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Preadolescent Parenting Strategies and Teens' Dating and

Sexual Initiation: A Longitudinal Analysis

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In this paper we examine the effects of preadolescent parenting strategies on timing of adolescents' dating and sexual initiation. Using data from the two waves of the National Survey of Families and Households (1987-88 and 1992-94) involving interviews with parents as well as adolescents four years later, we estimate the effects of preadolescent parental support, coercive control, and monitoring on the timing of teens' dating and sexual initiation. We also examine how adolescents' gender, race, family structure and socioeconomic background affect relationships between earlier parenting strategies and adolescent dating and sexual debut. We find evidence for the effect of preadolescent parental monitoring, though relatively little connection between parental support and coercive control, and variations in the timing of adolescent dating and sexual initiation. The findings suggest that parental monitoring prior to the onset of adolescence is important as a basic foundation for young people who later on must make behavioral choices outside of parental purview.

A growing body of research has examined factors associated with adolescent dating and sexual initiation. These factors include the peer group (e.g., Brazzell & Acock, 1988; East, Felice, & Morgan, 1993; Giordano, 1995; Miller et al., 1997), dating partners (e.g., Giordano, Longmore, & Manning, 1998) and community characteristics (e.g., Billy, Brewster, & Grady, 1994; Brewster, 1994; Lauritsen, 1994; South & Lloyd, 1992). Clearly, parents also influence adolescents' dating and sexual behaviors (e.g., Gray & Steinberg, 1999; Rosenthal, Feldman, & Edwards, 1998). In contrast to the influence of peers, dating partners, and community factors, parents are non-replaceable significant others who are responsible for the primary socialization of children and adolescents. Gray and Steinberg (1999) note "...parents influence the development of general social competence and skills, which gain expression in the behaviors adolescents adopt in romantic relationships" (p. 254). Consequently, adolescents' dating and sexual behaviors may vary as a function of parental socialization strategies. In this paper, we argue that because of their importance in the development of social competencies, parenting strategies prior to the onset of adolescence may affect teens' dating and sexual behavior.

Research suggests that parental control, monitoring, and supervision of adolescents influences dating and sexual attitudes and behaviors (Dornbusch et al., 1985; Hogan & Kitagawa, 1985; Miller, McCoy, Olson, & Wallace, 1986). Similarly, parental closeness and support influence adolescent sexual attitudes and behavior (Raffaelli, Bogenschneider, & Flood, 1998; Weinstein & Thornton, 1989). Most of this research, however, examines the adolescent period, when dating, and perhaps sexual activity, are already underway.

What has not been examined are the effects of *preadolescent* parenting strategies on adolescents' dating and sexual initiation. This is surprising because scholars have argued that by

adolescence the ground work of parental socialization is nearly complete, consequently adolescence can be thought of as a time of testing parents' earlier socialization techniques (e.g., Gecas & Seff, 1990). Similarly, we argue that parenting strategies prior to the onset of adolescence provide a basic foundation for young people who later on must make behavioral choices regarding dating and sexual activity outside of parental purview.

We believe it is important to understand how these earlier parenting strategies influence both dating and sexual debut, and to examine these activities separately and in tandem. First, understanding the onset of adolescent sexual activity, whether or not an adolescent has dated, is important because of the association of early sex with less frequent contraceptive use, potentially more frequent sexual activity and greater numbers of sexual partners (Alan Guttmacher Institute, 1994). We also know, however, that early dating influences early sexual activity (Dorius, Heaton, & Steffen, 1993; Miller et al., 1997; Thornton, 1990). The typical sequence is for the adolescent to engage in sexual activity after having had some dating experience (Miller & Moore, 1990). That is, it is an expectation of many adolescents, and some parents as well, that dating partners eventually have sex. Adolescents who date are presented with easier access to a sexual partner, thereby increasing their risk of engaging in sexual activity. As such, we are interested in the effect of preadolescent parenting strategies on adolescents presented with greater normative pressure and opportunity to initiate sexual intercourse.

In this paper, our objective is to determine the nature and extent of the relationship between adolescents' dating and sexual initiation and specific variations in parenting strategies that were reported by the parents four years earlier in the preadolescent period. These strategies include support, coercive control and monitoring. Specifically we ask, do greater degrees of support, control and monitoring of younger children delay or accelerate the pace of adolescent

dating and sexual experience? Moreover, what is the relative importance of these aspects of early parenting for adolescent dating as well as sexual debut? We also examine how other important variables such as adolescents' gender, race, family structure, and socioeconomic background affect relationships between early parenting strategies (i.e., support, coercive control, and monitoring) and (a) adolescent dating, (b) sexual debut, and (c) sexual debut among adolescents who report dating. The analyses are based on the two waves of the National Survey of Families and Households (NSFH). We use first-wave data from in-person interviews with parents and telephone survey data, collected four years later, from the focal adolescent.

