

**Starting Early: The Antecedents of Early  
Premarital Intercourse**

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**Final Summary Report**

**August, 1985**

The research reported in this summary paper was funded under Contract Number APR 000916-01-1 from the Office of Adolescent Pregnancy Programs, Department of Health and Human Services; however the opinions expressed herein are solely those of the authors.

## Starting Early: The Antecedents of Early, Premarital Intercourse

The initiation of premarital sexual intercourse is an important transition with potential health, social, and economic consequences for the young persons involved, their families and society. Those teens who initiate sexual activity at younger ages are less likely to use contraception (Zelnik and Shah, 1983). Consequently, teens under age 18 when they begin having intercourse are more than twice as likely to become pregnant within two years compared to teens aged 18 to 19 (Zabin, Kantner and Zelnik, 1979). Pregnancies experienced by younger women are particularly likely to be unwanted and are substantially more likely to end in abortion.

Negative social and economic consequences have also been documented for adolescents who bear and raise the child themselves. Teen parents tend to complete fewer years of schooling than those who delay parenthood into their twenties. They also tend to have larger numbers of children, to face a higher probability of being a single parent, to experience poverty more frequently, and to be disproportionately represented on welfare. Moreover, teen mothers are less likely to obtain appropriate prenatal care and are more likely to deliver low birth weight babies than older mothers (see Moore and Burt, 1982, for a review).

Researchers have yet to demonstrate negative psychological and social effects from early sexual activity apart from

pregnancy; however substantial increases in the incidence of venereal diseases may be related to the earlier and more widespread occurrence of non-marital sexual activity.

Thus early sexual activity, especially when it occurs without effective contraceptive practice, can represent a threat to the development and well-being of adolescents. This is particularly true for younger adolescents, who have proven to be less effective contraceptors and who are more vulnerable to poor outcomes in the event of a pregnancy.

In an attempt to understand the determinants of early sexual activity, a series of papers were completed using data on 15 and 16-year-olds from the 1981 National Survey of Children. These five papers focus on the association between early sexual activity and, respectively, household structure; television viewing; sex education; race; and parent-teen communication. The results of each paper are summarized below, following a description of the data employed in these analyses.

#### DATA

These analyses are based on data for 15- and 16-year-olds interviewed in 1981 in the National Survey of Children. This survey is the second wave of a longitudinal study of U.S. children designed to assess the physical, social, and psychological well-being of different groups of American children. The first wave, conducted in the fall and winter of 1976-77, was based on a multi-stage stratified probability sample of households in the continental United States containing

at least one child in the age range of seven through eleven years at that time (born between September 1, 1964 and December 31, 1969). Blacks were oversampled permitting more detailed analyses by race. Altogether, data were gathered on 2,301 children in 1,747 families. Weights were developed to take account of oversampling by race, as well as the number of eligible children in the family and minor discrepancies between sample and census distributions on age, sex, race, and residence.

The second wave of the survey was conducted in the spring and summer of 1981. It was a follow-up of a subsample (N=1,423) of the children, by then aged 11-16. The follow-up focused more specifically on marital disruption and its effects on children. For this purpose, the subsample was chosen to include all children in disrupted families and intact families experiencing high conflict at the first interview, plus a subsample of those in low or moderate conflict families. Roughly half the children were in each of these broad groups. Additional weights were developed to take account of the subsampling procedures so that national estimates could again be made.

In each survey, interviews were conducted with the eligible child and the parent most capable of providing information about the child, usually the mother. A follow-up study of schools attended by the children in each survey was also carried out.

To control interview costs, it was necessary to conduct the follow-up survey by telephone. In order to ensure that the quality of the data was not affected by this, an experiment was

conducted. In a random sample of 250 metropolitan interviews, half were conducted by telephone and half were conducted in person by the same pool of interviewers. Comparisons of these two subsets revealed no consistent or sizeable differences in the distribution of the variables, response rate, reported quality of the interview, length of interview time, or response bias.

In the 1981 survey, all of the respondents aged 15 and 16, males as well as females, were asked about the sexual experience of their friends and about their own sexual and pregnancy experience. One hundred and twenty of the 461 respondents in this age range indicated that they had had sexual intercourse.

Although overall data quality appears to be very good, one potential problem has been found, namely, there may be under-reporting of sexual activity on the part of 16-year-old females. Among males, the proportions reporting that they had had sexual intercourse were 21 percent at age 15 and 38 percent at age 16. Zelnik and Kantner (1980) report 56 percent for 17-year-olds, so the data for males appear to be about right, assuming a steady increase. Among females, 16 percent of the 15-year-olds and 20 percent of the 16-year-olds report having had sex, compared with 18 percent and 29 percent in the 1982 National Survey of Family Growth. Studies of sensitive topics are often handicapped by data problems; thus it is important to bear in mind that the dependent variable is a measure of the proportion of youth who report having had sexual intercourse.

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"Starting Early: The Antecedents of Early Premarital Intercourse," a paper by Kristin A. Moore, James L. Peterson, and Frank F. Furstenberg.

A number of researchers working with different samples have reported that the incidence of sexual activity is higher among families headed by a single parent. The same pattern is found in the National Survey of Children for blacks and for white females. Adolescents living with their biological or adoptive parents are less likely to initiate premarital sexual activity than those living with only one parent or with neither parent. Among white males, however, those youth living with their fathers were found to be more likely to be sexually experienced.

A number of hypotheses to explain this association were explored, including whether the incidence of sexual activity is related to the economic effects of marital disruption, and whether the attitudes of single parents might be different and thus explain the family structure effect. The example of parental dating was also hypothesized as a possible role model for non-marital sexual activity. In addition, whether single parents supervise their children's activities less effectively was considered, as was the possibility that parent-child relationships might be undermined by the experiences before and after marital disruption. These possible explanations for the associations between family structure and precocious sexual activity were operationalized using data from both the child and parent interviews in both 1981 and 1976. The sample was divided by the sex and race of the adolescent and a series of multiple

classification analyses were run for each race-sex group to see whether the sexual activity-family composition association would be modified in models explicating the several hypotheses.

Among white females, the association between family structure and sexual activity appears to be moderated by whether the mother dates frequently or has remarried. Daughters of single mothers who do not report that they date frequently are no more likely to be sexually active than daughters living with both biological or adoptive parents, while daughters of remarried and dating mothers are significantly more likely to be sexually experienced themselves. Sexual activity was also less likely among teens living in neighborhoods described as excellent or very good for children, among teens who aspire to graduate from college, among daughters of parents with traditional family attitudes, and among teens experiencing family disruption at an early age; however none of these associations were found to moderate the initial relationship between family structure and early sexual activity.

Among black females, the proportion sexually active was more than twice as high for daughters living apart from their fathers. Although only 12 young black women were living with their biological or adoptive fathers, among these young women only 15 percent were sexually experienced compared to 38 percent among those adolescents no longer living with their fathers. (Undermined by the small sample size, this relationship failed to reach statistical significance, as did most of the associations among the black sub-samples. Consequently, the

effects reported must be viewed as tentative. Nevertheless, they are very interesting.) Unlike what was found among whites, among black female teens, the initial association faded dramatically when parental education, family income, neighborhood quality, and the young woman's educational aspirations were controlled. The degree of affection between the mother and daughter was also found to be strongly related to the probability of early intercourse among black females, and controlling for this variable also nearly eliminated the association between early sexual activity and family structure. Two other variables were found to predict early intercourse; however neither was found to moderate the association between family composition and sexual activity. Black females described as troublesome at the time of the 1976 interview were significantly more likely to be sexually experienced, while those aspiring to complete college were significantly less likely.

The association between family structure and early sexual activity was also quite strong among black male adolescents, and, like white females, it does not disappear in any of the equations. Also like white females, the likelihood of having had coitus is higher among those whose mothers date frequently and those who do not aspire to a college education. Surprisingly, intercourse is also higher among those black males with employed mothers who do not leave their sons unsupervised. Although sexual experience is more common among black youth described as troublesome in 1976, those whose parent expresses



traditional attitudes about family, and those whose parents report they always monitor their son's whereabouts, none of these associations reached statistical significance.

The most intriguing result in some ways is that found for white males, among whom sexual activity seems to be more common when the son resides with his biological or adoptive father. Although sampling or methodological problems are a possibility, other anticipated associations were found. For example, those aspiring to complete college are less likely to have initiated sexual activity, while those described as troublesome in 1976 are more likely. Also, those white males living with neither parent are the most likely to be sexually experienced. Thus, we are inclined to regard this as a result that merits further exploration. A potentially important possibility is that the reason there is no association is that fathers are much less concerned about the sexual activity of their sons than they are that of their daughters. Related results indicate that both the presence of the father and the son's closeness to his father affect the probability of deviant behavior. Perhaps fathers are more involved in monitoring deviant behaviors such as alcohol and drug use because they perceive them as dangerous to their sons while they perceive no comparable risk associated with their son's sexual behavior. Further research with parents is needed to explore this possibility.

One conclusion that seems well warranted on the basis of these analysis is that race and sex differences in the family determinants of early sexual activity are substantial. Thus it

seems crucial to analyze the several groups separately when this issue is addressed, despite the fact that sample sizes are diminished by this procedure.

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"Television Viewing and Early Initiation of Sexual Intercourse: Is There a Link?," a paper by James L. Peterson, Kristin A. Moore, and Frank F. Furstenberg, Jr.

Sexuality, as portrayed on television, is a broad topic that includes suggestive and erotic behavior, gender roles, intimacy and affection, and marriage and family life. As such, the picture of sexuality presented by most programs is often distorted, and values are conveyed that many parents find inappropriate. Research has already demonstrated a link between the viewing of violent television programs and antisocial behavior in children, at least under some circumstances. The question has arisen, therefore, whether television viewing might also affect sexual behavior, in particular leading to the early initiation of sexual activity.

