

# Trends in Adolescent Males' Abortion Attitudes, 1988–1995: Differences by Race and Ethnicity

By Scott Boggess and Carolyn Bradner

**Context:** Studying how adolescent males view abortion and how their attitudes toward abortion have changed over time can improve our understanding of the sexual, contraceptive and abortion behavior of these males and their partners.

**Methods:** Data from the 1988 and 1995 National Survey of Adolescent Males are used to describe changes in young males' attitudes toward abortion over time, as well as differences in abortion attitudes by race and ethnicity. Multivariate models are used to examine the relationship between religiosity and abortion attitudes.

**Results:** Between 1988 and 1995, young males' approval of abortion decreased significantly. In 1995, 24% of U.S. males aged 15–19 agreed that it was all right for a woman to have an abortion "for any reason," down from 37% in 1988. This decrease was driven almost entirely by non-Hispanic white males; there was little change in the abortion attitudes of non-Hispanic blacks and Hispanics. The decrease in white males' approval of abortion coincides with a significant increase in the self-reported importance of religion and in the proportion of whites who identified themselves as born-again Christians. The proportion of non-Hispanic white males indicating that religion was very important increased from 28% in 1988 to 34% in 1995, while the proportion identifying themselves as born-again increased from 18% to 24%. Multivariate analyses indicate that religiosity was more strongly related to the abortion attitudes of non-Hispanic whites than to those of Hispanics or non-Hispanic blacks.

**Conclusions:** The large decrease in approval of abortion among white teenage males has closed the racial and ethnic gap in attitudes toward abortion that was evident in 1988, when such youth held significantly more liberal attitudes toward abortion than did either Hispanics or blacks. This trend toward more conservative abortion-related attitudes among whites coincides with increasingly conservative attitudes regarding premarital sex and greater religiosity among white male adolescents.

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Since the early 1960s, both the Gallup Organization and the National Opinion Research Center have conducted regular national surveys of the abortion attitudes of the adult population. Numerous studies have examined these data in attempts to describe and explain both the levels of and trends in support for abortion in the adult population and in important subpopulations. Yet while we have more than 30 years of data on the abortion attitudes of adults, we know very little about the abortion attitudes of adolescents, particularly adolescent males. This lack of information about the views of teenagers seems problematic, given that teenage females experience roughly 800,000 pregnancies and 400,000 abortions each year.<sup>1</sup> (Of course, not all of these pregnancies are caused by adolescent males.)<sup>2</sup>

Until recently, the vast majority of research on teenage sexual behavior centered almost exclusively on women. Only in the last decade, with increased efforts at child support enforcement and paternity establishment and with the outbreak

of HIV and AIDS, have researchers given serious attention to the sexual and contraceptive behavior of young males. Because decisions about whether to engage in sexual behavior, practice contraception or terminate an unwanted pregnancy are often joint decisions, ignoring the role of males limits our understanding of these behaviors. As a result, it hinders our ability to develop and implement effective policies to deal with the problem of unintended and unwanted pregnancies.<sup>3</sup>

To date, we are aware of only one previous study that analyzed the abortion attitudes of adolescent males using nationally representative data: an assessment of the attitudes of 15–19-year-old males toward abortion in eight different situations, using data from the 1988 National Survey of Adolescent Males (NSAM). That analysis showed that teenage males' approval of abortion varied widely, from 35% in cases where a pregnant woman wanted an abortion but her male partner did not to 89% in cases where a pregnancy would seriously endanger a woman's health. In ad-

dition, males who indicated greater religious attachment or less approval of premarital sex were significantly less likely to approve of abortion.<sup>4</sup> In this article, we build upon this earlier work by using data from two independent waves of the NSAM to examine the trends in and correlates of young males' abortion attitudes between 1988 and 1995.

## Data and Methods

### Data

We analyze data from two independent waves of the NSAM, one administered in 1988 and one conducted in 1995. Both were nationally representative surveys of non-institutionalized 15–19-year-old males residing in the contiguous United States. Each was drawn as a multistage, area-probability sample, with blacks and Hispanics overrepresented. The 1988 survey had a sample size of 1,880, with a response rate of 74% among eligible respondents; the 1995 survey had a sample size of 1,729 and a response rate of 75%. These surveys collected data on a variety of attitudinal measures, detailed information on sexual and contraceptive behavior, and demographic and family background information. All data used in this analysis were collected through face-to-face interviews with the respondents. (Detailed descriptions of both surveys are available elsewhere.<sup>5</sup>)

Our analyses are limited to never-married males, resulting in a 1988 sample of 1,880 (677 non-Hispanic blacks, 386 Hispanics and 817 non-Hispanic whites), a 1995 sample of 1,710 (490 non-Hispanic blacks, 552 Hispanics and 668 non-Hispanic whites) and a pooled sample of 3,590. Postsampling weights were developed to match the March 1987 Current Population Survey and preliminary census projections of the civilian noninstitu-

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tionalized population in 1988 and 1995, respectively. For the purpose of this study, we normalized the weights to average to 1.0; all analyses were weighted.

