ach</th>
<th>Mor</th>
<th>Fore</th>
<th>Dif</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Curious, experimentation</td>
<td>26.1</td>
<td>21.1</td>
<td>25.0</td>
<td>28.6</td>
<td>35.7</td>
</tr>
<tr>
<td>2. Ignorance</td>
<td>2.1</td>
<td>1.4</td>
<td>2.5</td>
<td>2.0</td>
<td>3.6</td>
</tr>
<tr>
<td>3. No control, drunk</td>
<td>9.0</td>
<td>11.3</td>
<td>2.5</td>
<td>2.0</td>
<td>3.6</td>
</tr>
<tr>
<td>4. Feels good, want to</td>
<td>53.7</td>
<td>64.8</td>
<td>45.0</td>
<td>42.9</td>
<td>57.1</td>
</tr>
<tr>
<td>5. In love, committed</td>
<td>39.9</td>
<td>45.1</td>
<td>42.5</td>
<td>34.7</td>
<td>32.2</td>
</tr>
<tr>
<td>6. Natural drive, hormones, horny</td>
<td>28.3</td>
<td>22.5</td>
<td>27.5</td>
<td>14.3</td>
<td>21.4</td>
</tr>
<tr>
<td>7. Pressure</td>
<td>34.0</td>
<td>25.4</td>
<td>47.5</td>
<td>28.6</td>
<td>46.4</td>
</tr>
<tr>
<td>8. Social norm, to be cool</td>
<td>12.2</td>
<td>14.1</td>
<td>5.0</td>
<td>16.3</td>
<td>10.7</td>
</tr>
<tr>
<td>9. Want/need acceptance, love</td>
<td>19.7</td>
<td>23.9</td>
<td>15.0</td>
<td>18.4</td>
<td>17.9</td>
</tr>
<tr>
<td>10. Use others, gain power</td>
<td>3.7</td>
<td>5.6</td>
<td>2.5</td>
<td>4.1</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Why people abstain from sexual intercourse</th>
<th>Tot</th>
<th>Ach</th>
<th>Mor</th>
<th>Fore</th>
<th>Dif</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Avoid STD/AIDS</td>
<td>28.2</td>
<td>32.4</td>
<td>27.5</td>
<td>22.5</td>
<td>28.6</td>
</tr>
<tr>
<td>2. Avoid pregnancy</td>
<td>12.8</td>
<td>14.1</td>
<td>12.5</td>
<td>12.2</td>
<td>10.7</td>
</tr>
<tr>
<td>3. No opportunity</td>
<td>12.8</td>
<td>11.3</td>
<td>17.5</td>
<td>10.2</td>
<td>14.3</td>
</tr>
<tr>
<td>4. Parent, peer, influence, rules</td>
<td>10.6</td>
<td>8.5</td>
<td>12.5</td>
<td>4.1</td>
<td>25.0</td>
</tr>
<tr>
<td>5. Religion</td>
<td>59.0</td>
<td>63.4</td>
<td>52.5</td>
<td>59.2</td>
<td>57.1</td>
</tr>
<tr>
<td>6. Scared</td>
<td>23.9</td>
<td>25.4</td>
<td>25.0</td>
<td>20.4</td>
<td>25.0</td>
</tr>
<tr>
<td>7. Values, beliefs, morals</td>
<td>44.7</td>
<td>43.7</td>
<td>27.5</td>
<td>59.2</td>
<td>46.4</td>
</tr>
<tr>
<td>8. Wait for right person</td>
<td>20.7</td>
<td>25.4</td>
<td>22.5</td>
<td>18.4</td>
<td>10.7</td>
</tr>
<tr>
<td>9. Wait till marriage</td>
<td>13.8</td>
<td>8.5</td>
<td>22.5</td>
<td>18.4</td>
<td>7.1</td>
</tr>
<tr>
<td>10. Want more from relationship</td>
<td>3.7</td>
<td>1.4</td>
<td>2.5</td>
<td>6.1</td>
<td>0</td>
</tr>
</tbody>
</table>