BACKGROUND

Parenting Strategies and Socialization Outcomes

Parental Support. Many of an adolescent's attitudes and behaviors have roots in parenting strategies that emphasize supportiveness. Support refers to parental behaviors toward the child such as praising, hugging, and encouraging which indicate to the child that he or she matters to the parent (Rollins & Thomas, 1979; Rosenberg & McCullough, 1981). Studies have documented that children and adolescents who feel support, affection and closeness with their parents report better psychological health and more positive self-concepts in adulthood (Bachman, O'Malley, & Johnston, 1978; Roberts & Bengston, 1996; Snarey, 1993). Parental support also positively influences desirable outcomes for children and adolescents including cognitive development, academic achievement, and conformity to adult standards for behavior (for reviews see Baumrind, 1991; Demo, 1992; Peterson & Rollins, 1987; Rollins & Thomas, 1979).

Conversely, lack of parental support is associated with negative socialization outcomes

for children and adolescents including low self-esteem, delinquency, deviance, drug use, and various other problem behaviors (e.g., Barnes & Farrell, 1995; Curtner-Smith & MacKinnon-Lewis, 1994; Simons, Johnson, & Conger, 1994). Moreover, these relationships appear to be consistent for two-biological parent families, single-parent families and stepfamilies (Amato, 1994; Thomson, McLanahan, & Curtin, 1992). In light of the consistent findings regarding desirable and undesirable outcomes associated with variations in parental support, we expect that parental support during preadolescence negatively influences the occurrence of early dating and early sexual debut among adolescents.

Coercive Control. Parenting requires more than providing support, affection, and praise to children. Barber (1992), as well as others (e.g., Baumrind, 1991; Gecas & Seff, 1990; Maccoby & Martin, 1983; Rollins & Thomas, 1979), note that much theory and research on parent-child socialization has identified a twofold influence of parental behaviors on children: (a) the extent to which children receive parental support; and (b) the extent and type of control exercised over children's behavior. Parental control generally refers to the degree and manner in which parents attempt to place constraints on their child's behavior. Compared with parental support, parental control is thought to be a more complicated variable because its effects are not uniformly positive (Barber, 1992; Baumrind, 1991; Gecas & Seff, 1990). Consequently some scholars distinguish different types or styles of control associated with differing socialization outcomes for children and adolescents. A number of studies of parenting strategies, for example, document that an authoritative style, based on psychological as opposed to physical or coercive control (Baumrind, 1991), is preferable with respect to desirable socialization outcomes (Barnes & Farrell, 1995; see Gecas & Seff, 1990 for reviews). However, the effect of early coercive control on adolescent dating and sexual debut is not known. We examine coercive

control attempts including hitting, yelling, and arguing, and expect that such attempts during preadolescence positively influence the occurrence of early dating and early sexual debut among adolescents.

Monitoring. A related aspect of parental control is monitoring or regulation, which refers to parental awareness of what the child is doing and his or her whereabouts (see Herman, Dornbusch, Herron, & Herting, 1997; Patterson & Stouthanmer-Loeber, 1984). It is an important parental control strategy because it involves physical and psychological control. The physical control dimension of monitoring is more overt than the psychological control dimension. Psychological control occurs when parents' monitoring of behavior reflects to the child that he or she matters to the parents (e.g., Rosenberg & McCullough, 1981), and as a result the child adheres to parental standards. As such, we expect that preadolescent parental monitoring negatively influences early dating and early sexual debut among adolescents.

Parenting Strategies, Family Structure and Child's Gender

Not surprisingly, widespread changes in family structure over the past three decades have affected parenting strategies (Demo, 1992; Furstenberg, Nord, Peterson, & Zill, 1983). Studies have found that marital dissolution, as well as remarriage, disrupts primary bonds between parents and children (e.g., Hetherington, Camara, & Featherman, 1983; Kinard & Reinherz, 1984). Numerous reviews (Demo, 1992; Demo & Acock, 1988; McLanahan & Adams, 1987; McLanahan & Booth, 1989; McLanahan & Sandefur, 1994), and recent longitudinal research (e.g., Woodward, Fergusson, & Belsky, 2000), shows that single-parents (custodial and non-custodial) are involved less in their children's school work, exert less parental influence, and find it more difficult to supervise and discipline their children -- parenting strategies that lead to single-parent families exhibiting significantly higher rates of adolescent

deviant behavior in general. Thomson et al. (1992) report that single-parents have less restrictive rules than do married parents, and step-parents and cohabiting male partners have less frequent involvement and fewer positive responses to children compared with biological parents.

Research findings also demonstrate that family structure affects adolescent age at first intercourse and likelihood of premarital pregnancy (e.g., Biglan et al., 1990; Brazzell & Acock, 1988; Dorius et al., 1993; Hogan & Kitagawa, 1985; Lauritsen, 1994; Luster & Small, 1994; McLanahan & Sandefur, 1994; Miller et al., 1997; Small & Kerns, 1993; Whitbeck, Conger, & Kao, 1993; Wu, 1996; Wu & Martinson, 1993). However, it is unclear whether the effect of family structure on adolescent early sexual initiation is due, in part, to differential preadolescent parenting strategies that are associated with variation in family structure.