Several reasons have been advanced as to why the sexual content of television programming should have an effect on children: the consistency of sexual messages projected by television programming; the adult nature of most of the programming children watch; children's limited access to countervailing views; and the realism of most television programming (Roberts, 1982).

Drawing on the research on television viewing and violent behavior, we can suggest several mechanisms by which television might affect sexual behavior: by imitation or modeling; by the disinhibition of existing behavioral tendencies; by arousing latent behavioral tendencies; by providing information, ideas, or behavioral scripts that serve to socialize children; and by catharsis or the release of feelings or tension. Given the pervasiveness of sexually oriented messages in television, it could be argued that by all but the catharsis mechanism watching more television, or watching television with explicit sexual content, would be expected to raise the probability of sexual activity.

In this paper we test the specific hypothesis that watching a lot of television or watching television with a high degree of sexual content contributes to the early initiation of sexual activity among adolescents. Limitations in the data preclude the consideration of a broader range of consequences of television on children's learning about sexuality, or the rigorous testing of the various mechanisms by which television may have its effect.

The overall results do not provide much support for the hypothesized link between amount of viewing and sexual activity. For females there is no bivariate relationship between the amount of television viewing at Wave 1 and the subsequent initiation of sexual activity. For males, a moderate relationship does appear, but it is curvilinear -- the lowest prevalence rate was found among moderate, rather than light or non viewers.

Data on the sexual content of programs watched are available in the form of respondents' mentions of their favorite programs, but only for Wave 2. A mild positive association between the sexual content of the favorite program and sexual experience is found for girls; for boys, the highest experience rates are actually found for those whose favorite programs have no sexual content. The meaning of the association among girls is unclear, however, because the causal ordering of events is not known. Being sexually experienced could lead to watching programs with higher sexual content as easily as the reverse.

It could be that television viewing has a strong effect on sexual experience only for certain subgroups or only under certain conditions. To check on this possibility, we examined the relationship between sexual experience and television viewing within each category of each of several variables measuring characteristics of the child, the parent, and the parent-child relationship. We expected that a strong relationship might emerge for some of the subgroups, such as children of lower intelligence or lower self-esteem, or children who do not discuss or watch television with their parents. For the most part the expected associations failed to emerge. No significant correlations between sexual experience and television viewing emerged for any of the subgroups of females. Two sets of large and significant correlations did emerge for boys: television viewing was positively related to sexual experience for boys who did not watch television with their parents, and negatively related for those who did watch with

their parents; and the correlation was positive for those with moderate educational aspirations, and near zero for those with high aspirations. Curiously, and unexpectedly, the correlation was strongly negative for those with the lowest aspirations.

The mediating variables themselves had moderate to strong associations with sexual activity without regard to television viewing, and these associations were almost always in the expected directions. Thus sexual experience was associated with characteristics such as lower educational aspirations, lower intelligence, watching television alone, not discussing television with parents, and having parents with permissive sexual attitudes.

Methodologically, improvements could be made in the design of future studies to more rigorously test the hypotheses about possible linkages between television viewing and sexual activity. In particular, more precise measures of exposure to the sexual content of television programming, perhaps through the use of viewing diaries, could be tried. Also, a broader range of measures of sexual activity are needed that include age at first intercourse, frequency of intercourse, number of partners, as well as pre-coital sexual behaviors.

Within the limitations of the data from the National Survey of Children, several hypotheses can be made that deserve further research. To the extent that television viewing is a predictor of sexual activity, it is probably a weak one. Even with the refinements in methods suggested above, we do not expect a strong overall relationship to emerge. However, such a

relationship may emerge more strongly for subgroups of the population that are more vulnerable to the effects of television, such as the less intelligent, or those whose viewing is not monitored or interpreted for them by parents. Finally, the relationship is likely to be stronger for boys than for girls. Because the social and economic costs of pregnancy are less for boys, their sexual activity may be more subject to the influence of weaker forces such as television viewing.

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"Exploring Race Differences in the Timing of Intercourse," by Frank F. Furstenberg, Jr., S. Philip Morgan, Kristin A. Moore, and James L. Peterson.

Researchers have long been aware of sizeable differences between blacks and whites in the prevalence and timing of premarital sexual behavior, yet have disagreed over the origin and meaning of these differences. The disparity is especially large among younger teens where the proportion of sexually active blacks is nearly three times as high as for whites. The racial differential has declined recently, due to a larger increase in the level of sexual activity among whites than among blacks; still, the incidence of sexual activity continues to be considerably higher among blacks, especially at younger ages.

Accounting for these racial differences has been both a politically controversial and an analytically difficult task.

Explanations can be grouped into several types that are not necessarily mutually exclusive. Some explanations have been built on observed or hypothesized biological differences in puberty or fecundity at young ages. A second line of explanation links black/white differences in the timing of sexual behavior to the disadvantaged socioeconomic position of blacks. A related explanation looks not at socioeconomic disadvantage per se, but at factors associated with disadvantage as the cause of early sexual experience. Such factors include single-parent families and poor school performance. Finally, some social scientists believe that the higher rates of adolescent sexual activity among blacks reflect different sexual norms, ones that are more tolerant of, if not altogether approving, of early sexual activity and childbearing.

This paper presents analyses of data from the National Survey of Children that bear on the validity of these varying explanations. While we cannot claim to disprove any of the explanations, the evidence partially supports the socioeconomic explanation, but is most consistent with the normative view.

The biological explanation cannot be tested with our data, since we do not have measures of hormone levels or pubertal development. However, other researchers have failed to find evidence of race differences in hormone levels. Also, a relationship between hormone levels in girls and sexual behavior has not been noted, while several researchers have reported

sexual activity among young black males that precedes puberty. Hence the weight of the evidence suggests that the biological explanation is an unlikely one.

The socioeconomic explanation is given some support by the data. Low mother's education and low family income are associated with early intercourse and these variables partly attenuate the race effect. However, the race effect remains strong even with these controls, indicating that this explanation is far from complete.

The third explanation, that factors associated with low socioeconomic position rather than socioeconomic status itself accounts for race differences is not supported by this analysis. The presence of the father, his employment status, and the mother's work status do not affect the differential in teen sexual behavior. Likewise, the respondent's school performance and educational goals are unable to sharply attenuate the race difference in sexual behavior.

Of all the explanations, the data are most consistent with that based on differences in subgroup attitudes and perceptions. If there are normative differences between blacks and whites on the acceptability of early intercourse, then we might expect these differences to be most sharply drawn in segregated schools, and this is just what the data show. Moreover, blacks are much more likely to have peers whom they report as sexually active. Controlling for both of these effects considerably weakens the race differences, lending support to the normative argument. The normative argument is given further support by findings that



black youth are more likely to report an expected age at parenthood that is less than or equal to their expected marriage age; that black youths' mothers are more likely to approve of living together prior to marriage; and that these race differences are most pronounced among those in segregated schools.

It should be pointed out that these attitudes are not related to the likelihood of ever having had intercourse at the individual level (controlling for sex and race). These results suggest that the normative pressure to initiate sex operates primarily at a community level, though it is difficult to demonstrate this interpretation convincingly with the data at hand.

In conclusion, the data are most consistent with a contextual explanation based on differences in subgroup attitudes or norms, though socioeconomic variables also provide part of the explanation. Further research examining the normative difference explanation more rigorously is warranted.

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"Sex Education and Adolescent Sexual Behavior," by Frank F. Furstenberg, Jr., James L. Peterson, and Kristin A. Moore.

Sex education in the public schools is a controversial subject, despite the large majority of Americans that has favored such programs since the 1940's, and the increasing implementation of such programs in the past decade or so. A

number of critics argue that classroom instruction may actually promote sexual activity, and others have begun to question the efficacy of sex education on other grounds. A number of recent studies suggest that sex education does not promote precocious sexual intercourse, an important conclusion in need of further validation. However, little other systematic data exist on the relationship of sex education programs to adolescent sexual behavior and pregnancy, a situation that undermines attempts to assess the promise of sex education as a preventive strategy.

This paper takes a fresh look at the association between sex education and sexual behavior, using data from the National Survey of Children. Although these data do not permit tests of causal hypotheses because they contain no retrospective questions on dates of onset of sexual activity or dates of sex education, they do allow us to look for patterns of association that are either consistent with or inconsistent with such hypotheses.

Our analysis is based on a set of questions asked of the nearly 500 15- and 16-year-olds in the sample. They were asked how many of their friends were sexually active; if they themselves had ever had sexual intercourse; whom, if anyone, in their family they talked to about sex; and if they had ever had a course on sex education at school.

There are inevitably some limitations in the data. As noted, with the cross-sectional design and lack of retrospective questions, we cannot test for a causal link between sex

education and behavior. Moreover, the question on sex education is not very specific, permitting the respondent some latitude in interpretation. Finally, self-reports of sexual experience are subject to response bias, most often in the direction of underreporting.

Sex education and sexual experience. The data show that the overall reported prevalence of sexual intercourse is about 50 percent higher among youth who did not have a course in sex education (25 vs. 16 percent). This result is consistent with the notion that sex education is effective at reducing sexual activity; but there are other possible interpretations. For example, youth exposed to sex education programs that advocate postponement of sexual activity might be more likely to underreport their level of sexual experience. To narrow the range of interpretation, we tested this association in a number of ways.

First, the association was examined within race/sex subgroups. The negative association between sex education and sexual activity held up for all subgroups except black males. Indeed, the pattern of association was actually reversed slightly for black males -- 37 percent without sex education were sexually experienced, compared with 41 percent for those with sex education. Since many black males initiate intercourse at very young ages, sex education may be offered too late to affect them greatly.

Second, the association was only diminished slightly in a multivariate analysis that held constant a variety of background

factors that might have created a spurious connection between the two variables: family income, mother's education, the mother's age at first birth, family structure, and community size.

Finally, we reasoned that sex education programs, usually of limited duration, are likely to be less influential than peers, so that the association between sex education and sexual experience will be weaker for those with many sexually active friends. Such was the case among blacks, but among whites the association held up regardless of the reported level of sexual activity among friends.