(table continues)
<table>
<thead>
<tr>
<th>Why sexually active people not use contraceptives</th>
<th>Tot</th>
<th>Ach</th>
<th>Mor</th>
<th>Fore</th>
<th>Dif</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Think no consequences, invincible</td>
<td>29.3</td>
<td>40.9</td>
<td>27.5</td>
<td>20.4</td>
<td>17.9</td>
</tr>
<tr>
<td>2. Doesn’t feel the same, not romantic</td>
<td>19.7</td>
<td>19.7</td>
<td>20.0</td>
<td>22.5</td>
<td>14.3</td>
</tr>
<tr>
<td>3. Don’t care, not macho</td>
<td>10.1</td>
<td>8.5</td>
<td>7.5</td>
<td>10.2</td>
<td>17.9</td>
</tr>
<tr>
<td>4. Don’t plan, not handy</td>
<td>14.4</td>
<td>15.5</td>
<td>17.5</td>
<td>14.3</td>
<td>7.1</td>
</tr>
<tr>
<td>5. Inconvenient, messy</td>
<td>6.4</td>
<td>5.6</td>
<td>0</td>
<td>8.2</td>
<td>14.3</td>
</tr>
<tr>
<td>6. Irresponsible, lazy</td>
<td>10.6</td>
<td>16.9</td>
<td>7.5</td>
<td>8.2</td>
<td>3.6</td>
</tr>
<tr>
<td>7. Spontaneous, caught up in moment</td>
<td>14.9</td>
<td>15.5</td>
<td>27.5</td>
<td>10.2</td>
<td>3.6</td>
</tr>
<tr>
<td>8. Stupid, don’t think</td>
<td>40.4</td>
<td>32.4</td>
<td>40.0</td>
<td>55.1</td>
<td>35.7</td>
</tr>
<tr>
<td>9. Too much trouble, too drunk</td>
<td>8.0</td>
<td>5.6</td>
<td>5.0</td>
<td>10.2</td>
<td>14.3</td>
</tr>
<tr>
<td>10. Uneducated about contraceptives</td>
<td>34.6</td>
<td>40.9</td>
<td>42.5</td>
<td>14.3</td>
<td>42.9</td>
</tr>
<tr>
<td>11. Want self or partner pregnant</td>
<td>8.5</td>
<td>4.2</td>
<td>7.5</td>
<td>12.2</td>
<td>14.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Why sexually active people use contraceptives</th>
<th>Tot</th>
<th>Ach</th>
<th>Mor</th>
<th>Fore</th>
<th>Dif</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. STD/AIDS</td>
<td>61.2</td>
<td>64.8</td>
<td>62.5</td>
<td>57.1</td>
<td>57.1</td>
</tr>
<tr>
<td>2. Consequences, safe sex</td>
<td>33.5</td>
<td>35.2</td>
<td>27.5</td>
<td>38.8</td>
<td>28.6</td>
</tr>
<tr>
<td>3. Educated, social norm</td>
<td>12.2</td>
<td>12.7</td>
<td>12.5</td>
<td>8.2</td>
<td>17.9</td>
</tr>
<tr>
<td>4. Intelligent, responsible, mature</td>
<td>18.1</td>
<td>18.3</td>
<td>20.0</td>
<td>18.4</td>
<td>14.3</td>
</tr>
<tr>
<td>5. Avoid pregnancy</td>
<td>64.4</td>
<td>63.4</td>
<td>70.0</td>
<td>57.1</td>
<td>71.4</td>
</tr>
<tr>
<td>6. Sexual responsibility, was planned</td>
<td>17.0</td>
<td>22.5</td>
<td>17.5</td>
<td>8.2</td>
<td>17.9</td>
</tr>
</tbody>
</table>
An interesting variation was that diffused respondents had the highest response rate of all statuses on "parent, peer influence, rules" (25%). Additional differences of note were that "values, beliefs, morals" was most likely suggested by foreclosed respondents (59%) and least likely by moratoriums (28%). Achieved individuals were more likely than other statuses to respond "wait for right person" (21%) (see Table 3).

"Why do you think never-married people your age who are having sexual intercourse do not use contraceptives?" received 38 different responses which were subsequently collapsed into 11 categories. "Stupid, don't think" (40%), "uneducated about contraceptives" (35%), and "think no consequences, invincible" (29%) were the three most common answers (see Table 3).

"Think no consequences, invincible" was the most popular response among achieved respondents (41%). "Don't care, not macho" was most likely suggested by diffused (18%). Additionally, foreclosed had a much lower response rate than other statuses on "uneducated about contraceptives" (14%), but were the highest on "stupid, don't think" (55%) (see Table 3).

The final question, "Why do sexually active people use contraceptives?" had very similar responses across statuses. There were initially 20 different responses which were subsequently collapsed into six categories. The top three
answers for all the statuses were "avoid pregnancy" (64%), "avoid STD/AIDS" (61%), and "consequences, safe sex" (34%) (see Table 3).

It was hypothesized that the responses would be theoretically interpretable across statuses. The analyses did not support this hypothesis. Though there was some variation, it appeared to be less theoretically based than expected.