Parenting strategies also differ for boys and girls. Although parents report that they treat sons and daughters the same, observational studies indicate that this is not the case (Fagot, 1982; Hoffman, 1977; Huston, 1983, 1985). Much of this differential interaction is due to parents' beliefs about gender differences (Hoffman, 1991). In general, parents monitor girls' behavior more closely (Gecas & Seff, 1990; Grube, Morgan, & Seff, 1989). Further, parents also use more coercive strategies with boys. Conger, Ge, Elder, Lorenz, and Simon's (1994) analysis of 451 two-parent families with children in seventh grade found that there was little difference between mothers and fathers with respect to the prevalence of physical punishment, and that both were more likely to physically punish boys than girls.

In sum, the effects of early parenting strategies on adolescent dating and sexual debut has not been examined in previous research. We argue that it is likely that the repertoire of earlier family experiences that adolescents bring to these new "private sphere" dating situations influence their choices and decisions, including those associated with dating and sexual activity.

All parents, to a greater or lesser degree, support, control, and monitor children's behavior. Parents are most effective as socializing agents, however, when they express a high degree of support, monitor activities, and exercise non-coercive control. In families in which parents provide support, monitor behavior, and sanction or punish negative behavior in non-coercive ways, self-control is more likely to become a stable characteristic of the child (Peterson & Rollins, 1987). Under these conditions, children are likely to identify with their parents, internalize parental values and expectations, use parents as their models, and become receptive to parental influence attempts. Thus, we expect that preadolescent parenting strategies that emphasize supportiveness and monitoring, and that do not emphasize coercive control, will result in delayed dating and sexual activity among adolescents.

CONTRIBUTION OF THE PRESENT STUDY

Distinct from our concern that most studies have not examined the preadolescent period, there are several limitations in existing studies of parenting effects on adolescent dating and sexual initiation that either limit their generalizability or prevent us from establishing the relative importance of various parenting strategies. Some studies, for example, suggest important gender differences in how parent-child relationships influence adolescent sexual behavior. However, much work relies on single-sex data sources (e.g., Feldman & Brown, 1993), regional data collection efforts (e.g., Feldman & Brown, 1993; Whitbeck, Hoyt, Miller, & Kao, 1992), or single-race data sources (e.g., Jaccard, Dittus, & Gordon, 1998) with resulting findings lacking in generalizability. In addition, many studies ignore the variety of family structures that exist in American society. Given the increases in the divorce rate, single-parent families, and remarriages,

it is of critical importance to understand how the impact of earlier parenting strategies on adolescent dating and sexual initiation may differ by family structure.

Another methodological weakness of the existing literature is that many studies have relied on parental reports of adolescents' behaviors, and yet most family scholars recognize that parents' and adolescents' perspectives may be quite different. Tein, Roosa, and Michaels' (1994) extensive review of research on parent-child agreement on parenting behaviors reveals a low degree of agreement between parents and their children in reports of parental behaviors. We would also expect a low degree of agreement between parents and children in reports of adolescents' behaviors (see, for example, Jaccard et al., 1998). Using the NSFH data, for example, comparing parents' and adolescents' reports of age of adolescents' first date, parents and children agreed in only 33 percent of the cases (Longmore, Manning, & Giordano, 1998). For most cases (57%) the child reported an earlier age at first date than did his/her parent.

In this study, we extend previous research by making use of a large, representative, longitudinal sample of adolescents and their parents. This enables us to consider parents' reports of parenting during preadolescence and adolescents' reports of dating and sexual debut four years later. We examine how other important variables such as adolescents' gender, race, family structure, and socioeconomic background affect relationships between early parenting strategies (i.e., support, coercive control, and monitoring) and (a) adolescent dating, (b) sexual debut, and (c) sexual debut among adolescents who report dating.

Reviewing our specific expectations, we expect that preadolescent parental support is associated negatively with early sexual debut among adolescents who have dated. Additionally, we expect that earlier monitoring is associated negatively with early sexual debut among adolescents who have dated, and that coercive control is associated positively with early sexual

activity among adolescents who have dated. Consistent with the findings of previous research, we expect that family structure influences adolescent dating and sexual debut. Specifically, adolescents from two-parent families, compared with single-parent and stepparent families, will report delayed dating and delayed sexual experience. We also expect that girls compared with boys will report later dating and delayed sexual experience.

METHOD

Sample

The data for this study were drawn from the two waves of the National Survey of Families and Households (NSFH) 1987-88 and 1992-94, a multistage probability sample of 13,008 adults in the noninstitutionalized U.S. population. These data are particularly appropriate for our purposes because they include parents' reports of their parenting strategies at wave 1 and adolescents' reports of their dating and sexual behavior at wave 2. One adult per household was selected randomly as the primary respondent for face-to-face interviewing. Several subpopulations were oversampled: unmarried cohabitors, recently married couples, single-parent families, families with stepchildren, and households whose heads were African American, Mexican American, or Puerto Rican (Sweet, Bumpass, & Call, 1988). At the second wave, a telephone interview was conducted with the focal child selected at wave 1. Adolescents' mean age at wave 2 is 14.8 years (standard deviation = .04).