Families as a source of sex information. The claims of some critics that sex education programs erode the influence of parents are not supported by our data. Adolescents who report that they received sex education at school were neither more nor less likely to say they usually could talk to their parents about sex. Further, both sex education programs and the ability to discuss sexual matters with parents were individually associated with a lower prevalence of sexual intercourse, although instruction at school is more strongly related to postponement of sex than is the ability to communicate about sex with parents. The lowest prevalence of all was associated with the joint occurrence of sex education and communication with parents.

Although the efficacy of sex education cannot be demonstrated with these associational data, the results are at least consistent with the proposition that sex education

programs reduce the level of sexual activity, and that they supplement, rather than interfere with the influence of parents. The association is robust under a variety of controls, and is attenuated in expected ways for specific population subgroups -- black males and those with many sexually active friends (at least among blacks). The difficulty of establishing causality points to the urgent need for the collection of retrospective or, preferably, longitudinal data designed to aid intelligent planning in an area that is badly in need of concerted social action. It is also crucial to demonstrate whether and under what conditions sex education can serve to lower the incidence of early pregnancy.

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"Family Attitudes and the Occurrence of Early Sexual Activity,"  
by Kristin A. Moore, James L. Peterson and Frank Furstenberg,  
Jr.

Parent-child communication is often suggested as an approach to lowering the incidence of early sexual activity or enhancing contraceptive practise, and a number of researchers have found modest support for this recommendation. Others, however, have reported that parental communication is infrequent, incomplete, and without much impact. It is generally assumed by researchers and policy makers that parents are fairly uniform in their opposition to premarital sexual activity; yet a significant liberalization in the attitudes of adults has occurred during

the past several decades and it cannot necessarily be assumed that all parents feel strongly about the importance of postponing sexual activity.

To explore whether parent-child discussion and parental supervision have different effects on the incidence of sexual activity as a function of the parent's own attitudes, five measures of parental communication and monitoring were included in a multiple classification analysis. They include, the parent's report of the proportion of their child's friends that they know; the young person's assessment of whether his or her parents listen and discuss decisions; the adolescent's report of whether he or she discusses television with parents; the adolescent's report of whether he or she has discussed sex with a parent; and the parent's assessment of how good a place their neighborhood is for a child to grow up. Analyses were conducted separately for males and females.

In an initial set of analyses, the parent's traditionality was not explicitly considered. These analyses produced results explaining very small amount of variance and providing moderate to weak evidence that communication and supervision are associated with less sexual activity.

In a second set of analyses, the sample was divided according to whether the parent's attitudes about marriage and family, as expressed in the parent section of the interview, were either traditional or moderate to liberal. Dividing the sample in this way demonstrates that there is an association between communication and a lower incidence of sexual activity,

but only among daughters of more traditional parents who communicate with their daughters about sex and television. Only 3 percent of the daughters whose traditional parents discuss sex with them report having had sexual intercourse, compared to 20 percent of those daughters whose traditional parents have not communicated, 17 percent of the daughters with more liberal parents who do not communicate, and 21 percent of those whose more liberal parents do communicate.

Similar results are found for communication regarding television. Only 1 percent of the daughters of traditional parents who discuss television often or sometimes report having had sexual intercourse, compared to about one-fifth of the daughters in the other three groups.

Daughters of traditional parents who generally tend to listen and discuss issues are less likely to report having had sex in a bivariate analysis; but this association disappears when the variables measuring discussion of sex and television are added.

Among sons of moderate to liberal parents, as among the daughters of more liberal parents, parental communication bears no association with the incidence of sexual activity. Results for the sons of traditional parents indicate that the incidence of sexual activity is lower when sons feel their parents generally listen and discuss decisions with them. However, discussion of television has no effect, and the discussion of sexual topics is significantly but negatively related to the incidence of premarital intercourse. That is, when traditional

parents discuss sex with their sons, their sons are more likely to have had intercourse. The temporal ordering of the events cannot be ascertained with these data, unfortunately, so it is not clear whether the discussion precedes or follows the son's entry into sexual activity.

In line with similar studies, we find that parents are much more likely to discuss sex with their daughters than with their sons. Sixty-seven percent of the young women but only 17 percent of the young men report having had such discussions. We speculate, then, that the negative association between communication and sexual activity among the daughters of traditional parents occurs because of parental communication that encourages the daughters to postpone having sex, while the positive association among sons of traditional parents reflects communication that occurs after evidence of sexual activity is perceived by the parent. In other words, we suspect that sex doesn't come up for discussion with sons unless the parents perceive that it has become an issue -- a definition that seems more common among traditional than among more liberal parents.

Results of this analysis suggest several methodological issues for future studies. First, there is a need to obtain more detailed information on the timing and content of the communication that occurs with regard to sex. Moreover, it seems that a broad definition of how sex can be approached is appropriate, given our finding that discussion of television is as strongly associated with the postponement of intercourse as is discussion of sex per se. Also, we found that a measure of



the parent's attitude toward living together prior to marriage was less effective at discriminating the subgroups than was the more general measure of attitudes toward marriage and family reported here. Consequently the possibility that general family values are as or more important than specific attitudes should also be considered.

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#### Note on Deviant Activities

Initial analyses in one of the papers focussed on the association between deviant activities and early sexual activity. Since these analyses do not appear in the final version of the paper, the tables are presented here as Tables 1 through 3.

In Table 1, the bivariate association is presented for sexual activity and five measures of deviant activity: smoking, using alcohol, using marijuana, shoplifting, and running away. Among white females and white males, the proportion reporting they have ever had intercourse is strongly and almost without exception linearly related to a greater involvement in deviant activities. Among blacks we have reason to believe that considerable under-reporting of deviant activities exists (e.g., mean levels of deviant activities are notably lower among blacks; the number of reported deviant activities is positively related to parental education among black youth; and few black

youth are reported to have engaged in any of the deviant activities. Hence it is impossible to really assess the association.

Table 2 reports the results of a multiple classification analysis among white youth in which the same set of independent variables was run against, first, a measure of the proportion sexually experienced and, second, a scale summing the youth's involvement in the five deviant activities included in Table 1. Sexual intercourse is, of course, not identical to any of the deviant activities in question. In fact, an intimate relationship is in some ways the very opposite of stealing, running away, and the like. However, for the age group considered in this analyses, precocious sexual activity bears many commonalities with deviant behaviors. One would expect the similarities to be even greater if sexual activity at ages 13 and 14 were considered.

In general, comparing the predictors for the two dependent variables, it is striking how similar they are (and how much they echo numerous studies focussed on identifying the predictors of a variety of types of child outcomes): well-educated parents, both parents present, a good neighborhood, and an affectionate relationship with the parents.

Of the four sex/race groups, sexual activity is least frequent -- that is, most deviant -- among white females. Hence one might expect that an equation predicting sexual activity among adolescent white females would be fairly similar to an equation predicting deviant activities in the same sub-group;

and they are to some extent. Among white females, both outcomes are more likely in intact families when the daughter's relationship with her father is less close and in mother-only families in which the mother dates frequently. Both are also more frequent when parental education is low, when maternal affection is lower, and when the young woman's friends tend to be older. Neighborhood quality and educational aspirations are both related to sexual activity but not deviant activities, whereas maternal employment is not related to either outcome.

Among white males, closeness to the father does diminish the level of deviant activities, as does living with a step-parent or with a mother who dates relatively regularly. As noted in the paper entitled "Starting Early," summarized above, closeness to the father did not predict a lower level of sexual activity among white males, suggesting that the father/son relationship has different implications for deviant activities than for sexual activity. While having older friends also predicts to a higher level of deviant activity as well as a higher likelihood of sexual activity, none of the other variables are important predictors of deviant activities, and the model as a whole does slightly less well predicting deviant activity than it does predicting sexual activity.

Among black respondents, a problem with under-reporting is suggested, as noted above, by a negative association between parental education and the level of deviant activity. Other anticipated relationships are found -- for example, lower aspirations, lower maternal affection and a poorer neighborhood

all predict to a higher incidence of deviant activity -- but we hesitate to draw conclusions about black respondents in view of the under-reporting issue.

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#### Note on Religiosity

Although none of the analyses have employed religiosity in their final models, it is relevant to summarize our data on this issue, since religiosity is widely regarded as an important predictor of early sexual activity. Briefly, our data indicate a slight association between the child's attendance at religious services and activities and a lower probability of sexual activity among white females and black females, but not among males (see Table 4). Other measures of religious interest or commitment bear little association with the incidence of sexual activity (several variables are also shown in Table 4).

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#### Concluding Comment

Data in the National Survey of children were not collected specifically to study the issue of teenage pregnancy. Because of this, some information, such as detailed data regarding the timing of events, the specific content of communication regarding sex, the type of material studied in sex education, etc., is not known. However the richness of the data in other

respects has made it possible to address questions not previously approached. This fits in with a developing consensus that early sexual activity and pregnancy are affected by a wide range of family and community influences and consequently are best studied using data that take a broad perspective. It seems unlikely that a small and simple set of determinants will be clearly established, particularly a set that applies to all age, race, and sex groups. It is our hope that these analyses will demonstrate the usefulness of broadly conceived data bases such as the National Survey of Children.