### Measures

• *Abortion attitudes.* Attitudes toward abortion are examined using responses to a question posed to respondents in both the 1988 and 1995 NSAM. In 1995, the question read: "Females have abortions for different reasons. Think of an unmarried female who has just found out she's pregnant. As I read each of the following statements, tell me how much you agree or disagree that it would be all right for her to have an abortion for that reason. Would you say you agree a lot, agree a little, disagree a little, or disagree a lot?" The statements were: "If the female had been raped"; "if the female was under age 15"; "if the pregnancy itself seriously endangered the female's health"; "if there is good reason to believe the child might be born deformed or mentally defective"; "if the female felt that she couldn't afford to take care of the child"; "if the female wanted the abortion for any reason"; or "if the female wanted an abortion but the man did not."<sup>\*</sup>

In addition to using the individual attitude items, we constructed an overall scale of abortion attitudes for use during the multivariate analysis. Responses to the abortion attitudes question were coded as follows: 4=agree a lot; 3=agree a little; 2=disagree a little; and 1=disagree a lot. The individual responses were then summed and averaged over the seven circumstances. The resulting overall scale ranges from 1 to 4, with larger values indicating greater support for abortion. Cronbach's alpha for the pooled 1988 and 1995 abortion scale is .80.

• *Religion.* Most previous studies have identified religion as a strong correlate of abortion attitudes among both adults and adolescents, with more religious individuals holding less-favorable attitudes toward abortion.<sup>6</sup> The NSAM asked four questions on religion. One was: "When you were 14 years old, how often did you usually attend religious services? Was it: once a week or more, one to three times a month, less than once a month, or never?" The second, "What is your religious affiliation?", could be answered by a range of 12 responses, from "Protestant, no specific denomination" to "none." Respondents were also asked: "Do you consider yourself Born Again or an Evangelical or Charismatic Christian?" Finally, the questionnaire asked: "How important would you say religion is to you? Is it: very im-

**Table 1. Percentage of U.S. males aged 15–19 with selected characteristics or mean values, by race or ethnicity and year**

| Characteristic                               | Black           |                 | White/other     |                 | Hispanic        |                 |
|----------------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                                              | 1988<br>(N=677) | 1995<br>(N=490) | 1988<br>(N=817) | 1995<br>(N=668) | 1988<br>(N=386) | 1995<br>(N=552) |
| Mean age (in years)                          | 16.9            | 16.9            | 16.9            | 16.9            | 17.0            | 17.0            |
| % behind in school                           | 20.3            | 19.9            | 10.4            | 16.2            | 17.2            | 17.8            |
| Region of residence (% distribution)         |                 |                 |                 |                 |                 |                 |
| North                                        | 15.4            | 13.5            | 19.7            | 12.5            | 19.1            | 12.6            |
| Midwest                                      | 17.7            | 18.9            | 26.8            | 31.5            | 7.8             | 9.9             |
| West                                         | 6.2             | 8.6             | 20.6            | 17.3            | 37.2            | 43.9            |
| South                                        | 60.7            | 59.0            | 32.9            | 38.7            | 35.9            | 33.6            |
| % living in central city                     | 56.7            | 58.5            | 23.4            | 24.2            | 61.6            | 54.0            |
| % living in rural area                       | 18.7            | 19.5            | 24.0            | 36.2            | 3.7             | 10.4            |
| Mother's education (% distribution)          |                 |                 |                 |                 |                 |                 |
| < high school grad.                          | 16.5            | 12.3            | 11.1            | 11.8            | 38.7            | 35.7            |
| High school grad.                            | 56.1            | 50.3            | 49.4            | 43.3            | 40.7            | 43.7            |
| Some college                                 | 13.2            | 20.5            | 14.7            | 17.6            | 6.7             | 10.5            |
| college degree                               | 14.2            | 16.9            | 24.9            | 27.3            | 13.9            | 10.1            |
| % born outside United States                 | 2.3             | 9.5             | 4.6             | 8.0             | 23.0            | 21.2            |
| Mean desired no. of children                 | 2.3             | 2.4             | 1.5             | 2.2             | 2.4             | 2.6             |
| % who ever had sex                           | 71.3            | 65.4            | 52.6            | 45.4            | 55.3            | 50.0            |
| % who ever had sex and made someone pregnant | 9.3             | 14.9            | 3.8             | 3.7             | 4.3             | 10.6            |

Note: Ns are unweighted.

portant, fairly important, fairly unimportant, or not important at all?"