Of the initial sample at wave 1, about 84 percent, or 848 of the focal children were reinterviewed at wave 2. This sample size was further limited in two ways. First, children who were not age 13 at wave 2 were excluded from analyses because the data do not include measures of the dependent variables for adolescents younger than age 13. Second, we eliminated 70

respondents who had missing data on timing of first date or first intercourse, and 26 respondents who had missing information on the independent variables. Thus, our sample consists of 752 adolescents who were age 13 or older at wave 2 and a focal child at wave 1.

For the last set of analyses, our sample is additionally limited to only adolescents who have ever dated (n = 538). The typical sequence relating to sexual initiation is for the adolescent to engage in sexual activity after having had some dating experience (Miller & Moore, 1990). These analyses, in a sense, are a refinement of the initial analyses, which include all cases (daters and non-daters). Specifically, these analyses are based on 214 fewer cases because 179 respondents (mostly young respondents) reported that they never dated and 35 respondents reported that they had sex before they had ever dated. Thus, we are limiting the analyses to the prediction of sexual debut following some dating experience.

Measures

Dependent Variables. The two dependent variables in our analyses are the adolescent's report of timing of first date and timing of first intercourse. To measure the timing of first date, respondents were asked: "At what age, if at all, did you first date or go out with a (boy/girl)?"

To collect information on sexual initiation the following prompt and subsequent questions were used: "The next questions are personal. Remember all your answers are strictly confidential, and will never be linked to your name. If you don't want to answer any questions, just say so, and I will skip to the next question. 'Have you ever had sexual intercourse with a (boy/girl)?' 'How old were you the first time?'" For the first set of analyses examining all adolescents (n = 752) the timing of sexual intercourse begins after the wave 1 interview and continues until the event or interview occurs. The set of analyses that focus on the prediction of

sexual debut among adolescents who have ever dated begins exposure to first sexual intercourse at age of first date.

Independent Variables. For ease of presentation, the independent variables are grouped into three categories: parenting strategies, family structure, and background variables. We created three parenting strategy variables. The first was a supportive parenting scale consisting of seven items from the NSFH in 1987-88. The seven items asked the frequency with which parents praise their child, hug their child, spend an enjoyable time with their child, spend time working on a project or playing together, spend time in leisure activities away from home, help with reading or homework, and have private talks. We coded all items into four categories reflecting (1) never to (4) very often. Scale reliability for this measure of parenting is .73.

We measured monitoring of child's behavior, the second parenting strategy, by averaging responses to three sets of questions. The first set of questions asked whether the child was allowed home alone after school, all day when there was no school, at night, and overnight. The response categories were not allowed, sometimes/it depends, and allowed. The second question asked "when the child is away from home, is (he/she) supposed to let you know where (he/she) is?" The three responses were: hardly ever, sometimes, all the time. The third set of questions asked about restrictions regarding type and frequency of television viewing permitted. Parents were categorized as: not restricting type or amount of television, restricting only type or only amount, and restricting both type and amount of viewing. The scale average ranges from 1 to 3 with a higher score indicating higher monitoring. Scale reliability is .63.

We measured coercive control by averaging parents' responses to questions about the frequency of (1) spanking, (2) yelling, and (3) arguing with their child. Responses were collapsed

into a four-point range from (1) never to (4) often. Scale reliability is .51. The lower reliability, relative to the other two scales, is partially a reflection of fewer scale items.

We coded family structure as three dummy variables: two biological parent, stepparent, and single-parent families. Twenty-one children or three percent of the sample were adopted and were coded according to their adopted family structure – two children lived in single-parent families and nineteen children lived with both of their adoptive parents. Further, this measure of family structure improves on other measures because cohabitation is treated as equivalent to marriage (Bumpass & Raley, 1995; Manning & Smock, 1997). For example, we code a child living with his/her biological mother and her cohabiting partner as a stepparent family.

Additionally, some of our expectations differed according to child's gender. Thus, we included the focal child's gender in the models.

We included several background variables in the analyses as controls because of their potential for confounding relationships between the explanatory variables of primary interest and the dependent variables. Failure to control for potentially confounding variables may result in an inflated estimate of the impact of family structure (or parenting strategies) on adolescent dating and sexual initiation. For example, poverty associated with single-parent family status may influence adolescent dating and sexual initiation. For these reasons we controlled for mother's education (four response categories included less than high school, high school graduate, some post-high school, and college or greater), and race/ethnicity (response categories included Hispanic, White non-Hispanic, African-American non-Hispanic, and other) (Lauritsen, 1994; McLanahan & Sandefur, 1994; Wu & Martinson, 1993). Additionally, we controlled for economic well-being using the poverty level estimate (Wu, 1996). As an alternative measure we

also included family income and number of children in the model. The results were similar regardless of the economic well-being measure chosen.