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Table 1  
 Percent Sexually Experienced Among 15-16 Year-Olds,  
 by Race and Sex of Teen, and Measures of Deviant Activities, 1981

	Non-Black <u>Females</u> (n*)	Non-Black <u>Males</u> (n*)	Black <u>Females</u> (n*)	Black <u>Males</u> (n*)
<b>Smoked?</b>				
Never	2 (57)	26 (75)	21 (30)	34 (30)
More than 2 weeks ago	12 (82)	23 (74)	45 (21)	34 (13)
Less than 2 weeks ago	39 (37)	61 (28)	45 (8)	74 (7)
<b>Use Alcohol?</b>				
Never	1 (55)	12 (47)	30 (34)	23 (27)
More than 2 weeks ago	19 (76)	25 (89)	33 (23)	73 (16)
Less than 2 weeks ago	27 (45)	44 (41)	-- (2)	40 (7)
<b>Used Marijuana?</b>				
Never	7 (124)	19 (124)	28 (41)	33 (43)
More than 2 weeks ago	19 (38)	42 (43)	32 (15)	-- (4)
Less than 2 weeks ago	62 (14)	74 (10)	-- (3)	100 (5)
<b>Shoplifted?</b>				
Never	13 (159)	24 (155)	31 (56)	35 (43)
Once	40 (10)	13 (16)	-- (2)	76 (6)
≥Twice	34 (7)	82 (6)	-- (1)	-- (3)
<b>Run away in past 5 years?</b>				
No	12 (165)	28 (167)	31 (58)	39 (52)
Yes	51 (11)	49 (10)	-- (1)	-- (0)

\*Unweighted. Percents are based on weighted figures.

Source: Child Trends, Inc., The 1981 National Survey of Children

Table 2

Proportion Sexually Experienced and Level of Deviant Activity  
Among 15-16 Year-Olds, Net of Controls for Child, Family,  
and Neighborhood Characteristics, by Sex, Whites, 1981

	White Females		White Males	
	<u>Sexual Activity</u>	<u>Deviant Activities Scale</u>	<u>Sexual Activity</u>	<u>Deviant Activities Scale</u>
<b>Family Structure</b>				
Biological father in home and extremely or quite close	.08	7.7	.22	7.5
Biological father in home, but only fairly or not close	.17	8.7	.22	8.6
Mother and step-father	.41	8.5	.12	7.8
Mother only; mother dates frequently	.30	8.9	.04	7.6
Mother only; mother dates infrequently	.10	7.8	.12	9.2
Other family type	.26	8.0	.58	9.7
<b>Age of Child</b>				
15 Years Old	.12	7.9	.15	7.8
16 Years Old	.16	8.2	.27	8.1
<b>Education of Better-Educated Parent in the Home</b>				
< 12 years	.20	8.8	.21	7.9
≥ 12 years	.13	7.9	.20	8.0
<b>Maternal Employment</b>				
Not employed	.14	8.1	.22	8.0
Employed part-time	.16	7.4	.11	7.9
Employed full-time	.12	8.3	.25	7.9
<b>Child's Perception of Neighborhood Quality for Children</b>				
Excellent or very good, 1976 and 1981	.10	8.5	.17	7.9
Excellent or very good, 1981 only	.10	7.9	.24	7.9
Good, fair, or poor, 1981	.17	8.0	.20	8.0



Table 2 (Continued)

Proportion Sexually Experienced and Level of Deviant Activity  
Among 15-16 Year-Olds, Net of Controls for Child, Family,  
and Neighborhood Characteristics, by Sex, Whites, 1981

	White Females		White Males	
	<u>Sexual Activity</u>	<u>Deviant Activities Scale</u>	<u>Sexual Activity</u>	<u>Deviant Activities Scale</u>
<b>Educational Aspirations</b>				
Less than college	.15	8.0	.28	7.8
College graduation or higher	.12	8.0	.13	8.1
<b>Maternal Affection Scale</b>				
Low/medium	.15	8.4	.19	7.9
High	.12	7.4	.23	8.1
<b>Grade Level of Child's Friends</b>				
Higher-grade	.28	8.6	.40	8.5
Same or lower grade	.09	7.8	.16	7.8
<b>N</b>	167	167	165	165
<b>Variation Explained</b>	.22	.20	.19	.16
<b>Adjusted R<sup>2</sup></b>	.14	.12	.12	.08
<b>Largest beta:</b>	Family Structure	Affection	Family Structure	Family Structure
<b>Second largest beta:</b>	Friend's Grade	Family Structure	Friend's Grade	Friend's Grade
<b>Third largest beta:</b>	Neighborhood	Education	Aspirations	-

Table 3  
 Proportion Sexually Experienced and Level of Deviant Activity  
 Among 15-16 Year-Olds, Net of Controls for Child, Family,  
 and Neighborhood Characteristics, by Sex, Blacks, 1981

	Black Females		Black Males	
	<u>Sexual Activity</u>	<u>Deviant Activities Scale</u>	<u>Sexual Activity</u>	<u>Deviant Activities Scale</u>
Biological or Adoptive Father in the Home				
Yes	.30	7.7	.31	6.3
No	.33	7.2	.44	7.3
Age of Child				
15 Years Old	.29	7.4	.37	6.8
16 Years Old	.35	7.2	.42	6.8
Education of Better- Educated Parent in the Home				
<12 years	.39	6.3	.44	6.3
≥12 years	.25	8.3	.35	7.2
Maternal Employment				
Not employed	.39	7.4	.30	7.1
Employed	.20	7.1	.48	6.5
Neighborhood, Excellent or Very Good				
Yes	.23	6.9	.35	6.3
No	.37	7.5	.40	7.0
Educational Aspirations				
Less than college	.39	7.6	.63	7.7
College graduation or higher	.20	6.7	.29	6.4
Maternal Affection Scale				
Low/medium	.41	7.9	.38	6.9
High	.20	6.5	.42	6.5
N	59	59	52	52
Variance Explained	.22	.29	.13	.26
Adjusted R <sup>2</sup>	.12	.20	0	.15
Largest beta:	Affection	Education	Aspirations	Aspirations
Second largest beta:	Aspirations	Affection	Employment	Father
Third largest beta:	Employment	Aspirations	Father	Education

Table 4

Percent Sexually Active, by Race and Sex, Among 15-  
and 16-Year-Olds, by Measures of Religiosity, 1981

	<u>Black</u> <u>Males</u>	<u>Black</u> <u>Females</u>	<u>Non-Black</u> <u>Males</u>	<u>Non-Black</u> <u>Females</u>
<b>Child's Frequency of Attending Religious Services or Activities</b>				
About once a week	34	20	23	15
At least once a month	58	49	26	0
A few times a year	(61)	(41)	19	25
Never	(27)	(41)	24	20
<b>Child's Attitude About Attending Church or Synagogue</b>				
Love	38	32	11	18
Like	36	32	38	17
No opinion	(37)	( 0)	15	0
Dislike, hate	(45)	(54)	33	27
<b>Parent's Frequency of Attending Religious Services/ Activities</b>				
About once a week	51	23	23	14
At least once a month	16	33	4	6
A few times a year	(30)	57	32	16
Never	(39)	(32)	37	16

Note: Sample n's under 10 are in parentheses.

Starting Early: The Antecedents of Early,  
Premarital Intercourse

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May 4, 1984

The research reported in this paper was funded under Contract Number APR 000916-01-0 from the Office of Adolescent Pregnancy Programs, Department of Health and Human Services; however the opinions expressed herein are solely those of the authors. The research assistance of Marianne Winglee and Nancy McMahon-Cox is gratefully acknowledged.

## ABSTRACT

A major factor in the increased incidence of premarital teenage pregnancy is the greater frequency of early, premarital intercourse. Data on 15 and 16-year olds in the 1981 National Survey of Children indicate that white females and blacks living with both biological parents are less likely to have had sex, while teens living with neither parent were more likely. Among black females, controls for income, neighborhood and maternal affection explain the association. Among white females and black males, family characteristics and aspirations are related to precocious sexual intercourse; but they do not explain the association between intercourse and family structure. Among white males, those living with their fathers are more likely to be sexually experienced.

Keywords: Premarital Sex, Family, Single Parents, Adolescent Sexuality, Adolescent Pregnancy, Teenage Parenthood

## INTRODUCTION

Initiating sexual activity is a natural transition made by nearly all humans. It is not the occurrence of this transition but its timing and the circumstances under which it occurs that can have significant implications. Between 1971 and 1982, the proportion of never-married females aged 15 to 19 who reported ever having sexual intercourse increased from 28 to 43 percent (Zelnik and Kantner, 1980; Pratt, et al., 1984). In consequence, during the decade of the 1970s, the proportion of women between the ages of 15 and 19 who became premaritally pregnant nearly doubled, rising from 8.5 to 16.3 percent (Zelnik and Kantner, 1980).

Those teens who initiate sexual activity at younger ages are less likely to use contraception (Zelnik and Shah, 1983), and are more than twice as likely to become pregnant during the 24 months following first intercourse (Zabin, Kantner, and Zelnik, 1979). Pregnancies among younger women are particularly likely to be unwanted and are substantially more likely to end in abortion. In addition, a substantial body of research has documented negative social and economic consequences of early childbearing for young women, their families, and for government welfare expenditures (see Moore and Burt, 1982, for a review).

Apart from the consequences of early childbearing, research has yet to demonstrate negative psychological and social effects of early sexual activity. However, substantial increases in the incidence of venereal diseases may be related to the earlier and more widespread occurrence of non-marital sexual activity.

Thus, early sexual activity, especially when it occurs without effective contraceptive practice, can be quite detrimental to the well-being of adolescents. Consequently, researchers have begun to explore the circumstances surrounding the sexual transition of young adolescents.

Why some teens initiate sex before others can be stated as a broader theoretical issue. In all transitions that are highly age-graded, such as the passage to non-virginity, we can expect that individuals who make the transition early will be different from those who delay. The differences may derive from variations in characteristics of the individuals themselves, differences in social situations, and differences in cultural norms governing the timing of the transition.

In our examination of the determinants of early sexual activity, we shall touch on all of these potential influences. However, we shall focus our inquiry on the relationship of family structure to the timing of the sexual debut. Several previous studies have discovered that adolescents are much more likely to initiate sexual activity at an earlier age if they are not living with both of their biological parents. Zelnik, Kantner, and Ford (1981) for example, report that family stability is one of the most important correlates of sexual activity in their studies of teenage females. Similar results have been reported by Hogan and Kitagawa (1983) for a sample of black female teens in Chicago, by Thornton (1983) for a sample of white teens in Detroit, and by Mott (1984) among a national sample of teenage females. Data for 15 and 16 year olds in the

1981 National Survey of Children indicate that sexual activity is less common among youth living with both parents among blacks and white females, but not among white males.