We use three variables to measure different aspects of the respondent's religiosity. The first two are discrete variables designed to measure the importance of religion at the time of the interview (from 1=not important at all to 4=very important) and religious attendance at age 14 (from 1=never to 4=at least once a week). The third is a dummy variable identifying whether the respondent considered himself to be a born-again, Evangelical or Charismatic Christian (with 1=yes).

• *Attitudes toward sex.* Previous research has shown attitudes toward premarital and extramarital sex to be correlated with abortion attitudes.<sup>7</sup> The NSAM measured attitudes about premarital sex using the following question: "Which statement best describes how you feel about sexual intercourse before marriage?" Potential responses were: "Sexual intercourse before marriage is never okay"; "sexual intercourse before marriage is okay, but only if the couple is planning to marry"; "sexual intercourse before marriage is okay, as long as the couple is close, even if they don't plan to marry"; or "sexual intercourse before marriage is okay, if both people agree to it."

To analyze attitudes toward premarital sex, we used two dummy variables, one indicating whether the respondent believes that premarital sex is never okay (with 1=yes) and the other showing if the respondent believes premarital sex to be okay only in those cases where the couple is planning to marry (with 1=yes). (In each instance, the reference category consists of

those who believe that premarital sex is okay even if the couple does not plan to marry.)

• *Individual and family background.* The NSAM also included numerous individual and family background variables. Several of these items served as control variables in the multivariate models, including the respondent's age, his race or ethnicity, his region of residence at the time of the survey, whether he lived in an urban or rural area, his educational performance, whether he was sexually experienced, whether he had ever made a partner pregnant, his desired number of children and his mother's level of education. (Desired number of children was set equal to 10 for respondents who indicated they wanted more than 10 children.)

Descriptive statistics for the control variables by race, ethnicity and year of survey are presented in Table 1. There were no ethnic differences in mean age. In 1988, white males were much less likely than black or Hispanic males to be behind in school, but this differential had narrowed somewhat by 1995. Regional variations by race and ethnicity were as one would expect, with blacks more likely to be living in the South, whites more likely to be living in the Midwest and Hispanics more likely to be living in the West; these patterns did not change much between 1988 and 1995. In

\*The questions preceding the abortion question were similar (although not identical) in both surveys. One difference between surveys was that the 1988 survey also asked about abortion "if the man would not support the child." This circumstance was presented sixth, immediately preceding "if the female wanted the abortion for any reason." The only other difference in wording was that in 1988 the series of abortion questions used "woman" in place of "female."

**Table 2. Percentage distribution of U.S. males aged 15–19, by level of approval of abortion, according to circumstances and year**

| Circumstance and year                                                                            | Agrees a lot | Agrees a little | Disagrees a little | Disagrees a lot | Total | N     |
|--------------------------------------------------------------------------------------------------|--------------|-----------------|--------------------|-----------------|-------|-------|
| <b>If the female has been raped***</b>                                                           |              |                 |                    |                 |       |       |
| 1988                                                                                             | 69.6         | 16.0            | 7.5                | 6.9             | 100.0 | 1,880 |
| 1995                                                                                             | 55.4         | 23.1            | 10.1               | 11.4            | 100.0 | 1,710 |
| <b>If the female is under age 15***</b>                                                          |              |                 |                    |                 |       |       |
| 1988                                                                                             | 43.6         | 25.3            | 16.5               | 14.7            | 100.0 | 1,880 |
| 1995                                                                                             | 26.1         | 30.9            | 19.7               | 23.3            | 100.0 | 1,710 |
| <b>If the pregnancy itself seriously endangered her health***</b>                                |              |                 |                    |                 |       |       |
| 1988                                                                                             | 75.3         | 14.0            | 5.9                | 4.8             | 100.0 | 1,880 |
| 1995                                                                                             | 61.8         | 25.2            | 8.2                | 4.8             | 100.0 | 1,710 |
| <b>If there is reason to believe the child might be born deformed or mentally handicapped***</b> |              |                 |                    |                 |       |       |
| 1988                                                                                             | 32.3         | 27.6            | 19.7               | 20.5            | 100.0 | 1,880 |
| 1995                                                                                             | 21.5         | 30.6            | 24.3               | 23.7            | 100.0 | 1,710 |
| <b>If the female felt she could not afford to care for it***</b>                                 |              |                 |                    |                 |       |       |
| 1988                                                                                             | 19.7         | 22.9            | 25.9               | 31.5            | 100.0 | 1,880 |
| 1995                                                                                             | 10.1         | 20.0            | 31.8               | 38.1            | 100.0 | 1,710 |
| <b>If the female wanted the abortion for any reason***</b>                                       |              |                 |                    |                 |       |       |
| 1988                                                                                             | 16.5         | 20.3            | 22.9               | 40.4            | 100.0 | 1,880 |
| 1995                                                                                             | 8.1          | 15.7            | 25.6               | 50.5            | 100.0 | 1,710 |
| <b>If the female wanted an abortion, but the man did not***</b>                                  |              |                 |                    |                 |       |       |
| 1988                                                                                             | 10.9         | 28.0            | 29.6               | 31.5            | 100.0 | 1,880 |
| 1995                                                                                             | 7.4          | 24.4            | 31.6               | 36.6            | 100.0 | 1,710 |