Plan of Analysis

Whether an adolescent had dated or ever had sexual intercourse, our two dependent variables, have been treated as dichotomous dependent variables in some studies (e.g., Miller et al., 1997). We feel this may not be the best strategy for at least two reasons. First, virtually all scholarship on adolescent dating and sexual behavior suggest that early sexual activity is still a relatively uncommon event. For example, our preliminary analyses of the National Longitudinal Study of Adolescent Health (Add Health) indicate that among 7th graders, 31.4 percent have ever dated and 10.8 percent have ever been sexually active with the percentage of dating and sexually active adolescents increasing in each year of high school (Longmore, Manning, & Giordano, 1999). Second, our interest centers on the timing in which dating and sexual activity occurs, and for some, particularly younger adolescents, it may not have occurred by interview time. For example, an examination of the NSFH sample distribution on focal child's sexual initiation, our key dependent variable, reveals that about one-fifth (21.5%) have ever had sex. Thus, the distribution is skewed in the direction of not having had sex. Additionally, our dependent variables are based on the adolescents' reports of age at first date and age of first sexual intercourse. The timing for adolescents begins at age 10, after the wave 1 interview, and continues forward until the event or interview occurs.

We employ Cox proportional hazard regression to estimate the models. Event history techniques permit inclusion of information about the respondents who have not yet experienced the event of interest. An advantage of this particular method is that it does not require specifying

a particular probability distribution (Allison, 1984). The coefficients are expressed as hazard ratios, which are the exponential value of the coefficient. The hazard ratio indicates the hazard of experiencing the event relative to the omitted category of a dummy variable or the percent change in hazard of experiencing the event for every unit change in a continuous variable.

Our analytical strategy is to first estimate a series of models that include only the zeroorder effects of the parenting strategy measures on the timing of first date and timing of first sexual intercourse. Then we estimate models that also include family structure, gender, and control variables. We also test for interactions between family structure and parenting strategy as well as gender of child and parenting strategy.

RESULTS

Univariate and Bivariate Descriptions

Descriptive characteristics of all adolescents, as well as those adolescents who reported dating, are shown in Table 1. Table 1 shows the mean scores of each preadolescent parenting strategy. The mean level of preadolescent coercive control (measured by frequency of yelling, spanking, and arguing) is 2.09 on a four point scale. The average level of preadolescent parental monitoring (restrict television, know whereabouts, allowed at home alone) is quite high, 2.74 on a three point scale. Parents also report high mean levels of preadolescent supportive behaviors (time spent with children in various activities, enjoyable time, praising, and hugging), 3.5 on a four point scale.

With respect to demographic characteristics, the sample is almost equally divided by gender (almost 46% male and 54% female). Three-quarters of the adolescents were living in two biological parent families at wave 1. (About one-quarter of the sample have experienced a change in family structure between waves. However, we tested whether change in family

structure had a significant effect net of the other variables in the model and found no significant effect of family structure change). About ten percent of the sample lived in a step-parent family and 13 percent lived with single-parents at wave 1. Almost all of the single-parent families are female-headed. Mothers, on average, were high school graduates (43%). With respect to race/ethnicity, 78 percent of the sample are non-Hispanic, White, 10.5 percent are Non-Hispanic Black, and 8 percent are Hispanic adolescents. Using the poverty level estimate (Wu, 1996), the mean poverty level of the sample is 16 percent above the national poverty threshold given the adolescent's family size at wave 1.

Turning to our dependent variables, almost three-quarters of the sample had dated and 22 percent had sexual intercourse. We note, however, that all of the respondents have not yet completed adolescence so the overall reported levels of sexual activity are quite low. Still the levels of dating and sexual activity reported by adolescents for each age group in the NSFH are comparable to those levels reported in other national data collections such as Add Health (Longmore et al., 1999).

Specifically, with respect to those adolescents who reported dating, the univariate descriptive characteristics are shown in column 2 of Table 1. About 47 percent are male and 53 percent are female. Seventy-five percent of the adolescents were living in two biological parent families at wave 1. On average, mothers were high school graduates (43%). About 81 percent of the adolescents who reported dating were White, 8 percent were Hispanic, and 7 percent were Black. The mean poverty level was 14 percent above the national poverty level threshold for the adolescent's family size at wave 1. Almost 26 percent of the adolescents who reported having dated have been sexually active. Comparing then, columns 1 and 2, we see that a slightly larger

percentage of adolescents who have dated also report being sexually active (26% compared with 22%).

TABLE 1 ABOUT HERE

Before proceeding to the evaluation of the multivariate models, we briefly consider the bivariate associations between preadolescent parenting strategies, family structure, and child's gender. Although all three parenting strategies comprise important aspects of preadolescent parental socialization, bivariate correlations among these measures are low. The correlation between coercive parenting and monitoring is r = -0.02, between coercive and supportive parenting is r = 0.004, and between supportive parenting and monitoring is r = 0.10 (Table not shown).

Table 2 compares preadolescent parenting strategies by family structure and child's gender. The level of coercive parenting of preadolescent children is significantly lower for two biological parent families than for either step-parent or single-parent families. Moreover, single-parents report significantly greater levels of supportive parenting of their preadolescent children than either two biological or step-parent families. In contrast, the average level of parental monitoring of preadolescent children is not statistically different by family structure.