(Insert Table 1 About Here)

These kinds of associations have promoted some speculation, that the rise in sexual activity which occurred in the 1970s may be traced to the increase in marital disruption which began in the preceding decade. However, recent evidence that increases in the incidence of sexual activity have abated (Pratt, et al., 1984) suggests that any causal association is not simple or direct. There are a number of hypotheses that might explain the association between family form and the propensity to initiate sexual activity at a young age. We will attempt to delineate some of these hypotheses and test them among a representative sample of U.S. 15 and 16 year olds.

#### HYPOTHESES

There are at least five separate ways of interpreting the relationship between family disruption and early sexual behavior, but they are neither completely distinct nor necessarily mutually exclusive. Thus, our goal ultimately is not to pick among competing hypotheses but to piece together complementary interpretations.



### Economic Status, Parental Education, and Early Sexual Activity

The first major line of explanation centers on the economic effects of marital disruption and its sequelae for children. Single parent families tend to have substantially lower incomes than two-parent families (Hoffman, 1977; Bumpass, 1981; Select Committee on Children, Youth, and Families, 1983). Lower income may mean that children raised by a single parent live in neighborhoods characterized by more models for deviant activity, fewer organized activities, and fewer models for the pursuit of academic and occupational goals. In addition, the incidence of marital disruption and out-of-wedlock childbearing is higher among adults with lower education. Their children are likely to have lower educational aspirations as a function of the lower schooling of the parents or in recognition of the reduced educational opportunities available to children from low-income families. Since high aspirations are associated with delayed entry into sexual activity, marriage, and parenthood (see Moore, Simms and Betsey, 1984; Nathanson and Becker, 1983), economic conditions may indirectly affect the timing of sexual activity.

### Parental Attitudes

Single parents also may have more tolerant sexual values regarding marital and fertility behavior, either as a cause or as a consequence of their own experiences. However, little is known about the attitudes or values of single parents that might influence the sexual activity of their children.

### Parental Dating

Regardless of the parents' stated values, children are likely to be influenced by their parents' behavior. If single parents are dating, children may be exposed to the nonmarital sexual activities of their parents. To the extent that their parents serve as role models, teens may come to regard sexual activity as appropriate for themselves.

### Parental Control and Early Sexual Activity

Another explanation for the association between family structure and early sexual activity has to do with the capacity of single parents to supervise their children's behavior outside the home. Mothers who are single parents are more likely to be employed outside the home than married mothers. If single parents are less able to afford substitute care or arrange organized activities, and lack the assistance of a spouse with supervision of children, they may end up being less able to monitor their children's sexual behavior. In this case, the variable of concern would not be family structure but the degree of supervision exercised over the child's activities.

If the advantage of the two-parent family lies in the force of numbers, then one would expect stepparent families to be highly similar to families composed of two biological parents. Conversely, if stepparents play a different role, being somewhat less concerned about or involved in the lives of their stepchildren, then one would expect the effect of stepparents to differ from the effect of living with both biological parents.

### Parent-Child Relations and Early Sexual Behavior

There may be still another route linking family structure and teens' sexual behavior. Marital disruption may remove the child from the parents' sphere of influence, because the child rejects the parent as a model or reference individual. A good deal of prior research has shown that children of divorce are more likely to experience troubled relations with their parents, especially the parent living outside the home (e.g., Peterson and Zill, 1984). If unmarried and formerly married parents are less able to build and sustain strong, positive ties to their children, and their influence on their children's behavior may be attenuated. Remarriage may do little to repair this disadvantage if, as some prior research has suggested, relations between parents and stepchildren are often problematic.

The recency of the marital disruption could also determine the influence of being in a one-parent family. Perhaps some time is necessary to recover from a disruption. This would suggest that sexual activity is higher when disruption is recent, as a reflection of the disorganization following the break-up of a family (Hetherington, 1979). Perhaps on the other hand, it is the early disruption of a primary bond that disposes the youth to subsequently enter sexual relationships ahead of his or her peers (Rutter, 1979).

We have sketched out a number of possible explanations for why and how family disruption may be causally related to the timing of sexual behavior among adolescents. In the analysis which follows, we shall make a preliminary effort to test these

explanations. Since the data we shall be examining were not originally collected to explore this problem, we cannot provide a definitive test of the alternative explanations mentioned above. Nevertheless, we believe the analysis provides some promising leads for a more complete examination of the link between family structure and early sexual behavior.

#### DATA

These analyses are based on data for 15- and 16-year-olds interviewed in 1981 in the National Survey of Children. This survey is the second wave of a longitudinal study of U.S. children designed to assess the physical, social, and psychological well-being of different groups of American children. The first wave, conducted in the fall and winter of 1976-77, was based on a multi-stage stratified probability sample of households in the continental United States containing at least one child in the age range of seven through eleven years at that time (born between September 1, 1964 and December 31, 1969). Blacks were oversampled. Altogether, data were gathered on 2,301 children in 1,747 families. Weights were developed to take account of oversampling by race, as well as the number of eligible children in the family and minor discrepancies between sample and census distributions on age, sex, race, and residence.

The second wave of the survey was conducted in the spring and summer of 1981. It was a follow-up of a subsample (N=1,423) of the children, by then aged 11-16. The follow-up focused more

specifically on marital disruption and its effects on children. For this purpose, the subsample was chosen to include all children in disrupted families and intact families experiencing high conflict at the first interview, plus a subsample of those in low or moderate conflict families. Roughly half the children were in each of these broad groups. Additional weights were developed to take account of the subsampling procedures so that national estimates could again be made.

In each survey, interviews were conducted with the eligible child and the parent most capable of providing information about the child, usually the mother. A follow-up study of schools attended by the children in each survey was also carried out.

To control interview costs, it was necessary to conduct the follow-up survey by telephone. In order to ensure that the quality of the data was not affected by this, an experiment was conducted. In a random sample of 250 metropolitan interviews, half were conducted by telephone and half were conducted in person by the same pool of interviewers. Comparisons of these two subsets revealed no consistent or sizeable differences in the distribution of the variables, response rate, reported quality of the interview, length of interview time, or response bias.

In the 1981 survey all of the respondents aged 15 and 16, males as well as females, were asked about the sexual experience of their friends and about their own sexual and pregnancy experience. One hundred and twenty of the 461 respondents in this age range indicated that they had had sexual intercourse.

(A description of how these and other variables used in this analysis were measured may be obtained from the authors.)

One potential problem has been found in the data; namely, there may be under-reporting of sexual activity on the part of 16-year-old females. Among males, the proportions reporting that they had had sexual intercourse were 21 percent at age 15 and 38 percent at age 16. Zelnik and Kantner (1980) report 56 percent for 17-year-olds, so the data for males appear to be about right, assuming a steady increase. Among females, 16 percent of the 15-year-olds and 20 percent of the 16-year-olds report having had sex, compared with 18 percent and 28 percent in the 1982 National Survey of Family Growth (Pratt, et al., 1984). The timing of the 1981 follow-up was such that the bulk of the 16-year-olds are in the first half of their 16th year. This may partly account for the somewhat lower proportion. Studies of sensitive topics are often handicapped by data problems; thus it is important to bear in mind that the dependent variable is a measure of the proportion of youth who report having had sexual intercourse.

## RESULTS

Although children are increasingly involved in and affected by the world outside their family as they grow older, the family remains an important influence. Hence, one would expect the likelihood that a young person will initiate sexual activity to be associated with a number of characteristics of their family of origin. As shown in Table 1, the probability of sexual

activity is related to family structure in our sample, being considerably lower among white females, black females, and black males when they live with their biological or adoptive father. This is not the case with white males, however, among whom sexual activity is higher when they live with both their mother and father.

In the following tables, this basic association is examined using multiple classification analysis (MCA) to explore whether and which aspects of the youth's individual, family and neighborhood environment might explain the association with family structure, or, in the case of white males, if such an association appears in one or more sub-groups.

Although we would have preferred to collapse our sample across the race and sex categories to increase the size of the analysis sample, the results clearly differ among the four groups. Consequently analyses were conducted for each group separately and will be discussed accordingly. This necessity has unfortunate implications for sample sizes and therefore for levels of statistical significance. Few of the results to be discussed reach conventional levels of statistical significance. Hence the results while interesting and potentially important cannot be taken as definitive. It is our hope that by presenting these results other authors will find them of sufficient interest to replicate our analyses on larger data bases.

### White Females

Family type is strongly related to the likelihood of being sexually experienced among white females ( $p < 0.01$ , as shown in Table 1). Compared with those young women who live with their biological father, teens living with a step-father are nearly six times more likely to report having had sexual intercourse ( $p < .01$ ), and those living with their mother only are more than twice as likely ( $p < .05$ ). These differences do not appear to result from economic differences between these family types, however, since controlling for family income and the quality of the neighborhood "as a place to raise children" has no impact on the coefficients for family type (the significance of family structure is at the  $p < .01$  level in either case; also compare column A of Table 2 with the column of unadjusted means).

(Insert Tables 2 - 5 here)

Social and biological maturity, social class, and the young person's future goals are basic predictors of sexual activity and are possible confounding influences. To remove their effects the education of the parent(s), the age of the teen, and the educational aspirations of the young person are also controlled in this and every equation. It is clear that while each of these variables is related to the probability of premarital intercourse, none significantly moderates the impact of family type on the dependent variable.



The possibility that parents with relatively liberal attitudes are the most likely to terminate troubled marriages and also the least likely to oppose sexual activity on the part of their daughters was explored next. These results, presented in Column B, do suggest that parents with highly traditional attitudes have daughters who are substantially though not significantly less likely to be sexually experienced. However, controlling for these attitudes has very little effect on the basic association between family composition and the probability of early sexual activity.