Summary

Psychometric analyses of these data paralleled the validity and reliability estimates for the EOM-EIS generated in past research. Hypothesis testing revealed a positive relationship between identity diffusion scores and risky sexual behavior. The higher the diffusion score the more likely the participation in risky sexual behaviors. Interestingly, high foreclosure scores were negatively correlated with risky behaviors. Furthermore, foreclosure scores and abstinence were positively related, as hypothesized. All statuses were equally consistent users of contraception, not just identity achieved as hypothesized. Foreclosed respondents had the lowest risky sexual behavior scores and diffused had the highest. Achieved and moratorium respondents had scores between those of the foreclosed and diffused respondents. Finally, there was no clear response pattern, mediated by identity status, to the open-ended questions, as initially anticipated.
Adolescent sexual behavior and its consequences have been a subject of growing interest the last three decades. The most important and visible outcomes of adolescent sexual intercourse are unplanned pregnancy and sexually transmitted diseases. There may also be related social and psychological effects. As there are varying motivations for engaging in sexual intercourse (Harris, 1986; Small et al., 1990; Carroll et al., 1985) there has been no single prevention or intervention strategy which has proven to be equally successful across all adolescent populations. Rather than continue searching for a single panacea, future efforts should consider identifying and targeting individual differences and tailoring prevention activities in order to capitalize on known differences.

Sexual behavior has been empirically related to adolescent deviant behaviors (Dryfoos, 1990; Jessor, 1987; Jessor & Jessor, 1977; Donovan & Jessor, 1985) including drug use and abuse (Benson & Donahue, 1989; Rodgers & Rowe, 1990). Additionally, Christopherson et al. (1988) have linked ego identity with motivations for substance use and abuse. The purpose of this research was to establish an empirical connection between adolescent sexual behavior/motivations and ego identity development.
This study utilized a correlational design. The largely homogeneous sample consisted of 579 college undergraduate students (mean age of 21) who were 90% white and 71% female. The questionnaire, administered in classroom settings, included the Extended Version of the Objective Measure of Ego Identity Status (EOM-EIS: Grotevant & Adams, 1984) and several questions to assess sexual behavior and motivations. The following research hypotheses were addressed:

1. There is a relationship between adolescent identity development and adolescent sexual behavior.
   (a) There is a positive relationship between diffusion scores and risky sexual behavior.
   (b) There is a positive relationship between foreclosure scores and sexual abstinence.
   (c) Among adolescents who report having had sexual intercourse there is a positive relationship between achievement subscale scores and consistent use of contraceptive methods.

2. It was further anticipated that reported motivations for sexual behavior would vary in a theoretically interpretable way.

Discussion of Findings

The analysis that examined relationships between diffusion scores and risky sexual behavior yielded significant correlations for the question "have you ever had
sex with someone on the first date," "have you ever had sex with more than one person in a 24-hour period," and the three item risky sexual behavior scale. In all instances, correlations were in the predicted direction, indicating that higher diffusion scores were related to more risky sexual conduct.

A second objective was to determine the relationship between foreclosure scores and sexual intercourse. It was addressed by looking at the question "have you ever had sexual intercourse." The higher the foreclosure score, the less likely the individual was to have had sexual intercourse. Additionally, foreclosure scores were negatively correlated with six out of seven risk factors.

Thirty-three percent (n=188) of the sample were categorically assigned to one of the four identity statuses. Of those respondents who met the classification criteria, 71 were achieved (38%), 40 moratorium (21%), 49 foreclosed (26%), and 28 diffused (15%). Foreclosed respondents were the least likely to be sexually active, (45%) and diffused respondents were most likely (77%). Achieved and moratorium individuals fell between the extremes of diffused and foreclosed (65% and 70%, respectively). Among the individuals who were sexually active, 10% of the foreclosed respondents reported at least one risk behavior, compared to 54% of the sexually active diffused respondents. The achieved and moratorium respondents were 25% and 23%,
respectively (see Figure 1). Diffused respondents were five times more likely than the foreclosed and twice as likely as achieved and moratorium to report risky sexual behaviors.

These findings are of theoretical importance given that diffused adolescents are also most likely, and foreclosed adolescents least likely, to report drug use and abuse (Jones & Hartmann, 1988) and sexual behavior covaries with drug use (Benson & Donahue, 1989; Rodgers & Rowe, 1990). Therefore, theoretically, and now empirically, one can conclude that diffused adolescents are most likely, and foreclosed adolescents are least likely (of the four identity statuses) to be sexually active and participate in risky sexual behavior.

![Figure 1. Risky sexual behavior across identity status.](image-url)
People who are diffused tend to seek thrills from their environment and are easily influenced by their peers (Bourne, 1978). They have not explored different life options and have postponed serious commitments. These characteristics parallel the risk behaviors which were identified with the diffused in this study.

Foreclosed adolescents, on the other hand, are interested in complying with the rules proscribed by society (parents, teachers, religious leaders) and are led by authority rather than their own decisions (Bourne, 1978). They have made commitments; however, they could be considered premature as they are not born of their own exploration but at the urging of others. In the case of unhealthy or risky behaviors, the foreclosure status could be seen as a benefit in that it retards exploration of health-compromising behavior (Jones & Hartmann, 1988). Also consistent with Jones and Hartmann’s (1988) findings, the risky sexual behavior scores (drug use for Jones & Hartmann) for those in moratorium and achievement statuses fell between the highest risk diffusion scores and the lowest risk foreclosure scores.