\*\*\*Percentage distributions differ significantly at p .001 (chi-square test). Note: The question read "When is it all right for a woman to have an abortion?" and then gave the seven listed circumstances.

both years, white males' mothers were somewhat more highly educated than were the mothers of black and Hispanic respondents. Mean desired number of children increased somewhat among white males but not among the others. The proportion of respondents who reported that they had ever had sex decreased somewhat in each racial and ethnic group, but in both years black males were more likely to report sexual experience than were white or Hispanic males.

**Analytic Methods**

• *Bivariate analysis.* We used chi-square analysis to test for significant changes in adolescent males' responses to the NSAM abortion attitude questions between 1988 and 1995, both for the population as a whole and separately by race or ethnicity. Additional chi-square tests were used to identify significant racial and ethnic differences in the level of approval for abortion under various circumstances in both 1988 and 1995. Next, using the same techniques, we examined changes in the importance of religion, religious attendance, religious affiliation and attitudes toward premarital sex, both over time and by race and ethnicity.

• *Multivariate analysis.* In the second phase of the analysis, we used ordinary least-squares regression to examine whether

changes in religiosity and in attitudes about premarital sex explain recent trends in attitudes toward abortion, and to study whether correlates of abortion attitudes differ by race and ethnicity. The dependent variable for this analysis was the overall index of abortion attitudes. Because multivariate analysis of the full sample revealed significant racial and ethnic differences in the relationship between attitudes about sex, religion and attitudes toward abortion, we ran regression models separately by race and ethnicity.

Results from a full-sample model, which included interaction terms for race and ethnicity and year, for race and ethnicity and attitudes about sex, and for race

and ethnicity and religiosity, were used to test for significant racial and ethnic differences in the relationship between religiosity and attitudes toward sex and abortion. The full-sample model also included interaction terms for year and attitudes about sex and for year and religion, to test for temporal differences in the relationship between religion, attitudes about sex and attitudes toward abortion. Due to the complex sampling design of the NSAM, we used SUDAAN to compute all tests of significance.<sup>8</sup>

**Results**

*Attitudes Toward Abortion*

In both 1988 and 1995, young males were most likely to approve of abortion in cases where the pregnancy poses a serious health threat to the woman or where the pregnancy resulted from rape (Table 2); in each circumstance, more than three-fourths of all males agreed (either a little or a lot) that it is all right for a woman to have an abortion. On the other hand, the majority of those surveyed did not support abortion for monetary reasons or in cases where the male partner does not want the abortion. In 1995, only 8% of respondents agreed a lot that it is all right for a woman to have an abortion for any reason, down from 17% in 1988, and the proportion agreeing either a lot or a little fell from 37% to 24%.

Moreover, young males in 1995 were significantly less likely than their 1988 counterparts to approve of abortion in each of the seven circumstances. Decreases in approval were largest for "any reason" and smallest if the pregnancy "seriously endangered" the woman's health. The results were similar when sexually experienced and sexually inexperienced youth were studied separately (not shown).

