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Authors
Males, M
Chew, K S

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The Ages of Fathers in California Adolescent Births, 1993

Mike Males and Kenneth S. Y. Chew, PhD

Introduction

Although teenage mothers have been subjected to increasingly intense attention, their male partners largely have escaped scrutiny.1 The news media, policy makers, and scholars alike assume that the partners in teenage fertility are likewise teenagers.2 Yet recent studies indicate that teenage sex, pregnancy, and childbearing are more complex than the teen-peer issues they are assumed to be.3 Evidence from birth tabulations (Stephanie Ventura, Division of Vital Statistics, National Center for Health Statistics, unpublished data, 1992), marriage records,4 and research5,6 focused on the age-of-partner issue, although incomplete, suggests that men aged 20 years or older father most infants born to teenage mothers. The partners of 445 teenage mothers in a 1989 study were often not age peers "but rather men who are at least five to ten years older than their early adolescent girlfriends"—an "age discrepancy" receiving "virtually no attention in the literature.""7

This analysis focuses on fathers' ages in school-age fertility: childbearing by mothers aged 18 years or younger. Most concern has been directed at school-age mothers on the premise that school-age childbearing involves age groups reachable through school programs. But if adult fathers play a significant role in childbearing among school-age females, then the present mix of youth-targeted education, abstinence and contraceptive promotion, and policy sanctions is likely to be insufficient.6 This article uses available birth statistics to estimate the extent of adult male involvement in school-age childbearing.

Methods

Data on School-Age Childbearing

Determining the ages of fathers of infants born to school-age mothers has proven difficult. Among the vital records for 518 000 US teenage births compiled by the National Center for Health Statistics in 1992, for example, 41% omitted the father's age (Stephanie Ventura, unpublished data, 1992). Fortunately, recent tabulations by the California Center for Health Statistics through 1993 provide fathers' ages for 86% of the state's approximately 70 000 teenage births per year by single-year intervals for both mothers and fathers.8 For 1993, the California data include fathers' ages by race for 96% of marital and 81% of nonmarital school-age births (marital status is tabulated by the Center for Health Statistics with an inferential method validated by Berkov).9 In the most recent years for which both state (1993) and national (1992) figures are available, the two data sets are virtually identical in aggregate and separately by race and age of the mother (Table 1). The equivalence of age distributions, despite the large difference in response rate, suggests that the ages of fathers in any one age group are no more likely to be unstated than those of fathers in any other age group.

As in other states, California data on the ages of fathers are compiled from birth certificates that are derived from the statements of mothers. Two factors help explain the higher proportions of birth records on which fathers' ages are reported in California. First, because California birth certificates omit marital status, the mother may list an unmarried father (and his age) without concern that marital status will be publicly disclosed. Second, the state trains hospital birth clerks extensively to elicit information that is complete (Janet Strickland, Program Analyst, California State Office of Vital Records and Statistics, personal communication, January 10, 1995). Still, might these reports be systematically biased, either by ignorance or by falsification? Ignorance is unlikely. On average, teen couples are together for 18 months before the birth,5 offering ample occasion to learn a partner's true age. Falsification is...
more likely, but could work either to inflate or deflate average ages. Mothers may overstate fathers' ages to acquire the cachet of having an older partner. Mothers may understate fathers' ages to avoid statutory entanglement or familial retaliation. Without further data, the relative weight of these countervailing influences cannot be gauged. In any case, the distribution of stated father ages for California school-age births is a smooth distribution with no evident heaping around socially significant milestones (e.g., ages 18 or 21). This increases our confidence that the 39,260 stated father ages provide a defensible starting point for estimating the age distribution of the 7251 unstated ages.

Three Approaches for Estimating Fathers' Ages

If we accept that the age-known data on the fathers are believable, the next step is to determine the range of plausible distributions for the age-unknown fathers. Three divergent approaches were used.