It was expected that consistent use of contraception would be related to identity achievement scores, as achieved individuals are most likely to be concerned with their future and tend to have higher grades (Streitmatter, 1989), which is correlated with consistent contraceptive use
(Harris, 1986). Those with high achievement scores did indeed use contraception consistently; however, so did all of the other statuses. All identity statuses were consistent contraceptors, not just the achieved as hypothesized; 83% of the achieved, 86% of the moratorium, 86% of the diffused, and 68% of the foreclosed respondents were consistent contraceptors. This could be because there has been a strong media and societal push (along with fear of AIDS) to use contraception when sexually active. Regardless of identity status, using contraception is becoming more of a societal norm, especially with people who are in their late teens and early twenties, which these respondents were.

The final anticipated result was that responses to the open-ended questions would vary in a theoretically interpretable way. Responses were quite similar across the statuses; there were, however, some important differences (see Table 3).

To the question "why do you think never-married people your age have sexual intercourse?," achieved individuals were more likely than the other statuses to respond "they're in love, committed" and "it feels good, they want to." These answers seem to indicate that a decision for one's self has been made, which is characteristic of the achievement status (Bourne, 1978). Diffused respondents were the most likely of all statuses to suggest
"curiosity/experimentation"; this could indicate a lack of commitment, which is a theoretical component of diffusion (Adams & Jones, 1983).

For the second open-ended question "Why do you think never-married people your age abstain from having sexual intercourse?," diffused respondents had the highest response rate of all statuses on "parent, peer influence, rules." Diffused individuals are highly influenced by peers, but it would be expected that foreclosed persons would be the most likely to be swayed by parental influence and rules (Bourne, 1978). It is theoretically consistent, however, that foreclosed individuals would be likely to respond "values, beliefs, morals" and achieved individuals would be likely to make a future-oriented remark like "wait for right person" (Josselson, 1987), which were most likely by foreclosed and achieved respondents, respectively.

In response to "Why do you think never-married people your age who are having sexual intercourse do not use contraceptives?," "think no consequences, invincible" was considerably more likely to be written by achieved persons. This is not a reason (theoretically speaking) (Josselson, 1987) why achieved persons would not use contraceptives. It is important to remember that the way these questions were worded was not soliciting a personal response but a perception of other people’s reasons for not using contraceptives. This may provide an explanation for some of
the results. "Don't care, not macho" was most likely written by diffused respondents which could be a reason for a diffused person to not use contraception, as it would be likely that foreclosed persons might be "uneducated about contraceptives"; however, this was least likely to be suggested by foreclosed respondents.

The final question, "Why do sexually active people use contraceptives?" had the identical top three responses across all four statuses. There was little variation in the responses to this question across the board.

The responses on the four open-ended questions were not consistently theoretically interpretable, and therefore, this hypothesis was not supported by the findings. The most likely reason for this is due to a flaw in the design of the questionnaire. Respondents were asked about people in general. Therefore, the responses did not reflect the reasons why the individuals had or have not had sexual intercourse or use or do not use contraceptives. This is a difficult aspect to assess because even if one did ask for personal reasons, it is unlikely that all respondents would have the self-perception to accurately report this.

Summary

The findings of this study further the efforts of identifying the relationship between deviant behaviors and identity status. The primary objective of empirically confirming a relationship between diffused adolescents and
sexually risky behavior was accomplished. Secondly, foreclosed respondents were opposite of diffused in terms of risky sexual behavior. Though the number of respondents in each of the identity statuses was small, it is important to realize the benefit of supporting the findings with analyses of the identity scores and risky sex. The relationship between contraception and achievement scores was not confirmed; however, this may be explained by use of contraception becoming a societal norm. Lastly, there was not a relationship between identity statuses and motivations. This is most likely due to a flaw in the design of the questionnaire. The questions addressing motivations elicited respondents’ perception of other people’s behavior rather than motivations for their own behavior.

Limitations and Recommendations

Generalizability of these findings is restricted by the relatively homogeneous, convenience sample. The sample was composed of college students from two western states, who were largely white and female. Expense and accessibility limited this sample. Ideally, the sample should be randomly selected and more representative in terms of ethnicity, gender, SES, religious preference, geography, and educational attainment/aspiration. The mean age of the respondents was 21. Lowering the age to mid and late teens would allow for more diversity in psychosocial maturity.
This study employed a cross-sectional design which does not allow the researcher to assess development of respondents. Finally, the method of gathering data was a self-report questionnaire. Self-report inventories are always subject to falsification and rationalization; however, ethical issues of measuring a highly personal domain such as sexual behavior restrict methodological options.