The possibility that the dating activity of the mother affects the daughter's heterosexual behavior was also explored (see Column C). These data show a rather strong association between having a single mother who dates frequently and precocious sexual activity. Those living with single mothers who do not date frequently are no more likely than those living with continuously married parents to be sexually active, while those living with mothers who date frequently are four times more likely to have had sex. Other evidence suggesting that dating on the part of single mothers might influence their daughter's sexual activity is the fact that teens living with remarried mothers (who have obviously dated as well) are even more likely to be sexually active. This result must be considered tentative since the sample sizes on which these results are based are quite small (12 mothers who date frequently and 12 remarried mothers); also this pattern is not found among daughters of black single women.

Several measures intended to tap various aspects of parental supervision are shown in Columns D and E. There is obviously no direct impact of maternal employment at the time of the initial interview on sexual activity. Although those white females who were left in their own supervision while their mother worked are more likely to be sexually experienced, there are only 12 cases in this category and similar effects are not found in any of the other three race/sex sub-groups. In addition, those teens whose whereabouts were sometimes unknown by their parent (measured in 1976) are no more likely to be sexually experienced by 1981 than are those whose whereabouts are always known.

One problem with both of these supervision measures, and with similar attempts to measure supervision, is that low supervision can reflect either laxness in the face of poor behavior or trust in response to good behavior, while high supervision can either be a measure of parental strictness, or a response to poor behavior. In an attempt to control for the level of misbehavior on the part of the teen, the parent's evaluation of how much trouble the child was to bring up at the time of the 1976 interview -- five years earlier -- was also included in the equation. While girls described as difficult to bring up are somewhat more likely to have become sexually active at any early age, the introduction of the control variable has no impact on the "whereabouts" variable, either in and of itself or as a variable explaining the association between family type and early sexual activity. Thus while the data are in line with the hypothesis that white females left alone during the workday

are more likely to have sexual intercourse at a young age, neither this variable nor any of the other supervision measures seem to explain the association between family structure and precocious sexual activity.

The possibility that the teen's relationship with the parent interacts with family structure was also explored (see Column F). Those not statistically significant, the pattern of the results suggests that a close relationship with a father who resides in the home lowers the probability of early sexual activity among daughters. Teens not close to their father are nearly as likely to have had sex as those who live apart from their fathers. Other data (not shown here) indicate that very few teenagers manage to maintain such a close relationship with their father when he is not physically present in the home; moreover these same data fail to provide evidence that a close relationship with an outside biological father has the same effect as being close to the father in the home. A close relationship with the mother, on the other hand, does not seem related to the probability of early sexual activity among white females.

Finally, the recency of the marital disruption was examined, and these data indicate that the probability of early sexual activity is much higher if the disruption occurred more than 36 months before the interview. Again, though, the case base is small, and the result is not significant.

In summary, these results indicate that family structure is an important influence on the likelihood that 15 and 16-year old

white females have initiated sexual activity, that both the presence of the biological or adoptive father in the home and the teenager's closeness to the father seem to be important in delaying sexual activity, and that earlier disruptions seem to have more impact than recent disruptions. In addition, frequent dating on the part of the single mother and remarriage are both associated with a higher probability of early sexual activity among white daughters. These variables are inevitably entangled, since those mothers whose marriages have been disrupted for some time are probably the most likely to have begun dating or to have remarried. Unfortunately, given the small number of cases involved it is not possible to put all of these variables into the same model using these data.

It is also important to note that in every equation, regardless of the other variables included, the measures of parental education and the teenager's own educational aspirations are always associated with the probability of initiating early sexual activity, yet they do not explain the association between family structure and sexual intercourse. Moreover, these data provide little support for the idea that socioeconomic factors such as lower income or education or a less desirable neighborhood explain the association between family type and early sexual activity among white females. Similarly, traditional parental attitudes, a "latch key" child care arrangement, and a daughter described as troublesome even

before puberty relate, though non-significantly, to the probability of precocious sexual activity but do not explain the relationship between family structure and sexual activity.

### White Males

The most striking result for white males is the finding that sexual activity is significantly higher among teens who live with both biological or adoptive parents than among those who live with their mother only ( $p < 0.05$ , two-tailed test; see Table 1). This contrasts sharply with the results for white females.

The socioeconomic predictors of early sexual activity, however, have effects for white males similar to those found for white females. Intercourse is somewhat more likely among those white males with less well-educated parents, those in relatively poor neighborhoods and lower income families. Those living with neither parent are significantly more likely to be sexually experienced. Also, white males with high educational aspirations are significantly more likely to deny having had sexual intercourse. However, controlling for these variables does not substantially alter the association between family structure and sexual activity.

Results for the non-socioeconomic variables are less clear for white males than for white females. While traditional parental attitudes do predict lower reported levels of sexual activity, intermediate attitudes show the highest levels. Moreover, sons who were in "latch key" child care situations are

least, rather than most likely to have had sex. Those sons close to a father living in the home are only slightly less likely to report having had sex, while being close to the mother has no effect.

### Black Females

Overall, the probability of having initiated sex is substantially higher among black females than among white females. However, for both groups, sexual activity is highest among those teens who live with neither parent and considerably lower among those teens who live with both of their biological or adoptive parents. Although the difference is not statistically significant due to small sample sizes, it is nevertheless quite striking, with only 15 percent sexually active among those living with both parents, compared with 38 percent in other family types. Among black teens however, only a minority live with both of their biological parents; consequently the majority of the blacks in the study are in the higher risk category.

Black females who aspire to complete college are significantly less likely to have initiated sex. Also those being from a lower income household and living in a relatively undesirable neighborhood are more likely, though non-significantly, to be sexually experienced. Of considerable importance is the fact that controlling for these latter factors greatly reduces the effect of family type, in contrast to the result for whites. In other words, among black females, unlike

white females, the social and economic disadvantages associated with marital disruption appear to explain much of the association between family type and early sexual activity. As with family structure, a majority of the black females are in the high risk categories of educational aspirations, family income, and neighborhood quality, elevating the group level of sexual experience.

A number of other associations found among white females are not found among black females. (Although these associations are not statistically significant, they are discussed because non-confirmation of common expectations is as important as finding support for hypotheses.) Among blacks, the daughters of the more traditional parents are more likely to report being sexually experienced. In addition, daughters whose mothers date frequently are less likely to report having had sexual intercourse, rather than more so. Also unlike white females, black females who go unsupervised while their mothers work are not singularly high in their level of sexual activity. They are high but so are the daughters of non-employed mothers. However, the employment variable does not moderate the effect of family structure nearly as strongly as income and neighborhood quality.

The data suggest that supervision per se may matter for black females. Those teens whose mothers said in 1976 that they did not consistently know their daughter's whereabouts are more likely to be sexually experienced than those monitored more closely. In addition, those girls described in 1976 as troublesome to bring up are significantly more likely to have

initiated sexual intercourse by the time of the 1981 interview. It is important to note, though, that neither of these variables has much impact on the family structure coefficients.

Maternal affection, on the other hand, seems to be an important moderator of the family composition association. Those young black women who are not close to their mothers are twice as likely to report having had sexual intercourse ( $p < .10$ ), and when this variable is added to the equation the gap between intact families and non-intact families shrinks to 3 percentage points -- 30 versus 33 percent. It is not clear why the mother-daughter relationship is so important; it may simply reflect the strains of early sexual activity and other forms of acting out on the relationship. On the other hand, the forces of poverty and an unpleasant neighborhood may be responsible for both undermining the mother-daughter relationship and for hastening the daughter's sexual debut.

Unfortunately, it is not possible to explore the impact of the daughter's relationship to the father among blacks because so few of the black females still live with their biological father. In addition, so few black marriages terminated recently that it was not possible to test whether it is early or late disruption that increases the odds of early sexual activity. Given the many differences between the predictors found important for whites and the predictors important for blacks, there is no reason to assume that either of these factors are necessarily as significant among black females as they were for whites.



Finally it is important to emphasize that in every equation regardless of the other variables included as controls, parental education (NS) and the daughter's educational aspirations ( $p < .05$ ), are related to the timing of sexual debut yet they do not in and of themselves explain the association between family structure and the early initiation of intercourse.

### Black Males

Among black males, the likelihood of having initiated sexual activity is decidedly higher among those teens not living with their biological or adoptive father, though the difference does not reach statistical significance. As in all other groups, the probability is very high among youth living apart from both parents.

While the probability of having had intercourse is not related to parental education, it is significantly associated with the youth's own educational aspirations. Sexual activity is only half as likely if the teen wants to complete college. In addition, the odds are somewhat lower if the teen is from a higher income family. However, unlike black females, controlling for these factors reduces the association between family type and early sexual activity only slightly.

The measures of supervision and parental attitudes are not related to levels of sexual activity in any meaningful way; however, as found for white and black females, those young men who were described as troublesome in the 1976 interview are more likely to be sexually experienced by 1981. Those teens whose

mothers date frequently are more likely to report being sexually experienced, but maternal affection bears only the slightest relationship to sexual debut in this group. However, none of these measures affects the basic association between family type and the initiation of sexual activity.

### Discussion and Conclusions

One conclusion from these analyses is that the predictors of early sexual intercourse differ greatly between race and sex groups. The results of the current analysis caution against combining samples prior to exploring whether the process is similar for the respective race/sex groups.

Given this major distinction, it is even more significant that large differences in the proportion sexually experienced are associated with family composition among all four groups. In each race/sex sub-group, those youth living with neither parent were found to be much more likely to have had sex. In addition, with the exception of white males, sexual activity was least often reported among youth living with both of their biological or adoptive parents. However, the data do not suggest that the factors underlying this association are consistent across the several race/sex groups.