TABLE 2 ABOUT HERE

The next panel of Table 2 presents gender differences in parenting strategies. Parents report significantly higher mean levels of coercive parenting of their preadolescent boys than girls

and significantly lower mean levels of monitoring of preadolescent boys than girls. The average level of supportive parenting is comparable for boys and girls.

Table 3 presents the results of the life-table estimates of adolescents' cumulative survival to age at first date and age at first sexual intercourse. The first panel of Table 3 starts exposure time at age 10 and ends at age 17. The age at which half of the sample has dated is age 14. The cumulative proportion of respondents who have dated increases steadily with age. The next column presents the cumulative proportion that has had sexual intercourse. Half of our sample has not had sexual intercourse by age 17. The levels of sexual experience accelerate markedly at ages 16 and 17.

Regarding the progression to sexual activity once dating has started, most of the sample (89%) did not have sexual intercourse until after they had started dating. The bottom panel of Table 3 shows the cumulative proportion of adolescents who had sex at each year since they started dating. Among those who have dated and have ever had sexual intercourse, only four percent (n = 35) had sex before ever dating (Table not shown). Approximately half of the sample had intercourse within four years of their first date. Thus, there is a delay between first date and sexual debut; for most adolescents the timing of first sex does not immediately follow the timing of first date.

TABLE 3 ABOUT HERE

Event History Models

The event history models examine the relationship between parenting strategies and timing of first date (Table 4), timing of first sexual intercourse (Table 5), and timing of first sexual

activity following first date (Table 6). Our approach is to first estimate zero-order models for each parenting strategy variable (models 1-3 respectively) and then multivariate models that include control variables (models 4-6), and all three parenting strategies and the control variables (model 7).

We first present the hazard ratios of the timing of first date in Table 4. None of the three parenting strategies are related significantly to the timing of first date in the zero-order (models 1-3) or in the multivariate models (model 4-7). Examining the effects of the various control variables, we find statistically significant differences by gender and race. Males have 36 percent greater hazard of dating than females ((1.36-1.00)*100). Black adolescents have significantly lower hazards of dating than White adolescents. We do not observe, however, significant differences in the timing of dating between Hispanics and White adolescents. Additionally, there are no significant differences in the effects of the remaining independent variables: family structure, mother's education, and poverty on timing of first date.

TABLE 4 ABOUT HERE

Table 5 shows the effects of parenting strategies on timing of first sexual intercourse. The first model indicates that coercive parenting is significantly, positively associated with earlier timing of first sexual intercourse. The second model shows that children whose parents monitored them more closely during preadolescence experienced later timing of first sexual intercourse. Supportive parenting, however, is not associated significantly with early sexual activity in the zero-order models.

TABLE 5 ABOUT HERE

Models 4 through 6 include the various control variables. Model 7 includes all three parenting strategies and the control variables. Early coercive parenting is not related significantly to timing of first sexual activity when the other covariates are included in the model (model 4). However, early parental monitoring remains significantly associated with delays in sexual activity (model 5). Model 6 shows that the timing of sexual activity does not significantly vary by level of parental supportiveness. Similarly, the addition of the other parenting variables does not modify the effect of parental monitoring (model 7) controlling for the other variables in the model.

Timing of sexual activity varies by type of family structure. Adolescents from two biological parent families have significantly lower hazards of first sexual activity than adolescents from single-parent families. This is consistent with findings that indicate that sexual initiation is earlier for adolescents who live in single-parent families (see reviews in McLanahan & Sandefur, 1994; Moore, Miller, Glei, & Morrison, 1995). (However, one difference between our study and other studies examining family structure and adolescent sexual experience is that we examine family structure four years earlier than the reporting of adolescent sexual experience). We also expected that the parenting strategies might differ for each family structure type. Our results suggest that the effect of parenting does not significantly vary for each family structure type (Table not shown). At the bivariate level parenting behaviors appear to differ based on gender of the child and family structure, but interaction models indicate that the effects of these parenting processes do not differ.

Finally, we assess the timing of first sexual intercourse following an adolescent's first date (Table 6). This particular analysis is restricted to those adolescents who dated before having sex

for several reasons. Analyses of sexual activity prior to dating can be found elsewhere (e.g., Manning, Longmore, & Giordano, in press). In the zero-order models, only monitoring influences the timing of first sexual activity among daters. Greater parental monitoring during preadolescence is associated with later timing of first sexual intercourse among those adolescents who have dated. Comparing results from Table 5 and Table 6, we no longer find the significant effects of gender and family structure in these models. However, the pattern and significance of the mother's education and race/ethnicity variables are similar to those found in Table 5.

TABLE 6 ABOUT HERE

DISCUSSION

The effects of parenting strategies have been the focus of a great deal of sociological research. The weight of the evidence in the literature suggests that parental support, monitoring, and coercive control significantly influence adolescent socialization outcomes (e.g., academic achievement and social competence). We argue that parental behavior prior to the onset of adolescence provides a basic foundation for young people who later on must make behavioral choices outside of parental preview. In this paper, our objective was to determine the relationship between adolescents' dating and sexual initiation and specific variations in three parenting strategies, support, coercive control and monitoring that occurred four years earlier. We asked the question: Do greater degrees of support, control and monitoring of younger children delay or accelerate the pace of adolescent dating and sexual experience? And what is the relative importance of these aspects of early parenting for adolescent dating as well as sexual debut? We expected that parental support and monitoring would delay adolescents' dating and sexual

activity, and that early coercive control would accelerate the pace of adolescent dating and sexual activity.