**Future Research Directions**

This research contributes important information toward understanding the relationship between psychosocial identity development and deviant behaviors. It is important that future research replicate these findings in other populations, especially among younger adolescents. Since there is a normative increase (hence perceived as less deviant) in sexual activity as adolescents mature, it is more likely to be associated with other deviant behaviors in younger adolescents (Elliot & Morse, 1989) and, therefore, more likely to be related to psychosocial maturity. Another important research direction should be identifying a relationship between personal motivations for sexual behavior and identity status. The most important implication of these findings is in the ability to tailor prevention/intervention efforts not only in risky sexual behaviors but across deviant behaviors.
REFERENCES


Brindis, C. Center for Population & Reproductive Health Policy. Unpublished manuscript.


engaging in health-compromising behaviors. Paper presented at the annual meeting of the National Council on Family Relations, Seattle, WA.


APPENDIX
PERSONAL OPINION SURVEY

You have been selected to participate in a multi-state survey to examine personal attitudes, beliefs, and behaviors. In order to ensure privacy and confidentiality, do NOT put your name anywhere on this questionnaire. You are not required to complete this questionnaire. If you participate we assume that you have done so willingly. YOUR ANSWERS ARE VERY IMPORTANT. Please answer each question carefully and honestly. Circle your answer and fill in the blanks as appropriate.

We at Utah State University thank you for your cooperation.

1. What is your current age? ___ years old
2. What is your gender?
   a. Female
   b. Male

3. Who are you living with now?
   a. My parents
   b. My grandparents
   c. My husband
   d. My boyfriend/girlfriend
   e. Friends or roommates
   f. Other (specify) __________

4. What year in college are you?
   a. Freshman
   b. Sophomore
   c. Junior
   d. Senior
   e. Graduate Student
   f. Other (specify) __________

5. What is your ethnic background?
   a. Asian
   b. Hispanic
   c. Native American
   d. Black
   e. White
   f. Other (specify) __________

6. What is your religious preference?
   a. Protestant
   b. Catholic
   c. LDS (Mormon)
   d. Jewish
   e. Islam
   f. Other (specify) __________
   g. None

7. What is your current marital status?
   a. Single, never married
   b. Married
   c. Divorced or separated
   d. Widowed

DIRECTIONS: Each of the following statements reflect personal feelings held by some people in this society. We are interested in how much you agree with each statement. Because these statements reflect personal feelings and attitudes, there are no right and wrong answers. The BEST response to each of the following statements is your PERSONAL OPINION. We have tried to cover many points of view. You may find yourself agreeing with some of the statements and disagreeing with others. Regardless of how you feel, you can be sure that many others feel the same as you do. RESPOND TO EACH STATEMENT ACCORDING TO YOUR PERSONAL FEELINGS BY CIRCLING THE ANSWER THAT BEST REFLECTS YOUR OPINION.

<table>
<thead>
<tr>
<th>STATEMENT</th>
<th>RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>My parents know what's best for me in terms of how to choose friends.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>In finding an acceptable viewpoint to life itself, I often exchange ideas with friends and family.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>All my recreational preferences were taught to me by my parents and I haven't really felt a need to learn any others.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>I have lots of different ideas about how a marriage might work, and now I'm trying to arrive at some comfortable position.</td>
<td>1 2 3 4 5 6</td>
</tr>
</tbody>
</table>
I know what my parents feel about men's and women's roles, but I pick and choose what my own lifestyle will be.

6. After a lot of self-examination, I have established a very definite view on what my own lifestyle will be.

7. My own views on a desirable lifestyle were taught to me by my parents and I don't see any reason to question what they taught me.

8. I really have never been involved in politics enough to have made a stand one way or another.

9. My parents had it decided a long time ago what I should go into for employment and I'm following their plans.

10. I guess I just kind of enjoy life in general, I don't see myself living by any particular viewpoint to life.

11. Even if my parents disapproved, I could be a friend to a person if I thought she/he was basically good.

12. When I'm on a date, I like to "go with the flow."

13. Religion is confusing to me right now. I keep changing my views on what is right and wrong to me.

14. I just can't decide what to do for an occupation. There are so many that have possibilities.

15. I haven't thought much about what I look for in a date--we just go out to have a good time.

16. I've been thinking about the roles that husbands and wives play a lot these days, but I haven't made a final decision for myself yet.

17. I guess I'm pretty much like my folks when it comes to politics. I follow what they do in terms of voting and such.

18. Men's and women's roles seem very confused these days, so I just "play it by ear."

19. I'm really not interested in finding the right job, any job will do. I just seem to go with what is available.

20. While I don't have one recreational activity I'm really committed to, I'm experiencing numerous activities to identify one I can truly enjoy.