The decrease in approval of abortion primarily resulted from lower levels of approval among non-Hispanic white males. Compared with 1988, white males in 1995 were significantly less likely to approve of abortion in each of the seven circumstances (Table 3). In contrast, non-Hispanic black males and Hispanic males were significantly less likely to approve of abortion in only one circumstance each. Black males were significantly less likely to agree in 1995 than in 1988 that it is all right for a female to have an abortion if the

**Table 3. Among U.S. males aged 15–19, mean level of approval of abortion, by circumstance, according to race and ethnicity and year**

| Circumstance                                                                           | All         |               | White/other |               | Black       |             | Hispanic†   |             |
|----------------------------------------------------------------------------------------|-------------|---------------|-------------|---------------|-------------|-------------|-------------|-------------|
|                                                                                        | 1988        | 1995          | 1988        | 1995          | 1988        | 1995        | 1988        | 1995        |
| <b>Total</b>                                                                           | <b>2.77</b> | <b>2.52**</b> | <b>2.80</b> | <b>2.50**</b> | <b>2.68</b> | <b>2.61</b> | <b>2.64</b> | <b>2.50</b> |
| If the female has been raped                                                           | 3.48        | 3.22**        | 3.52        | 3.21**        | 3.35        | 3.29        | 3.38        | 3.23        |
| If the female is under age 15                                                          | 2.98        | 2.60**        | 3.02        | 2.61**        | 2.79        | 2.66        | 2.87        | 2.48**      |
| If the pregnancy itself seriously endangered her health                                | 3.60        | 3.44**        | 3.62        | 3.44**        | 3.55        | 3.44*       | 3.49        | 3.43        |
| If there is reason to believe the child might be born deformed or mentally handicapped | 2.72        | 2.50**        | 2.74        | 2.47**        | 2.56        | 2.57        | 2.79        | 2.59        |
| If the female felt she could not afford to care for it                                 | 2.31        | 2.02**        | 2.31        | 1.97**        | 2.41        | 2.25        | 2.12        | 2.04        |
| If the female wanted the abortion for any reason                                       | 2.13        | 1.81**        | 2.18        | 1.81**        | 2.02        | 1.87        | 1.89        | 1.78        |
| If the female wanted an abortion, but the man did not                                  | 2.18        | 2.03**        | 2.23        | 2.00**        | 2.10        | 2.21        | 1.95        | 1.95        |

\*Difference between means is significant at p<.05. \*\*Difference between means is significant at p<.01. †May be of any race. Notes: The question read "When is it all right for a woman to have an abortion?" and then gave the seven listed circumstances. Larger values correspond to higher levels of approval.

pregnancy seriously endangers her health, while Hispanics were significantly less likely to agree in 1995 than in 1988 that it is all right for a woman to have an abortion because she is younger than 15.

In 1988, white males exhibited the highest levels of approval of abortion (in terms of the percentage agreeing a lot or agreeing a little) in all cases except when the woman felt that she could not afford to care for a child. Chi-square tests (not shown, but available upon request) indicate that in 1988, whites were significantly more likely than blacks to agree that abortion is all right in five of the seven circumstances (rape, very young age, deformity, any reason and disagreement between the woman and her male partner).

Moreover, white respondents were significantly more likely than Hispanics to agree that abortion is all right in four circumstances (rape, very young age, any reason and disagreement between the woman and her male partner).

By 1995, however, black males appeared to be slightly more accepting of abortion in most circumstances than either whites or Hispanics, with racial and ethnic differences tending to be larger if the abortion was for a social reason as opposed to a health reason. Blacks were significantly more likely than whites to approve of abortion in three circumstances (deformity, cost and any reason), and also were significantly more likely than Hispanics to approve in three circumstances (young age, cost and disagreement). Approval rates among whites and Hispanics did not differ significantly in 1995.

These patterns are also evident when we examine changes in the mean value of the overall index of abortion attitudes. In the case of the full sample, the mean value of the overall index decreased significantly, from 2.77 in 1988 to 2.52 in 1995—indicating decreasing levels of approval (Table 3). Among the different racial and ethnic groups, however, only for white males was the decrease in the attitudes index statistically significant.

#### Religion and Attitudes Toward Sex

To what extent can changes in religious feeling and in attitudes toward premarital sex help explain the decreased support for abortion among young white males? An examination of attitudes toward premarital sex, importance of religion, religious attendance and the proportion describing themselves as born-again Christians (Table 4) in 1988 and 1995 reveals some significant changes. As was the case with abortion attitudes, attitudes toward