**Age-peer approach.** To estimate a lower-boundary (i.e., youngest possible) age distribution, we adopted the extreme assumption that *all* age-unknown fathers were the school-age peers of their partners. This assumption is operationalized by distributing age-unstated fathers as if they were identical in age to their school-age female partners.

**Adult-father approach.** To estimate an upper-boundary (i.e., oldest possible) age distribution, we adopted the extreme assumption that *all* age-unknown fathers were adults significantly older than their school-age partners. Various age thresholds could be used to delimit births involving adult (nonpeer) fathers. By our definition, a nonpeer, adult father was at least 2 years older than the mother and beyond school age at the time of birth. In reference to 18-year-old mothers, for example, 19-year-old fathers were peers whereas 20-year-old fathers were adults; in reference to mothers aged 10 to 17 years, nonpeers would be 19 years of age or older. Thus, the adult-father assumption was operationalized by distributing age-unstated fathers (within each category of race and mother's marital status) in proportion to the age distribution of age-known fathers age 20 years or older.

**Interpolation from known ages.** The two preceding approaches bracket an intermediate one that is based on the assumption that father ages are missing at random, an assumption supported by the close resemblance noted earlier between California and US age-of-father patterns (Table 1). Thus, our third, most realistic estimate interpolated omitted ages from known ages with simple proration. Specifically, age-unknown fathers were prorated by mother's marital status (married or not married), race (White, Black, Hispanic, Asian/Other), and age. Median ages of mothers and fathers and partner age gaps within each age group were calculated with cumulation differenting for the distribution as a whole.

**Results**

Figure 1 compares the range of results among 17-year-old mothers (the average age of school-age mothers at time of birth). Under the lower-boundary age-peer approach, 66% of the infants born to 17-year-old mothers would be fathered by postschool adult men ages 19 years and older, compared with 76% under the upper-boundary adult-father assumption and 71% under the intermediate interpolated estimate. Under all three scenarios, at least two thirds of the partners would be postschool adult men. For 15-year-old mothers (data not shown), 47% of the infants would be fathered by...
postschool adult men under the lower-boundary assumption, 63% under the upper-boundary assumption, and 52% under the interpolated estimate. At ages younger than 15 years, where cases are fewer and missing data more prevalent, the estimates diverge somewhat more and should be viewed with less confidence. As the terms peer and adult imply, partners of school-age mothers comprise two divergent groups of males. Table 2 presents the median ages of mothers and their peer or adult partners, incorporating estimates for age-unknown fathers under the intermediate assumption. (A detailed table of single-year age distributions of fathers and teenage mothers by race, using 1993 California data and the interpolated approach, is available from the authors.) In the total 16,065 births involving school-age peer couples, the mother’s median age at time of birth was 17.1 years and the father’s median age was 18.2 years, a gap of around 1 year. For the total 30,446 births involving school-age mothers and postschool adult fathers, the mother’s median age was 17.8 years and father’s was 22.1 years, a gap of 4.3 years. Moreover, the younger the mother, the wider the partner age gap. The median age of 18-year-old mothers was 0.3 years younger than school-age fathers and 4.2 years younger than adult partners; for 10- to 14-year-old mothers, these gaps widen to 2.4 and 6.7 years, respectively. In a (mean) rather than median ages are used, age gaps between school-age fathers and school-age mothers increase to 5 years.

Adult fathers account for a substantial majority of school-age births irrespective of mother’s race or marital status. Adults were fathers in 67.8% of births (n = 28,399) to Hispanic mothers, 62.9% of births (n = 10,148) to non-Hispanic Whites, 58.8% of births (n = 5,466) to Blacks, and 63.6% of births (n = 2,498) to Asians/others. Adults were fathers in 74.7% of births (n = 12,217) to married mothers and 62.2% of births (n = 34,294) to unmarried mothers.