21. I am not completely sure about my political beliefs, but I'm trying to figure out what I truly believe in.
<table>
<thead>
<tr>
<th></th>
<th>STRONGLY DISAGREE</th>
<th>MODERATELY DISAGREE</th>
<th>DISAGREE</th>
<th>AGREE</th>
<th>MODERATELY AGREE</th>
<th>STRONGLY AGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>22.</td>
<td>I've thought my political beliefs through and realize that I can agree with some and not other aspects of my parent's beliefs.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<td>23.</td>
<td>I know my parents don't approve of some of my friends, but I haven't decided what to do about it yet.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>24.</td>
<td>I'm not sure what religion means to me. I'd like to make up my mind, but I'm not done looking yet.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>25.</td>
<td>I've come through a period of serious questions about faith and can now say that I understand what I believe as an individual.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>26.</td>
<td>Some of my friends are very different from each other. I'm trying to figure out exactly where I fit in.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>27.</td>
<td>When it comes to religion, I haven't found anything that appeals to me and I really don't feel the need to look.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>28.</td>
<td>I've tried numerous recreational activities and have found one I really love to do by myself or with friends.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>29.</td>
<td>I couldn't be friends with someone my parents disapprove of.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>30.</td>
<td>My parent's recreational activities are enough for me; I'm content with the same activities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>31.</td>
<td>My parent's views on life are good enough for me. I don't need anything else.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>32.</td>
<td>I don't give religion much thought and it doesn't bother me one way or another.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>33.</td>
<td>I've been experiencing a variety of recreational activities in hopes of finding one or more I can enjoy for sometime to come.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>34.</td>
<td>My dating standards are flexible, but in order to change, it must be something I really believe in.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>35.</td>
<td>I've had many different kinds of friends, but now I have a clear idea of what I look for in a friendship.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>36.</td>
<td>I don't have any close friends; I just like to hang around with the crowd and have a good time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>37.</td>
<td>A person's faith is unique to each individual. I've considered it myself and know what I believe.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>38.</td>
<td>I've never really questioned my religion. If it's right for my parents it must be right for me.</td>
<td>1</td>
<td>2</td>
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<td>5</td>
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<td></td>
<td>STRONGLY DISAGREE</td>
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<td>MODERATELY AGREE</td>
<td>STRONGLY AGREE</td>
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<tr>
<td>39.</td>
<td>There are many ways that married couples can divide up family responsibilities.</td>
<td>I've thought about lots of ways, and know how I want it to happen for me.</td>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40.</td>
<td>My ideas about men's and women's roles are quite similar to those of my parents. What's good enough for them is good enough for me.</td>
<td>I would never date anyone my parents disapprove of.</td>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>41.</td>
<td>I've never had any real close friends; it would take too much energy to keep a friendship going.</td>
<td>Sometimes I wonder if the way other people date is the best way for me.</td>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>42.</td>
<td>I haven't really considered politics. It just doesn't excite me much.</td>
<td>After considerable thought, I've developed my own individual viewpoint of what is an ideal 'lifestyle' and don't believe anyone will be likely to change my perspective.</td>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>43.</td>
<td>I haven't chosen the occupation I really want to get into, and I'm just working at whatever is available until something better comes along.</td>
<td>The standards or 'unwritten rules' I follow about dating are still in the process of developing—they haven't completely gelled yet.</td>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>44.</td>
<td>My folks have always had their own political and moral beliefs about issues like abortion and mercy killing and I've always gone along accepting what they have.</td>
<td>My rules or standards about dating have remained the same since I first started going out and I don't anticipate that they will change.</td>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45.</td>
<td>I'm not ready to start thinking about how married couples should divide up family responsibilities yet.</td>
<td>There's no single 'lifestyle' which appeals to me more than another.</td>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>46.</td>
<td>It took me a while to figure it out, but now I really know what I want for a career.</td>
<td>I'm still trying to decide how capable I am as a person and what jobs will be right for me.</td>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>47.</td>
<td>Politics is something that I can never be too sure about because things change so fast. But I do think it is important to know what I politically stand for and believe in.</td>
<td>I might have thought about a lot of different jobs but there's never really been any questions since my parents said what they wanted.</td>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>48.</td>
<td>I have one recreational activity I love to engage in more than any other and doubt I'll find another that I enjoy more.</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
58. My ideas about men's and women's roles have been taught to me by my family. 1 2 3 4 5 6
59. I'm looking for an acceptable perspective for my own 'lifestyle' view, but I haven't really found it yet. 1 2 3 4 5 6
60. I attend the same church my family has always attended. I've never questioned why. 1 2 3 4 5 6
61. I take a long time to decide, but now I know for sure what direction to move in for a career. 1 2 3 4 5 6
62. I join my friends in leisure activities, but I really don't seem to have a particular activity I pursue systematically. 1 2 3 4 5 6
63. I've dated different types of people and now know exactly what my own "unwritten rules" for dating are. 1 2 3 4 5 6
64. There are so many political parties and ideals. I can't decide which to follow until I figure it all out. 1 2 3 4 5 6

DIRECTIONS: For the following questions, respond according to the scale below. For instance if the statement is very much like you, mark a 5, if it is not like you at all, mark a 1. Use the 1 to 5 point scale to indicate the degree to which you think each statement is uncharacteristic (1) or characteristic (5) of yourself.