Among white females, the association between family structure and precocious sexual activity appears to be moderated by whether the mother is single and dates frequently or has remarried and by whether or not the father is close to the teenager when he lives in the home. However, our confidence in

this conclusion is tempered by the small sample sizes involved. Other variables predict early sexual activity among white females but appear to have no moderating influence on the effect of family composition. Thus the only hypotheses to receive even tentative support are those contending that maternal dating and relationship to the father mediate the association between family structure and early sexual activity.

Among black females, on the other hand, controlling for several measures of social and economic status nearly eliminates the association between family structure and the early initiation of sexual activity. Specifically, when income and neighborhood quality were controlled, the 23 percentage point difference between girls living with both biological parents and girls in other situations fell to 5 percentage points. The degree of affection between the mother and daughter was also found to be strongly related to the probability of early intercourse among black females, and controlling for this variable also nearly eliminated the association between early sexual activity and family structure.

Among black males, the association between family type and early sexual activity is quite strong, and it does not disappear in any of the equations. Having low educational aspirations, being described as troublesome to bring up, having a mother who dates, and to a lesser extent living in an undesirable neighborhood and having a low income are all associated with early sexual activity; but none of these factors seem to moderate the family structure association.

The most puzzling result is that found for white males, among whom sexual activity seems to be more common when the son resides with his biological or adoptive father. While sampling and/or methodological problems are always possible, other anticipated associations were found. For example, the youth's own educational aspirations were found associated with the likelihood of sexual activity. Consequently, we recommend further exploration of this issue. Most interesting is the possibility that the reason no association is noted is that fathers are much less concerned about the sexual activity of their sons than they are that of their daughters because they deem the risks and costs much lower for their sons. Related results (not shown) indicating that the presence of the father and a close relationship with him do predict lower levels of deviant behaviors among white males are in line with such an interpretation.

In general it would appear to be the case that those teenagers exposed to the risk of early pregnancy tend to be those who are exposed to a number of other risks: those from single parent families, those with less close relationships with their parents, those living in less desirable neighborhoods, and those with lower educational aspirations and less well-educated parents. While far more could be known about the nature of the family dynamics that underlie these associations, these results do lead to the conclusion that early sexual activity is highest among children from relatively vulnerable families who seem likely to face other difficulties as well.

Families with resources do seem to discourage precocious sexual activity. Children from families with the fewest resources and those exposed to the most demanding circumstances do indeed seem most likely to initiate sexual activity at a young age and thus to risk continuing the circumstances of their upbringing into another generation.

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Table 1

Proportion of 15- and 16-Year-Olds Reporting Having  
Had Sexual Intercourse, by Race and Sex of Teen and  
Family Structure, 1981

	<u>White Females</u>	<u>White Males</u>	<u>Black Females</u>	<u>Black Males</u>
Biological or adoptive father in home	9.1(132)	22.6(122)	14.6(13)	30.6(19)
No father in home	24.9( 28)	12.3( 29)	31.3(37)	42.0(28)
Other father, father substitute in home	52.9( 14)	13.1( 21)	71.3( 9)	(62.1)(5)

Table 2. The Proportion Sexually Experienced Among White Females,  
Aged 15-16 in 1981

	Unadjusted Means	Unweighted (N)	Models						
			A	B	C	D	E	F	G
<b>Family Structure</b>									
Both Biological or Adoptive Parents Present	.09	120	.09**	.09	.09	.09	.10		
Extremely/quite close to father	.06	85	-	-	-	-	-	.07	.07
Fairly/not very close to father	.16	34	-	-	-	-	-	.16	.16
Mother and Stepfather	.54*	12	.54**	.55	.55	.54	.52	.47	.54
Mother Only	.20	26	.20**	.18	-	.20	.19	.20	-
Dates frequently	.38	12	-	-	.36*	-	-	-	-
Dates infrequently	.09	14	-	-	.08	-	-	-	-
Disruption < 3 years ago	.06	9	-	-	-	-	-	-	.06
Disruption > 3 years ago	.31	18	-	-	-	-	-	-	.29
Other	.28*	13	.28**	.29	.28	.29	.28	.26	.28
<b>Age of Child</b>									
15 Years Old	.14	102	.13	.13	.13	.13	.13	.12	.14
16 Years Old	.16	69	.17	.17	.16	.17	.17	.16	.16
<b>Education of Better-Educated Parent</b>									
< 12 Years	.26	24	.22	.25	.22	.22	.22	.21	.20
≥ 12 Years	.12	147	.13	.13	.13	.13	.13	.12	.14
<b>Educational Aspirations</b>									
Less Than College	.20	92	.19	.20	.19	.19	.19	.18	.20
College Graduate or Higher	.08	79	.10	.09	.10	.09	.10	.09	.09
<b>Income</b>									
<\$10,000	.13	23	.05						
\$10,000-\$25,000	.16	78	.16						
>\$25,000	.13	70	.17						
<b>Neighborhood Quality</b>									
Excellent Or Very Good, 1976 and 1981	.06	33	.10						
Excellent Or Very Good, 1981 Only	.07	49	.09						
Good, Fair, Or Poor, 1981	.23	89	.20						
<b>Parental Attitudes</b>									
Least Traditional	.22	55		.21**					
Intermediate	.14	67		.17*					
Traditional	.08	48		.05					
<b>Child Care And Employment</b>									
Mother Not Employed	.13	85				.14			
Mother Employed; Not Latch Key	.15	74				.15			
Mother Employed; Latch Key	.25	12				.20			
<b>Time Whereabouts Unknown</b>									
None	.22	123					.15		
Any	.21	48					.13		
<b>Trouble To Bring Up</b>									
None	.28	92					.12		
A Little, Quite A Bit, A Lot	.15	79					.18		
<b>Maternal Affection</b>									
Low/Medium	.21	111						.15	
High	.19	56						.11	
Variation Explained			.18	.18	.16	.15	.15	.13	.17
Adjusted R <sup>2</sup>			.13	.13	.13	.11	.11	.08	.13

\*p < 0.05, 1 tail  
\*\*p < 0.25, 1 tail  
\*\*\*p < 0.005, 1 tail

Table 3. The Proportion Sexually Experienced Among White Males,  
Aged 15-16 in 1981

	Unadjusted Means	Unweighted (N)	Models						
			A	B	C	D	E	F	G
<b>Family Structure</b>									
Both Biological or Adoptive Parents Present	.22	110	.24**	.22	.23	.22	.22	-	-
Extremely/quite close to father	.20	79	-	-	-	-	-	.21	.21
Fairly/not very close to father	.25	29	-	-	-	-	-	.25	.30
Mother and Stepfather	.10	20	.14**	.15	.15	.15	.15	.14	.15
Mother Only	.12*	29	.06**	.10	-	.08	.09	.09	-
Dates frequently	.06	11	-	-	.04	-	-	-	-
Dates infrequently	.16	19	-	-	.10	-	-	-	-
Disruption < 3 years ago	.13	6	-	-	-	-	-	-	.10
Disruption > 3 years ago	.12	23	-	-	-	-	-	-	.08
Other	.52*	13	.45**	.49	.48	.47	.50	.56	.48
<b>Age of Child</b>									
15 Years Old	.13	100	.14	.14	.14	.14	.14	.14	.14
16 Years Old	.31*	72	.30	.30	.29	.30	.30	.27	.29
<b>Education of Better-Educated Parent</b>									
<12 Years	.28	22	.28	.31	.29	.30	.27	.25	.29
≥ 12 Years	.20	150	.21	.20	.20	.20	.21	.20	.20
<b>Educational Aspirations</b>									
Less Than College	.28	81	.28	.27	.28	.28	.28	.28	.28
College Graduate or Higher	.15	91	.15*	.16	.15	.15	.15	.13	.15
<b>Income</b>									
<\$10,000	.24	19	.25	-	-	-	-	-	-
\$10,000-\$25,000	.20	78	.21	-	-	-	-	-	-
>\$25,000	.23	75	.21	-	-	-	-	-	-
<b>Neighborhood Quality</b>									
Excellent Or Very Good, 1976 and 1981	.13	34	.15	-	-	-	-	-	-
Excellent Or Very Good, 1981 Only	.25	54	.27	-	-	-	-	-	-
Good, Fair, Or Poor, 1981	.23	84	.21	-	-	-	-	-	-
<b>Parental Attitudes</b>									
Least Traditional	.16	49	-	.20	-	-	-	-	-
Intermediate	.29	74	-	.28	-	-	-	-	-
Traditional	.14	49	-	.13*	-	-	-	-	-
<b>Child Care And Employment</b>									
Mother Not Employed	.20	88	-	-	-	.20	-	-	-
Mother Employed; Not Latch Key	.24	75	-	-	-	.24	-	-	-
Mother Employed; Latch Key	.09	9	-	-	-	.14	-	-	-
<b>Time Whereabouts Unknown</b>									
None	.22	92	-	-	-	-	.21	-	-
Any	.21	80	-	-	-	-	.21	-	-
<b>Trouble To Bring Up</b>									
None	.28	83	-	-	-	-	.28**	-	-
A Little, Quite A Bit, A Lot	.15	89	-	-	-	-	.15	-	-
<b>Maternal Affection</b>									
Low/Medium	.21	118	-	-	-	-	-	.20	-
High	.19	47	-	-	-	-	-	.22	-
Variation Explained			.13	.14	.12	.12	.14	.13	.12
Adjusted R <sup>2</sup>			.07	.10	.08	.08	.10	.08	.08

Table 4. The Proportion Sexually Experienced Among Black Females,  
Aged 15-16 in 1981