**Table 4. Percentage distribution of U.S. males aged 15–19, and p-values (from chi-squared tests) showing changes in distribution between surveys, by attitudes about premarital sex and religion, according to race and ethnicity and year**

| Attitude                              | Total |      | White/other |      | Black |      | Hispanic† |      |
|---------------------------------------|-------|------|-------------|------|-------|------|-----------|------|
|                                       | 1988  | 1995 | 1988        | 1995 | 1988  | 1995 | 1988      | 1995 |
| <b>Attitude toward premarital sex</b> |       |      |             |      |       |      |           |      |
| OK if couple does not plan to marry   | 73.0  | 65.2 | 72.8        | 63.1 | 72.4  | 72.2 | 75.4      | 69.9 |
| OK only if couple plans to marry      | 15.9  | 17.6 | 15.1        | 17.8 | 18.9  | 17.4 | 18.2      | 16.5 |
| Never OK until marriage               | 11.1  | 17.2 | 12.1        | 19.1 | 8.7   | 10.3 | 6.4       | 13.6 |
| p                                     |       | .001 |             | .001 |       | .778 |           | .067 |
| <b>Importance of religion</b>         |       |      |             |      |       |      |           |      |
| Not important at all                  | 7.9   | 8.5  | 8.8         | 9.4  | 4.0   | 5.3  | 6.6       | 6.8  |
| Fairly unimportant                    | 13.8  | 12.7 | 15.4        | 14.7 | 5.9   | 8.3  | 13.3      | 5.9  |
| Fairly important                      | 45.3  | 42.3 | 48.1        | 42.1 | 31.1  | 39.0 | 44.7      | 47.1 |
| Very important                        | 33.0  | 36.5 | 27.7        | 33.7 | 59.1  | 47.4 | 35.5      | 40.3 |
| p                                     |       | .098 |             | .003 |       | .065 |           | .088 |
| <b>Religious attendance</b>           |       |      |             |      |       |      |           |      |
| Never                                 | 17.3  | 21.0 | 18.7        | 22.5 | 10.8  | 16.1 | 16.7      | 18.0 |
| <once a month                         | 16.3  | 14.3 | 16.5        | 14.5 | 13.6  | 12.5 | 19.0      | 15.3 |
| 1–3 times per month                   | 17.6  | 19.5 | 16.9        | 18.9 | 24.6  | 21.9 | 12.7      | 20.9 |
| once per week                         | 48.8  | 45.2 | 48.0        | 44.2 | 51.1  | 49.5 | 51.6      | 45.9 |
| p                                     |       | .005 |             | .019 |       | .337 |           | .152 |
| <b>Born-again Christian</b>           |       |      |             |      |       |      |           |      |
| Yes                                   | 20.5  | 23.7 | 18.3        | 24.0 | 33.8  | 29.2 | 17.3      | 15.5 |
| No                                    | 79.5  | 76.3 | 81.7        | 76.0 | 66.2  | 70.8 | 82.7      | 84.5 |
| p                                     |       | .020 |             | .001 |       | .260 |           | .641 |

†May be of any race.

premarital sex became significantly more conservative between 1988 and 1995: In 1988, 73% of respondents felt that premarital sex is okay even if a couple is not planning to get married, while only 11% believed that premarital sex is never okay; by 1995, the proportion believing that premarital sex is okay even if a couple has no plans to marry had fallen to 65%, while the proportion believing it to be never okay had risen to 17%.

White males exhibited the largest—and the only statistically significant—change in attitudes about premarital sex. Hispanic males appear to have become slightly more conservative in their attitudes toward premarital sex, while the attitudes of black males remained relatively stable. As a result, although attitudes toward premarital sex were nearly identical across racial and ethnic groups in 1988, by 1995 black and Hispanic males were more accepting of premarital sex than were whites.

Young males' self-reports on the importance of religion changed only minimally from 1988 to 1995, with small increases in the proportion of males indicating that religion is either very important or not important at all and corresponding decreases in the proportion indicating that religion is either fairly important or fairly unimportant. Once again, however, there were important differences by race and ethnicity: Whites were the only subgroup to ex-

hibit a significant change, with the proportion identifying religion as very important increasing by six percentage points (from 28% to 34%) and the proportion identifying religion as fairly important decreasing by six percentage points (from 48% to 42%).

Although the differences were not statistically significant, the proportion of Hispanics who identified religion as either fairly important or very important increased from 80% in 1988 to 87% in 1995. In contrast to patterns among whites and Hispanics, the importance of religion appears to have declined among young black males: In 1988, 59% of blacks identified religion as being very important in their lives, but by 1995 this proportion had fallen to 47% (a change that was marginally significant).