We find that neither parenting strategies, family structure nor traditional risk factors (e.g., low mother's education, poverty, etc.) influence timing of first date for adolescents. Thus, our expectations regarding the importance of early parenting strategies for the timing of adolescent dating are not supported. Race and gender, however, do influence the timing of an adolescent's first date with boys reporting earlier timing than girls, and Blacks reporting later timing of first date relative to White adolescents. The lack of significant effects for parenting may be due to the age appropriateness of dating. In other words, almost half of the sample has dated by age 14 suggesting that it is developmentally appropriate.

With respect to predicting timing of first sexual intercourse, early monitoring is the only significant predictor among the preadolescent parenting strategies. Parents who monitor their children in early years have teens who delay the onset of sexual activity. This is consistent with other studies that found relationships between low parental monitoring of adolescents, sexual activity, high risk sexual behavior, and early pregnancy (e.g., Biglan et al., 1990; Dornbusch et al., 1985; Luster & Small, 1994; Miller et al., 1997).

Surprisingly, preadolescent parental support and coercive control do not influence timing of sexual initiation net of the control variables. Other scholars using cross-sectional data, or small, single-sex, regional data sets, report that perception of parental support, warmth, and closeness are related to later timing of adolescent sexual activity. Perhaps this difference in findings is due to the use of single-source data and shared variance.

Timing of sexual activity, however, varies by gender with males experiencing higher hazards of sexual activity than females. This is consistent with previous findings. Moore et al.

(1995) report that although the gender gap in adolescent sexual experience is narrowing, nevertheless, every national survey (e.g., National Survey of Family Growth, Youth Risk Behavior Survey) reports greater numbers of adolescent males, more so than females, having sexual intercourse at every year of age. We also anticipated that the effects of parenting might vary by the child's gender. However, our tests for interactions between child's gender and parenting strategy indicate that the effect of parenting is similar for boys and girls. Simple models that consist only of gender and parenting indicate that parental monitoring has a significant effect for girls but not boys, but the effect disappears with the inclusion of the other independent variables.

We find that the control variables have similar effects regardless of which parenting variables are in the model. Age, mother's educational level, and race are important variables in the timing of adolescent sexual activity. We find that the higher the level of mother's education the lower the hazard of sexual activity. Other national studies also report that parents' educational level is associated with later sexual activity for adolescents. Also consistent with other research (e.g., Brooks-Gunn & Paikoff, 1993), African American adolescents report earlier onset of sexual activity. We do not observe significant differences based on the adolescent's family poverty level.

Some limitations of this study are that, apart from parents, we do not consider the influence of others (i.e., peers, partners, and siblings) on timing of sexual initiation. We also do not include adolescents' perceptions of their parents' behavior. Thus a useful avenue for future research would be to measure the relative influence of these "significant others" on adolescent behaviors, as well as perceptions of parents and others.

Additionally, scholars such as Reiss (1995) argue that genes may influence the association

between coercive parenting, on the one hand, and adolescents' antisocial behavior. Similarly, Belsky, Steinberg, and Draper (1991) and Moffitt, Caspi, Belsky, and Silva (1992) argue that stressful early childhood experiences may be manifested in earlier "reproductive readiness." In other words, it is possible that preadolescent monitoring is reflecting a lack of family stress whereas low degrees of monitoring are reflecting greater family stress. Although we recognize the importance of these influences and ideas, our data do not permit their inclusion in these analyses.

Another fruitful direction would be to explore whether the meaning of dating and sexual activity within a dating relationship differ across gender, racial, age, and socioeconomic groups. Additionally, incorporating a complete array of parenting strategies (e.g., inductive parenting strategies) might provide greater insight into the ways that preadolescent parenting affects adolescent sexual activity.

Policymakers have turned to the family as a critical arena for preventing adolescent risk behaviors, including early sexual activity. However, there is a general lack of attention to the family dynamics that work to produce positive outcomes. While it may be beneficial overall to adolescents to develop a warm and caring family environment, our findings suggest that direct monitoring or supervision is nevertheless a critical (if not more important) component of effective early parenting.