	Unadjusted Means	Unweighted (N)	Models					
			A	B	C	D	E	F
<u>Family Structure</u>								
Both Biological or Adoptive Parents Present	.15	12	.28	.22	.24	.16	.18	.30
Other	.38	47	.33	.35	-	.37	.37	.33
Mother only, dates frequently	.12	8	-	-	.14	-	-	-
Mother only, dates infrequently	.32	26	-	-	.26	-	-	-
Other (not 2 biological parents or mother-only)	.66	13	-	-	.68	-	-	-
<u>Age of Child</u>								
15 Years Old	.30	32	.28	.31	.28	.28	.24	.30
16 Years Old	.34	27	.35	.34	.36	.35	.39	.34
<u>Education of Better- Educated Parent</u>								
<12 Years	.45	30	.38	.39	.45	.37	.38	.39
≥ 12 Years	.20	29	.27	.25	.20	.28	.26	.25
<u>Educational Aspirations</u>								
Less Than College	.43	34	.40 <sup>a</sup>	.39	.36	.40	.35	.39
College Graduate or Higher	.13	25	.18	.20	.26	.19	.27	.21
<u>Income</u>								
<\$10,000	.43	35	.36					
≥\$10,000	.14	24	.25					
<u>Neighborhood is Excellent/Very Good</u>								
Yes	.27	18	.21					
No	.35	41	.37					
<u>Parental Attitudes</u>								
Least Traditional	.24	16		.20				
Intermediate	.29	26		.34				
Traditional	.45	17		.39				
<u>Child Care And Employment</u>								
Mother Not Employed	.40	26				.41 <sup>*</sup>		
Mother Employed; Not Latch Key	.20	27				.18		
Mother Employed; Latch Key	.39	6				.45		
<u>Time Whereabouts Unknown</u>								
None	.26	42					.28	
Any	.52	17					.45	
<u>Trouble To Bring Up</u>								
None	.23	41					.24	
A Little, Quite A Bit, A Lot	.62	18					.56 <sup>***</sup>	
<u>Maternal Affection</u>								
Low/Medium	.44	37						.40
High	.16	22						.21
Variation Explained			.16	.15	.25	.19	.24	.16
Adjusted R <sup>2</sup>			.07	.05	.16	.09	.16	.08

Table 5. The Proportion Sexually Experienced Among Black Males,  
Aged 15-16 in 1981

	Unadjusted Means	Unweighted (N)	Models					
			A	B	C	D	E	F
<u>Family Structure</u>								
Both Biological or Adoptive Parents Present	.31	19	.33	.29	.32	.28	.34	.32
Other	.45	33	.43	.46	-	.47	.42	.44
Mother only, dates frequently	.65	11	-	-	.58	-	-	-
Mother only, dates infrequently	.29	14	-	-	.28	-	-	-
Other (not 2 biological parents or mother-only)	.49	8	-	-	.53	-	-	-
<u>Age of Child</u>								
15 Years Old	.37	31	.36	.36	.37	.37	.35	.36
16 Years Old	.41	21	.43	.42	.41	.41	.45	.43
<u>Education of Better- Educated Parent</u>								
<12 Years	.41	23	.37	.41	.40	.40	.40	.39
≥ 12 Years	.37	29	.40	.37	.37	.37	.38	.38
<u>Educational Aspirations</u>								
Less Than College	.61	21	.60**	.60	.60	.60	.61	.60
College Graduate or Higher	.30	31	.30	.30	.30	.30	.30	.30
<u>Income</u>								
<\$10,000	.44	31	.41					
≥\$10,000	.32	21	.35					
<u>Neighborhood is Excellent/Very Good</u>								
Yes	.36	13	.36					
No	.39	39	.40					
<u>Parental Attitudes</u>								
Least Traditional	.40	15		.47				
Intermediate	.34	20		.31				
Traditional	.43	17		.38				
<u>Child Care And Employment</u>								
Mother Not Employed	.29	18				.25		
Mother Employed; Not Latch Key	.49	29				.52*		
Mother Employed; Latch Key	.26	5				.31		
<u>Time Whereabouts Unknown</u>								
None	.38	34					.41	
Any	.41	18					.32	
<u>Trouble To Bring Up</u>								
None	.32	32					.33	
A Little, Quite A Bit, A Lot	.48	20					.47	
<u>Maternal Affection</u>								
Low/Medium	.37	35						.38
High	.43	17						.41
Variation Explained			.11	.12	.15	.17	.12	.10
Adjusted R <sup>2</sup>			.0	.0	.03	.06	.01	.01

APPENDIX TABLE 1: GLOSSARY OF VARIABLES\*

Sexual Intercourse. This dummy variable was coded 1 if the adolescent answered positively to interview item 127, which was part of the following sequence: Q126. People refer to sexual intercourse in many ways -- "making love," "having sex," or "going all the way." "As far as you are aware, how many of your friends have done this? Is it (1) most of them; (2) several; (3) just a few; or (4) none? Q127. Have you done this? (1) yes; (2) no." Only 6 of the respondents aged 15 or older who were asked this question did not answer. They were excluded from the sample.

Family Structure. This measure was coded from a number of items in the parent interview assessing the child's relationship to the mother in the home, if any, and the father in the home, if any. Closeness to the biological or adoptive father was measured by the question, "How close do you feel to (FATHER): (1) extremely close; (2) quite close; (3) fairly close; or (4) not very close?" All children were able to answer this question. Maternal dating was measured by an item asked of non-married mothers, "Are you currently going out or dating (1) almost every day; (2) once or twice a week; (3) once or twice a month; (4) less than once a month; or (5) not at all?" Two respondents did not answer

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\*Sample sizes and the distribution of cases for each variable are shown for each race/sex group in Tables 2-5.

this question. The recency of the (most recent) marital disruption was measured for non-married mothers using data from both the 1976 and the 1981 interviews. Never-married mothers were coded in the category  $\geq 3$  years. Children living in "Other" family arrangements include all those living with neither of their biological or adoptive parents.

Age of Child. Age was measured in 1976 according to day, month, and year. By 1981, 3 had reached age 17; they were included with the 190 16-year-olds. 274 15-year-olds were interviewed.

Education of Better-Educated Parent. Adult respondents were asked the highest grade of school that they had completed and that their spouse or partner had completed. The higher level attained was coded. If only one parent lived in the home, that level of education was chosen. If data on education was missing for both parents,  $< 12$  years was coded. To save degrees of freedom, dummy variables were created of  $< 12$  years and  $\geq 12$  years.

Educational Aspirations. All children interviewed were asked, "Looking ahead, what would you like to do about school: (1) quit school as soon as possible; (2) finish high school; (3) get some college or other training; (4) finish college; or (5) take further training after college; (6) or what?" To create a measure of high aspirations, categories 4 and 5 were combined in contrast to all of the other categories of youth not aspiring to complete college.

Income. The parent respondent was asked, "From all sources of income (including those you have mentioned), was your total family income before taxes in 1980 (a) under \$5,000; (b) \$5,000-10,000; (c) \$10,000-15,000; (d) \$15,000-20,000; (e) \$20,000-25,000; (f) \$25,000-35,000; (g) \$35,000-50,000; (h) \$50,000 or over?" These detailed categories were combined so as to produce low (<\$10,000), medium and high categories (>\$20,000) among whites. So few black children lived in high income families that only two categories could be created.

Neighborhood. In both surveys, children were asked to rate their neighborhoods "as a place for kids to grow up." Among whites, the first category comprised those living in a very good neighborhood in 1976 and an excellent or very good neighborhood in 1981. Those living in 1976 in neighborhoods described as pretty good or not so good were differentiated according to whether their 1981 neighborhood was excellent or very good or, in contrast, just good, fair, or poor. Since few black children described their neighborhoods positively, the 1981 measure was used to divide black neighborhoods into just two categories, either (1) excellent, or very good; or (2) good, fair, or poor.

Parental Attitudes. A three-category scale was created by summing the parent's responses to three questions asked in 1981: "Marriages are better when the husband works and the wife runs the home and cares for the children"; "children are better off if their mothers do not work outside the



home;" and "When parents divorce, children develop permanent emotional problems." Responses coded from 1 to 5 -- (1) strongly agree; (2) mostly agree; (3) depends; (4) mostly disagree; and (5) strongly disagree -- were summed to form a scale ranging from 3 to 15 that was then divided into a most conservative third, a least traditional third, and a residual middle group.

Child Care and Employment. In the 1976 interview, the mother's employment status and child care arrangements were ascertained. Among mothers employed at all, those children left to watch over themselves when they were 10-11 were defined to be "latch key" children.

Time Whereabouts Unknown. Parent respondents were asked in 1976, "About how much time on a usual weekday does (CHILD) spend away from home when you do not know definitely where (he/she) is? Would you say: (1) none at all; (2) less than one hour; (3) between 1 and 2 hours; (4) between 2 and 4 hours; or (5) more than four hours?" Since category 1 was chosen for 2/3 of the boys and 3/4 of the girls, the sample was collapsed to create a dummy variable in which 1= no time; and 2= any time when whereabouts unknown.

Trouble To Bring Up. In 1976, parent respondents were asked, "How much trouble has (CHILD) been to bring up: (1) none; (2) just a little; (3) quite a bit; or (4) a lot?" Since responses were very positively skewed, with more than half of all parents in every race/sex group reporting their child

to have been "no trouble," a dummy variable was created contrasting "no trouble" with "a little," "quite a bit," and "a lot" combined.

Maternal Affection. Questions tapping different aspects of the adolescent's relationship with the mother in 1981 were used to create this variable. They are all questions from the interview with the adolescent: "How close do you feel to your (MOTHER): (1) extremely; (2) quite close; (3) fairly close; or (4) not very close?" "Does she spend enough time with you, or do you wish she spent more time with you? (1) Spends enough time; (2) Wish she spent more." "Does she give you: (1) all the affection you want; (2) slightly less than you want; (3) much less than you want; or (4) don't you want affection from her?" "How much do you want to be like the kind of person she is when you're an adult: (1) a lot; (2) quite a bit; (3) just a little; (4) not all all?" "I am going to read statements about parents. For each, tell me if it sounds very much like, somewhat like, or not at all like your (MOTHER): She lets you know she appreciates what you try to accomplish?" Since most described their mothers very favorably, the distribution was quite skewed. Scores ranging from 0-9 were combined in a low/medium category and 10-11 were coded as highly affectionate. The "affection" variable had missing data on 3 cases; the other variables had 1 such case each.