Discussion

What we call school-age childbearing is predominantly a teen–adult phenomenon. In 1993, only a minority (34.5%) of California’s 46,500 school-age mothers gave birth after liaison with a school-age peer; by contrast, about two thirds (65.5%) had a post-school-age adult partner who, on average, was more than 4 years older. Overall, half of the fathers were fully 3 or more years older than their female partners; indeed, 13% of males were at least age 25 years. Thus, the 2-year age gap estimated as typical in earlier studies may be grossly understated. The gap is especially significant because teenage mothers with much-older partners are disproportionately the childhood victims of sexual assault by adult men. The possibility that much early childbearing represents an extension of rape or sexual abuse by male perpetrators averaging one to two decades older remains a serious question.

Until now, research, policy, and prevention/intervention programs concerning school-age fertility have focused on peer-age couples, not the adult male involvement that characterizes the substantial majority of relationships. If the California results are supported by other data, school-age fertility may not be a distinct phenomenon that can be addressed separately from adult fertility. If prevention of early childbearing is the goal, then the predominant involvement of much-older adult males in the sexual assault of children, and the initiation of young adolescent females into sex (often by rape), and the impregnation of school-age females in voluntary relationships must become central in research and policy.

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![TABLE 2-Median Ages of Partners in School-Age Births, California, 1993](image)
Center for Health Statistics), Janet Strickland (California Office of Vital Records and Statistics), and Stephanie Ventura (National Center for Health Statistics).

References

Carrying and Using Weapons: A Survey of Minority Junior High School Students in New York City

Roger D. Vaughan, MS, James F. McCarthy, PhD, Bruce Armstrong, DSW, Heather J. Walter, MD, MPH, Pamela D. Waterman, and Lorraine Tiezzi, MS

Abstract
To explore weapon carrying among young, inner-city adolescents, a survey was administered in fall 1993 to 2005 predominantly Hispanic students (mean age = 12.8 years) in three New York City junior high schools. The survey revealed that 21% of students reported personally carrying a weapon; guns and knives were the weapons most commonly carried. Most of those who carried guns reported that they bought them. Forty-two percent indicated that they had a family member or close friend who had been shot. Boys and older students were more likely to report carrying weapons. Preventive efforts may need to begin before or on entry into junior high school rather than high school. (Am J Public Health. 1996;86:568–572)

Introduction
Violence is the major cause of mortality among American youth, with accidents, suicide, and homicide accounting for 75% of all adolescent deaths.1 Minority youth are disproportionately represented in terms of deaths from suicide and homicide. More than one third (36%) of all deaths among Hispanic youth are caused by homicide and suicide, in comparison with one fifth (22%) for similarly aged Whites.2 The overall death rate for Black youth is twice that for Whites, and whereas the leading cause of death among adolescent Whites is accidents, the leading cause of death among teenage Blacks is homicide.3 Firearms play a key role in these grim statistics. They are the leading means of homicide for these young victims,4 and the presence of a handgun in the home greatly increases the risk that someone who lives there will be killed.5

Several studies have investigated access to and availability of weapons (particularly guns) among high school students.6–8 Far less is known about the weapon experience of younger adolescents, although it has been suggested that an adolescent’s first experience with weapons may be as early as 12 years of age.9 No literature is available about young, minority adolescent involvement with weapons. The data presented in this paper begin to document the weapon experience of younger, minority, inner-city adolescents and may help to guide the timing and content of violence prevention programs.

Methods
Procedure
In the fall of 1993, a two-page anonymous questionnaire was administered to trained staff members to 2005 seventh- and eighth-grade students (70% of eligible) in three junior high schools in a New York City school district. As in many other inner-city neighbor-

Roger D. Vaughan, James F. McCarthy, Bruce Armstrong, Pamela D. Waterman, and Lorraine Tiezzi are with the Center for Population and Family Health, Columbia University School of Public Health, New York City. Heather J. Walter is with the Department of Psychiatry, Children’s Memorial Hospital, Chicago, Ill.

Requests for reprints should be sent to Roger D. Vaughan, MS, Center for Population and Family Health, Columbia University School of Public Health, 60 Haven Ave Level B-3, New York, NY 10032.

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