Despite the slight increase in importance of religion, the 1995 cohort actually reported significantly lower levels of church attendance at age 14 than did the 1988 cohort. The proportion of males who claimed to have attended services at least once a week fell from 49% to 45%, while the proportion who claimed at age 14 to have never attended services increased from 17% to 21%. Upon analyzing the trends separately by race and ethnicity, we found that all three groups experienced similar trends in attendance, although the drop in attendance was statistically sig-

**Table 5. Coefficients from ordinary least-squares regression analysis predicting level of approval of abortion among adolescent males, by demographic characteristics and attitudes, according to race and ethnicity**

| Characteristic/<br>attitude           | Black   | White/<br>other | Hispanic† |
|---------------------------------------|---------|-----------------|-----------|
| Intercept                             | 3.19    | 3.44            | 3.09      |
| <b>Controls</b>                       |         |                 |           |
| Age                                   | -0.01   | 0.00            | -0.01     |
| Behind in school                      | 0.01    | -0.07           | 0.02      |
| North                                 | 0.03    | -0.06           | 0.12      |
| Midwest                               | -0.07   | -0.12**         | -0.04     |
| West                                  | 0.02    | -0.02           | 0.06      |
| Central city                          | 0.08    | 0.01            | 0.02      |
| Rural                                 | 0.01    | -0.06           | 0.01      |
| Mother's education                    | 0.06*   | 0.06**          | 0.02      |
| Mother's education<br>(don't know)    | 0.05    | -0.11           | 0.01      |
| Born outside the U.S.                 | -0.08   | 0.16*           | 0.05      |
| Desired no. of<br>children            | -0.05** | -0.05*          | -0.06**   |
| Ever had sex                          | 0.03    | -0.01           | 0.13**    |
| Had sex, made<br>someone pregnant     | 0.15*   | 0.05            | 0.10      |
| Year 1995                             | -0.07   | -0.24**         | -0.09     |
| <b>Attitude toward premarital sex</b> |         |                 |           |
| OK if couple plans<br>to marry        | -0.09   | -0.18**         | -0.01     |
| Never OK<br>until marriage            | -0.21** | -0.58**         | -0.45**   |
| <b>Religion</b>                       |         |                 |           |
| Religious importance                  | -0.08** | -0.10**         | -0.08*    |
| Religious attendance                  | -0.02   | -0.07**         | 0.00      |
| Born-again Christian                  | -0.03   | -0.17**         | 0.04      |
| <i>N</i>                              | 1,139   | 1,450           | 910       |
| <i>R</i> <sup>2</sup>                 | .05     | .25             | .11       |

\*Difference is significant at  $p < .05$ . \*\*Difference is significant at  $p < .01$ . †May be of any race.

nificant only among white males.\*

The proportion of young men identifying themselves as born-again also changed over time. This proportion increased significantly among whites between 1988 and 1995 (from 18% to 24%), while the changes among blacks and Hispanics (five percentage points and two percentage points, respectively) were not statistically significant.

The trends in attitudes toward premarital sex and toward religion are largely consistent with trends in abortion atti-

\*Americans tend to overreport church attendance by a factor of 1.1 to 2.0 on interviewer-administered questionnaires, and that overreporting has increased over the last 30 years (Hadaway CK, Marler PL and Chaves M, What the polls don't show: a closer look at U.S. church attendance, *American Sociological Review*, 1993, 58(6): 741-752; Hout M and Greeley A, What church officials' reports don't show: another look at church attendance data, *American Sociological Review*, 1998, 63(1):113-119; Presser S and Stinson L, Data collection mode and social desirability bias in self-reported religious attendance, *American Sociological Review*, 1998, 63(1):137-145; and Smith TW, A review of church attendance measures, *American Sociological Review*, 1998, 63(1):131-136.). As a result, the trends in religious attendance depicted in Table 4 may understate the actual drop in attendance.

tudes. In addition to being less approving of abortion, young white males in 1995 had significantly more conservative attitudes toward premarital sex, viewed religion as being more important and were more likely to identify themselves as born-again than their counterparts in 1988. In contrast, among Hispanics and blacks, who showed no significant changes in abortion attitudes, Hispanics exhibited slightly more conservative attitudes toward premarital sex and no clear trend in religiosity, while blacks had relatively stable attitudes toward premarital sex and, if anything, lower levels of religious attachment in 1995 than in 1988.

### Multivariate Analysis

We estimated multivariate regression models separately for each ethnic group to determine what factors significantly affected adolescent males' approval of abortion. Each of the three models included both 1988 and 1995 respondents. Larger, positive coefficients indicate a higher level of approval for abortion. Wald chi-square tests for significant differences in coefficients across models were performed using the results of the full-sample, pooled-year model with interactions for race and ethnicity. (The complete results are available from the authors upon request.)