1. Not at all
2. Somewhat
3. Agree
4. Moderately
5. Strongly

1. Regarding religious beliefs, I know basically what I believe and don't believe. 1 2 3 4 5
2. I've spent a great deal of time thinking seriously about what I should do with my life. 1 2 3 4 5
3. I'm not really sure what I'm doing in school. I guess things will work themselves out. 1 2 3 4 5
4. I've more-or-less always operated according to the values with which I was brought up. 1 2 3 4 5
5. I've spent a good deal of time reading and talking to others about religious ideas. 1 2 3 4 5
6. When I discuss an issue with someone, I try to assume their point of view and try to see the problem from their perspective. 1 2 3 4 5
7. I know what I want to do with my future. 1 2 3 4 5
<table>
<thead>
<tr>
<th>NOT AT ALL</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>VERY MUCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIKE ME</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>LIKE ME</td>
</tr>
<tr>
<td>8.</td>
<td>It doesn’t pay to worry about values in advance; I decide things as they happen.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>I’m not really sure what I believe about religion.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>I’ve always had a purpose in my life. I was brought up to know what to strive for.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>‘I’m not sure which values I really hold.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>I have some consistent political views; I have a definite stand on where the government and country should be headed.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Many times by not concerning myself with personal problems, they work themselves out.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>‘I’m not sure what I want to do in the future.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>‘I’m really into my school work. It’s the course of study that is right for me.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>I’ve spent a lot of time reading and trying to make some sense out of political issues.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>I’m not really thinking about my future now; it’s still a long way off.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>‘I’ve spent a lot of time and talked to a lot of people trying to develop a set of values that make sense to me.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>Regarding religion, I’ve always known what I believe and don’t believe; I never really had any serious doubts.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>‘I’m not sure what occupation I should be in (or change to).</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>‘I’ve known since high school what I wanted to be and which training to pursue.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>‘I have a definite set of values that I use in order to make personal decisions.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>‘I think it’s better to have a firm set of beliefs than to be open minded.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>When I have to make a decision, I try to wait as long as possible in order to see what will happen.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>‘When I have a personal problem, I try to analyze the situation in order to understand it.</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>26.</td>
<td>I find it’s best to rely on the advice of a professional (eg. clergy, doctor, lawyer) when I have a problem.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
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<td>27.</td>
<td>It’s best for me not to take life too seriously. I just try to enjoy it.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
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<tr>
<td>28.</td>
<td>‘I think it is better to have fixed values than to consider alternative value systems.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
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<tr>
<td>29.</td>
<td>I try not to think about or deal with problems as long as I can.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td></td>
<td>NOT AT ALL LIKE ME</td>
<td></td>
<td>VERY MUCH LIKE ME</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30.</td>
<td>I find that personal problems often turn out to be interesting challenges.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>31.</td>
<td>I try to avoid personal situations that will require me to think a lot and deal with them on my own.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>32.</td>
<td>Once I know the correct way to handle a problem, I prefer to stick with it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>33.</td>
<td>When I have to make a decision, I like to spend a lot of time thinking about my problem.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>34.</td>
<td>I prefer to deal with situations where I can rely on social norms and standards.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>35.</td>
<td>I like to have the responsibility for handling problems in my life that require me to think on my own.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>36.</td>
<td>Sometimes I refuse to believe a problem will happen, and things manage to work themselves out.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>37.</td>
<td>When making important decisions, I like to have as much information as possible.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>38.</td>
<td>When I know a situation is going to cause me stress, I try to avoid it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>39.</td>
<td>To live a complete life, I think people need to get emotionally involved and commit themselves to specific values and ideals.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

The following questions have to do with relationships. Although some of the questions are sensitive we encourage your honesty and assure you once again of complete anonymity.

1. If you are single, are you dating anyone?
   a. No, I'm not dating anyone
   b. I'm dating one person (specify length of relationship)
      months years
   c. I'm dating several people (specify how many)

Here are some things you may have done with someone of the opposite sex. For questions 2 through 10, circle your response to the right of each question.

Have you ever:  

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Kissed</td>
<td>Y</td>
</tr>
<tr>
<td>3.</td>
<td>Made out (kissed for a long time)?</td>
<td>Y</td>
</tr>
<tr>
<td>4.</td>
<td>Touched the genitals of someone of the opposite sex?</td>
<td>Y</td>
</tr>
<tr>
<td>5.</td>
<td>Allowed someone of the opposite sex to touch your genitals?</td>
<td>Y</td>
</tr>
<tr>
<td>6.</td>
<td>Had sexual intercourse (had sex)?</td>
<td>Y</td>
</tr>
<tr>
<td>7.</td>
<td>Had sex on the first date?</td>
<td>Y</td>
</tr>
</tbody>
</table>
8. Had sex with someone you have known less than 24 hours?  
   Y  N
9. Had sex with more than one person in a 24 hour period.  
   Y  N
10. Done more sexually than you wanted to?  
    Y  N
11. If someone has tried to get you to do more sexually than you wanted to, how did you respond?