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Table 1. Descriptive Characteristics of Analytical Samples

	All Adolescents	Adolescents Who Dated		
<u> </u>	Percent/Mean	Percent/Mean		
Dependent Variables				
Sexual Activity	21.5	25.7		
Ever Date	73.3			
Independent Variables				
Parenting				
Coercive	2.1	2.1		
Monitoring	2.7	2.7		
Support	3.5	3.5		
Child's Gender				
Male	45.8	47.4		
Female	54.2	52.6		
Family Structure				
Two Biological	76.4	74.8		
Step-parent	10.5	11.6		
Single Parent	13.1	13.6		
Mother's Education				
<12 years	13.2	11.8		
12 years	43.2	43.4		
13-15 years	22.9	23.6		
16+	20.7	21.2		
Race/Ethnicity				
Non-Hispanic White	78.1	81.3		
Hispanic	8.0	8.3		
Non-Hispanic Black	10.5	7.3		
Other	3.4	3.1		
Poverty	1.16	1.14		
N	752	538		

TABLE 2. Parenting Strategies, Family Structure and Gender of the Child

Parenting Strategies						
Coercive	Monitoring	Supportive				
2.09	2.74	3.46				
2.05a,b	2.74	3.45b				
2.24	2.72	3.39c				
2.20	2.72	3.55				
2.13d	2.70d	3.48				
2.03	2.78	3.44				
	2.09 2.05a,b 2.24 2.20	Coercive Monitoring 2.09 2.74 2.05a,b 2.74 2.24 2.72 2.20 2.72 2.13d 2.70d				

Table 3. Life Table Cumulative Survival Estimates of Age at First Date and First Sexual Activity

Age	First Date	First Sex
10	0.00	0.00
11	0.07	0.01
12	0.13	0.02
13	0.30	0.04
14	0.48	0.09
15	0.64	0.17
16	0.83	0.32
17	0.94	0.47
N	752	752
Years Since First Date	First Sex	
0	0.09	_
1	0.21	
2	0.34	
3	0.43	
4	0.55	
5+	0.61	
N	538	

Table 4. Relative Hazard of Timing of First Date

	Models							
	1	2	3	4	5	6	7	
Parenting								
Coercive	1.01			0.99			0.99	
Monitoring		0.83			0.93		0.92	
Supportive			1.05			1.03	1.04	
Gender								
Male				1.37***	1.36***	1.37***	1.36***	
(Female)								
Family Structure								
Two Biological				0.87	0.87	0.87	0.88	
Step-parent				1.06	1.07	1.07	1.07	
(Single parent)								
Mother's Education								
<12 years				0.97	0.98	0.98	0.98	
(12 years)								
13-15 years				0.96	0.97	0.97	0.96	
16+				1.12	1.12	1.12	1.12	
Race/Ethnicity								
Hispanic				1.00	1.01	1.00	1.01	
Non-Hispanic Black				0.71***	0.72***	0.71***	0.72***	
(Non-Hispanic White)								
Other				0.71	0.71	0.71	0.71	
Poverty				0.72	0.72	0.71	0.72	
-2LogLikelihood	6760.8	6759.1	6760.6	6728.3	6728.1	6728.3	6727.9	
Df	1	1	1	11	11	11	13	

Table 5. Relative Hazard of Timing of First Sexual Intercourse

	Models							
	1	2	3	4	5	6	7	
Parenting								
Coercive	1.23*			1.12			1.10	
Monitoring	1.20	0.63**		1.12	0.68*		0.69*	
Supportive		0.05	0.89		0.00	0.91	0.95	
Gender			0.07			0.72	0.70	
Male				1.50***	1.48***	1.52***	1.47***	
(Female)				-10 0				
Family Structure								
Two Biological				0.68**	0.68**	0.66**	0.69**	
Step-parent				0.82	0.82	0.81	0.82	
(Single parent)								
Mother's Education								
<12 years				1.24	1.27	1.23	1.26	
(12 years)								
13-15 years				0.53***	0.54***	0.53***	0.54***	
16+				0.41***	0.42***	0.41***	0.43***	
Race/Ethnicity								
Hispanic				1.00	1.06	0.99	1.07	
Non-Hispanic Black				2.54***	2.63***	2.56***	2.62***	
(Non-Hispanic White)								
Other				1.45	1.42	1.44	1.44	
Poverty				0.85	0.88	0.86	0.87	
-2LogLikelihood	2316.2	2314.3	2318.4	2248.5	2245.5	2248.0	2244.8	
Df	1	1	1	11	11	11	13	

Table 6. Relative Hazard of Timing of Sexual Intercourse Following First Date

	Models							
	1	2	3	4	5	6	7	
Parenting								
Coercive	1.18			1.10			1.06	
Monitoring		0.58***			0.61**		0.62**	
Supportive			0.89			0.87	1.03	
Gender								
Male				0.88	0.88	0.89	0.87	
(Female)								
Family Structure								
Two Biological				0.77	0.77	0.74	0.79	
Step-parent				0.86	0.86	0.86	0.87	
(Single parent)								
Mother's Education								
<12 years				1.36	1.37	1.38	1.37	
(12 years)								
13-15 years				0.62**	0.64**	0.62**	0.63**	
16+				0.41***	0.43***	0.42***	0.43***	
Race/Ethnicity								
Hispanic				0.93	0.98	0.94	0.98	
Non-Hispanic Black				2.36**	2.49***	2.39***	2.48***	
(Non-Hispanic White)								
Other				2.31***	2.04*	2.32*	2.04*	
Poverty				0.90	0.92	0.92	0.92	
-2LogLikelihood	1818.7	1814.2	1819.6	1777.4	1773.3	1777.8	1773.1	
Df	1	1	1	11	11	11	13	