The coefficient for the "year" variable shows that white males became significantly less approving over time (Table 5), while the attitudes of black and Hispanic males remained relatively unchanged—results consistent with those from the bivariate analyses. Results from the full-sample model (not shown) indicated that white males were significantly more approving of abortion than either blacks or Hispanics in 1988. By 1995, however, whites were significantly less approving of abortion than blacks and marginally less approving ( $p = .08$ ) than Hispanics.

Males who felt that premarital sexual intercourse is never okay were significantly less likely to approve of abortion than were those who approve of premarital sex even if the couple has no plans to marry (Table 5). This was true for all three racial and ethnic groups, although the magnitude of the effect was significantly larger for whites than for blacks. Among whites, respondents who viewed premarital sex as being okay only if the couple plans to marry also were significantly less approving of abortion than were those who felt that premarital sex is always okay. Results of the full-sample model revealed no significant temporal differences in the relationship between atti-

tudes toward sex and attitudes about abortion (not shown).

There was a significant negative correlation between self-reported importance of religion and abortion approval (Table 5), a correlation that was consistent across racial and ethnic groups. Religious attendance was negatively correlated with overall abortion attitudes among whites, but not among Hispanics or blacks. Full-sample results (not shown) indicated that the effect for whites was significantly larger than that for the other two racial and ethnic groups.

The results for the "born-again" variable were similar to those for religious attendance: White male adolescents who identified themselves as born-again, Evangelical or Charismatic Christians were significantly less approving of abortion than were whites who did not consider themselves born-again. Among blacks, there was no statistically significant relationship between being born-again and abortion attitudes; in the case of Hispanics, respondents who classified themselves as born-again were actually more approving of abortion than were other Hispanics, although the relationship was not statistically significant. In addition, the full-sample model (not shown) revealed no significant temporal differences in the relationship between religion and abortion attitudes.

Finally, several other characteristics were significantly related to approval of abortion. The desired number of children was negatively related to approval of abortion among all racial and ethnic groups. Moreover, black adolescent males tended to be more approving of abortion if they had a more educated mother or if they reported having made a partner pregnant. Whites were significantly more approving of abortion if they were born outside the United States or if they had a more educated mother. Hispanics who were sexually experienced were more approving of abortion than those who were not.

### Discussion

Our findings indicate that abortion attitudes among adolescent males became significantly more conservative between 1988 and 1995, and that this change was most prominent among white males. Although in 1988 young white males expressed significantly more liberal attitudes toward abortion than did blacks or Hispanics, by 1995 their attitudes were similar to those of Hispanics and more conservative than those of blacks.

That adolescent males have become less

approving of abortion is consistent with results from an annual survey of college students, which showed that the proportion of male college freshmen who agreed that abortion should remain legal fell from 64% in 1989 to 56% in 1996.<sup>9</sup> Although research suggests that attitudes about the legality of abortion do not necessarily correspond with attitudes regarding approval of abortion,<sup>10</sup> the main result confirms our results.

The finding that whites have become less permissive concerning abortion is also consistent with racial trends in abortion attitudes among the adult population data during the 1970s and 1980s. Analysis of data from the 1972–1988 General Social Surveys finds that while white adults were more supportive of abortion than were blacks during the 1980s, the black-white gap in attitudes declined significantly over that period, due to decreased support for abortion among the white population.<sup>11</sup>

Some of the change in white males' abortion attitudes between 1988 and 1995 can be linked to increasing levels of religiosity. The proportion of young white males who identified themselves as born-again, Evangelical or Charismatic Christians, a group with relatively conservative attitudes toward abortion, increased from 18% in 1988 to 24% in 1995. The proportion of white males who said that religion was "very important" in their lives also increased significantly. The association of religion with abortion attitudes was strongest among non-Hispanic whites.

Besides increased religiosity, white males

also exhibited lower levels of approval for premarital sex in 1995 than in 1988. In 1988, 12% of white males indicated that premarital sex was never okay; by 1995, this proportion had risen to 19%. Our multivariate model suggests that this trend is consistent with more conservative abortion attitudes: While attitudes toward premarital sex and attitudes about abortion were significantly correlated in all racial and ethnic groups, this relationship was again strongest among non-Hispanic whites.

Our results indicate that adolescent males' feelings about the resolution of potential pregnancies are related to their individual and family background characteristics. Recent declines in abortion, adolescent pregnancy and sexual activity suggest that the shift toward more conservative attitudes found here may be influential in altering young men's sexual and reproductive behavior.<sup>12</sup> Further research needs to examine the direct connection between these concurrent shifts in attitudes and behavior.

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