12. How old were you the first time you had sex?  
   a. _______ years old  
   b. I have chosen to be sexually abstinent
13. In the last 6 months how often have you had sex?  
   a. Zero times  
   b. I have only had sex 1-2 times ever  
   c. Once every few months  
   d. A few times a month  
   e. A few times a week  
   f. Other (specify) 
14. How many partners have you ever had sex with?  
   number of different partners 
15. How many partners have you had sex with in the last 6 months?  
   number of partners 
16. Have you and your partner(s) ever used any method(s) of contraception?  
   a. I have never had sex  
   b. No, I have never used contraception when I had sex.  
   c. Yes
17. If Yes:
   a. Which method do you usually use?  
      1. Pill  
      2. IUD (loop, coil)  
      3. Cream, jelly, foam  
      4. Suppository (insert)  
      5. Diaphragm  
      6. Sponge  
      7. Rhythm (calendar)  
      8. Condom (rubber)  
      9. Withdrawal (pulling out)  
      10. Other
   b. In general how often do you and your partner use a contraceptive method when you have sex?  
      1. Rarely  
      2. Sometimes  
      3. Often  
      4. Always
   c. Why do you use contraceptives?  
      ________________________________
      ________________________________
      ________________________________
18. If No:
   what are the reasons you have not used a contraceptive method? (Circle all that apply)  
   a. I didn't think we would have sex  
   b. I forgot or didn't really think about it  
   c. If my partner didn't want to use a method  
   d. I didn't think I/my partner could get pregnant  
   e. I wanted to get myself/my partner pregnant  
   f. I thought it was dangerous to use them  
   g. I thought it was wrong to use them  
   h. My parents would disapprove  
   i. I didn't know where to get contraceptives  
   j. I though contraceptives cost too much  
   k. It would be too embarrassing to obtain/use them  
   l. Other ________________________________
The following questions have to do with reasons for behavior. Please give what you think are the three most relevant reasons for each behavior.

19. Why do you think never married people your age have sexual intercourse? (Please list reasons)

20. Why do you think never married people your age abstain from having sexual intercourse? (Please list reasons)

21. Why do you think never married people your age who are having sexual intercourse do not use contraceptives? (Please list reasons)

22. Why do you think never married people your age who are having sexual intercourse do use contraceptives? (Please list reasons)

For the following questions use this scale to indicate your response.

1 = Strongly Disagree  2 = Disagree  3 = Agree  4 = Strongly Agree  DK = Don't Know

1. It is all right for someone unmarried to have sexual intercourse.  1  2  3  4  DK

2. Having sexual intercourse is an okay way to let out frustrations.  1  2  3  4  DK

3. Parents' rules about sexual behavior should be obeyed.  1  2  3  4  DK

4. People shouldn't complain about teens having sexual intercourse, because most don't get pregnant or catch AIDS.  1  2  3  4  DK

5. Unmarried people who choose to have sexual intercourse shouldn't worry about the consequences, since they are only doing something that is part of being human.  1  2  3  4  DK

6. Having sexual intercourse should be viewed as just a normal and expected part of dating relationships.  1  2  3  4  DK

7. People who do not want to have sexual intercourse before marriage should have the right to say "No."  1  2  3  4  DK

8. It is all right for young adults to have sexual intercourse before marriage if they are in love.  1  2  3  4  DK

9. Having sexual intercourse is something only married couples should do.  1  2  3  4  DK

10. My mother thinks I should not have sexual intercourse while I am unmarried.  1  2  3  4  DK

11. My father thinks I should not have sexual intercourse while I am unmarried.  1  2  3  4  DK

12. My best friend thinks I should not have sexual intercourse while I am unmarried.  1  2  3  4  DK
With regard to sexual behavior, do you ever, or, would you ever:

1 = Never  2 = Rarely  3 = Sometimes  4 = Often

1. Feel scared that you might get AIDS?  
2. Feel scared that you might get a sexually transmitted disease? 
3. Feel afraid of losing the respect of your sexual partner?  
4. Feel afraid of losing respect among your friends?  
5. Feel afraid of losing self-respect?  
6. Feel guilty?  
7. Feel that you would go into trouble with parents or guardians?  
8. Feel afraid of getting an undesirable (bad) reputation?  
9. Have a feeling of emotional closeness?  
10. Have an enjoyable physical experience?  
11. Have sex to keep your boyfriend or girlfriend interested in you?  
12. Have sex to fit in better with your friends?  
13. Have sex to have something to do?  
14. Have sex to make someone happy?  
15. Have sex to make yourself happy?  
16. Have sex to feel wanted by someone else?  

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE.