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Abstract

In this paper we examine differences in attitudes related to pregnancy among black and white women at the beginning of the transition to adulthood. Newly available data from the Relationship Dynamics and Social Life (RDSL) study include a wide set of indicators of attitudes related to pregnancy. We compare these attitudes among black and white women, and investigate the extent to which differences are net of, explained by, or independent of family background, childhood socioeconomic status, adolescent experiences related to pregnancy, and current socioeconomic status. We find substantial black-white differences in attitudes toward sex, contraception, and pregnancy. Although African-American women are less desirous of sex and more negative toward sex in general than are white women, they are less willing to refuse sex with a partner if it would make him angry. And, although African-American women view contraception as inexpensive and easy to access relative to white women, they are more negative toward its use and its moral implications. Finally, although African-American women are more negative toward early and/or premarital pregnancy for women in general, they are less negative about the potential consequences for themselves. In spite of these differences, black women's desires to achieve and to prevent pregnancy are similar to white women's desires. Many of these black-white differences in attitudes persist even net of differences in family background, SES, and pregnancy-related experiences during adolescence.

INTRODUCTION

Teen pregnancies have declined dramatically among all racial and ethnic groups in the United States since their peak in the early 1990s, yet racial disparities in teen pregnancy persist (Kost and Henshaw 2012). The pregnancy rate for black teens is nearly three times as high as the rate for non-Hispanic white teens, and the abortion rate for teens is four times higher among blacks than whites (Kost and Henshaw 2012). The consequences of early pregnancy are serious and wide reaching–from curtailed educational attainment to later-life health problems (Geronimus and Korenman 1992; Hardy et al. 1998; Kost et al. 2010; Ventura et al. 2008). Healthy People 2020 has identified the reduction of adolescent pregnancy rates as a nationwide health improvement priority, virtually the same as Healthy People 2010 (U.S. Department of Health and Human Services). Understanding racial variation in childbearing is fundamentally important for this goal (e.g., see Morgan et al. 2008; Seltzer et al. 2005).

Attitudes may play an important role in racial differences in early pregnancy. (We use the term "attitudes" as shorthand for a wide range of subjective phenomena, including beliefs, perceived norms, desires, willingness, expectations, preferences, and general attitudes.) Attitudes are important mechanisms affecting the timing of parenthood in many theories of childbearing behavior, including structural or demand theories (Becker 1981; Easterlin and Crimmins 1985; Rindfuss, Swicegood, and Rosenfeld 1987), ideational and diffusion theories (Caldwell 1982; Valente et al. 1997; Watkins 1995), and theories focusing on consumption aspirations (Crimmins, Easterlin, and Saito 1991; Easterlin 1980; Freedman 1979).

Previous research has documented differences between black and white women in terms of pregnancy desire, finding alternatively that black women have more positive attitudes or more ambivalence toward pregnancy than their white peers (Abma et al. 2010; Jaccard et al. 2003; Rocca and Harper 2012; Schwarz et al. 2007). Further, race differences in a variety of pregnancy-related attitudes – toward sex, marriage, contraception, premarital childbearing, etc. – have been documented in the qualitative literature (e.g., Edin and Kefalas 2005, Kendall et al. 2005). However, very little empirical research has systematically examined these attitudes using population-based samples (for important exceptions see Cherlin et al. 2008 and Rocca and Harper 2012). To our knowledge, no study to date has thoroughly investigated whether the documented black-white differences in attitudes are explained by, or net of, socioeconomic characteristics. Further, while most studies have focused solely on pregnancy desires, we argue that attitudes toward the two main proximate determinants of pregnancy – sex and contraception – are equally important. To become pregnant, after all, pregnancy desires must affect either sex or contraception.

This analysis examines differences in attitudes toward sex, contraception, and pregnancy between African-American and white women at the beginning of the transition to adulthood (ages 18-19). Further, it explores the extent to which those race differences can be explained by key differences between African-American and white women, on average, in experiences related to the risk of pregnancy. Newly available data from the Relationship Dynamics and Social Life (RDSL) study allow us to analyze a large number of attitudes.

BACKGROUND

Previous research suggests that, when compared to white teens, African-American teens have less knowledge about contraception, are less likely to use contraception, and when they do so, are less likely to choose effective methods (Frost and Darroch 2008; Frost et al. 2007; Mosher and Jones 2010; Rocca and Harper 2012; Shih et al. 2011). Part of these behavioral differences may be explained by African-American women's lower likelihood of having insurance to cover the costs of contraception (Ebrahim et al. 2009), higher likelihood of experiencing discrimination when seeking contraception (Smedley et al. 2006), and provider bias in contraceptive counseling (Dehlendorf et al. 2010). But another part is likely to be explained by black-white differences in attitudes – particularly differences in attitudes toward contraception, but also perhaps in attitudes toward sex and/or pregnancy.

Theories of attitude formation rely heavily on the influence of everday people – family members, friends, peers, or even medical personnel at a clinic – as we form and re-form our ideas about the world. Socialization provides information about others' positive and negative reactions to events in our lives, which allow us to decide how we feel about those events (Alwin et al. 1991; Brody et al. 1994; Crimmins et al. 1991; Hester and Fuller 1999; Moen et al. 1997; Starrels 1992). Modeling allows us to match our attitudes to those of important "others" in our lives (Bandura 1972, 1982, 1997). And social comparisons let us test these ideas against the behaviors and ideas of those important "others" (Festinger 1954). The importance of these people in the formation of attitudes that guide later-life decisions cannot be overstated.

Past studies have found black-white differences in a wide range of childhood and early adulthood experiences in the United States. For example, compared to white children, African-American children are more likely to have experienced poverty, an unmarried mother, domestic abuse, a large number of siblings from multiple parents, and a religious upbringing (Casper and Bianchi 2002; Chatters et al. 2009; Guzzo and Furstenberg 2007; Sell and Kunitz 1997; Smith et al. 2003; US Dept. of Justice 2000). Many of these experiences are well-established determinants of attitudes, likely in part because they structure the types of people to which young people are exposed. In our analyses, we consider family background; childhood socioeconomic status; adolescent experiences with sex, contraception, and pregnancy; and current socioeconomic status as possible mechanisms explaining black-white differences in attitudes toward sex, contraception, and pregnancy.

METHODS

Data

The Relationship Dynamics and Social Life (RDSL) study draws data from a population-based sample of 1,003 young women, ages 18-19, residing in a Michigan county. A 60-minute face-to-face baseline survey interview was conducted between March 2008 and July 2009, to assess important aspects of family background, demographics, attitudes, romantic relationships, education, and career trajectories. At the conclusion of this baseline interview, respondents were invited to participate in a 2.5 year follow-up study that required completion of weekly online or telephone surveys asking about participants' ongoing contraceptive use and relationships, and their prospective pregnancy intentions. This follow-up "journal" portion of the study concluded in January 2012, and resulted in 58,594 journals. Respondents were paid $30 to participate in the baseline interview, and received additional incentives to participate in the journal portion of the study. The incentive scheme, coupled with the cooperative nature of this age group and their interest in the subject matter, resulted in extremely high participation rates for the baseline interview: an 83% response rate and a 93% cooperation rate (among located women); and more than 99% of the teens who completed a baseline interview enrolled in the weekly journal portion of the study (N=992). These analyses use the data from the baseline interview.

Measures

Table 1 provides descriptive statistics for all independent variables included in these analyses. We dropped 31 (3%) respondents who did not identify as either white or African American, resulting in 961 respondents for analysis.

Race was measured with the following question: “Which of the following groups describe your racial background? Please select one or more groups: American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, Black or African American, or White.” In all, 35% percent of the sample reported their race as African American. A preceding question about Hispanic ethnicity yielded 69 Latinas, who were coded according to their answer to the race question – 28 selected African American, 41 selected white.

We use three indicators of childhood family background. For the question “How important if at all is your religious faith to you?” the mean score was 2.69 on a scale from 1 (not important) to 4 (more important than anything else). Although this question refers to the present, not childhood, religiosity in young adulthood is highly related to the religiosity of the childhood home (Regnerus et al. 2004). On the second family background question – “How old was your biological mother when she had her first child?” – 37% answered less than 20. The third question asked about who the respondent lived with primarily while growing up. About half of the respondents reported growing up with two parents (either two biological or one biological and one step-parent), 40% with one biological parent only (no step-parent), and 8% in another arrangement (e.g., with grandparents, an aunt, etc.)

Respondents were asked a series of questions to assess childhood socioeconomic status. In response to “While you were growing up, did your family ever receive public assistance?” 36% of respondents answered yes. For the question “What is the highest level of education your mother (father) completed?” 9% reported a mother who did not complete high school, and 8% a father who did not complete high school. Although the data do not contain a measure of parental income during childhood, we assume it is correlated with parents’ current income. Respondents were asked, “What was your parents’ or guardians’ total household income before taxes in the past 12 months?” and were given four categories: $14,999 or less, $15,000 to $44,999, $45,000 to $74,999, or $75,000+. Responses were relatively equally distributed across the four categories, with an additional 20% not knowing (or declining to provide) their parents’ income. In response to “While you were growing up, did your parents or guardians own their own home?” 71% said yes.

We use three indicators of experiences related to pregnancy. 51% of respondents reported they were 16 or younger to the question "How old were you the first time you had sexual intercourse?" When asked, "With how many total partners have you had sexual intercourse?" 60% reported two or more sexual partners. When asked, "Have you ever had sexual intercourse without using some method of birth control such as condoms, pills, or another method?" 48% answered affirmatively. In response to "How many times have you been pregnant in your life?" 22% reported a prior pregnancy, the majority only one pregnancy. Finally, respondents were asked a series of questions about their current relationship status and living arrangements, which we used to create a measure with four mutually-exclusive categories: currently married or engaged (90%), cohabiting (10%), dating (55%), and no relationship (55%).

We measure current socioeconomic status with six questions. First, we asked for the respondent's total income in the past 12 months with 12 categories ranging from <$1,000 to $15,000-$17,499. 57% of respondents chose income categories of less than $3,000 or said they didn't know their income, and 43% chose categories of $3,000 or higher. In response to the question "At the end of the month, do you usually have some money left over, just enough money to make ends meet, or not enough money to make ends meet?" 19% said "not enough," 34% said "just enough," and 48% said "some money left over." When asked if they owned a car, 49% said yes. In the Computer-Aided Self-Interview portion of the interview, where respondents themselves entered their responses into a laptop without the interviewer's assistance, they were asked, "Are you currently receiving public assistance from any of the following sources? WIC (Women, Infants & Children Program), FIP (Family Independence Program), Cash welfare, or Food stamps." In all, 27% of respondents indicated "yes" for at least one category of public assistance. Finally, because respondents were sampled at age 18 or 19, many were still enrolled in school and few had completed any post-secondary education. When asked "Are you going to school at all now?" and "Did you graduate from high school, get a GED, or neither?" 69% reported being currently enrolled and 79% reported completing high school.

The dependent variables are 34 measures of attitudes toward sex, contraception, and pregnancy. The specific question wording, valid N, range, and means for each measure are presented in Table 2. We allowed item-specific missing data for each measure – note that the valid N ranges from 919 to 961. Of the 961respondents, 822 (86%) had answers to all of the attitude questions, 7% were missing one answer, and only 4% were missing three or more answers.

Analysis

We perform two types of analyses with these data. First, we conduct two-tailed independent samples t-tests on each attitude measure to assess whether the mean of responses was different for African-American and white respondents. (Those results are also presented in Table 2.)

Second, we estimate a series of OLS models for each attitude measure.[1] We use a model-building approach. We begin by entering race into the model as an independent variable, which estimates the overall difference in the attitude by race. We then enter into the model the variable sets for family background, childhood socioeconomic status, adolescent experiences related to pregnancy, and current socioeconomic status, one set at a time, as control variables. Because this approach uses nested models, decreases in the magnitude of the race coefficients for attitudes in subsequent estimations indicate that race differentials are explained by newly entered background variables (e.g., race differentials found in an attitude toward pregnancy might be explained by race differences in family background variables). Note that our population-based sample is well-suited to these analyses because there is substantial socioeconomic variation within each racial group.

RESULTS

Race Differences in Attitudes

Table 2 presents women's attitudes separately by race, with bold numbers indicating differences that are statistically significant at the .05 level. Overall, the results suggest many racial differences in the attitudes of respondents.[2]

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[1] OLS models assume equal intervals between categories in these Likert-scale measures of attitudes. As a sensitivity check, we also ran ordered probit models (which do not assume equal intervals) on all measures except the two "what are the chances" questions, which range from 0 to 100. The results of those analyses were very similar to the results obtained with OLS regression. To simplify interpretation, we present the OLS models in the tables, but note the two instances when the models differ slightly in the Results section.

[2] Note that we also examined differences between white and African-American 18- to 19-year-old respondents in the 2006-2010 National Survey of Family Growth (NSFG). There were few statistically significance race differences in the NSFG attitudes toward sex, contraception, and pregnancy, in part due to the small sample of African-American 18- and 19-year-old women (n=205). Compared to white women, African American women were more positive in response to "If you got pregnant now how would you feel?" This difference is consistent with the differences in similar measures in the RDSL. In contrast, African American women were less certain in response to "What is the chance that it would be embarrassing for you and a new partner to discuss using a condom?" In related measures in the RDSL (not shown in tables), African American women also express less favorable attitudes toward discussing contraception with their partner. In addition, in the NSFG question "It is okay for an unmarried

The African-American women hold significantly more negative attitudes about sex than white women. They tend to view premarital sex less favorably, to more strongly agree that they themselves are not ready for a sexual relationship, and to express less desire to have sex in the upcoming year. However, in spite of these relatively negative feelings about sexual intercourse, they report less willingness than white women to refuse sex if the refusal would make their male partner angry.

Race differences in women's attitudes toward contraception are more complicated. On average, black women perceive greater access to contraception than do white women – fewer consider birth control expensive, fewer believe that they cannot afford birth control, and more consider birth control easy to get. However, black women generally hold less favorable attitudes toward *using* contraception, more strongly agreeing that it takes too much planning to have birth control available, it is too much of a hassle to use, and that it makes women feel sick. Finally, more African-American women than white women perceive moral dilemmas with contraception – that requesting condom use raises issues of trust in the relationship, that birth control is morally wrong, and that girls who use contraception are "looking for sex." Overall then, although black women hold more positive attitudes than white women about access to contraception, they hold more negative attitudes about the actual use and morality of contraception.

African-American women also hold more negative attitudes, in general, about early and premarital childbearing than do white women, but they tend to view the personal consequences of a potential pregnancy less negatively. Fewer black than white women believe that young women's bodies generally recover faster, and/or that it is alright in general to have a child without being married. However, more African-American than white respondents agree that if they got pregnant they would feel less lonely, and could handle the responsibilities of parenting; more disagree that they would be forced to grow up too fast, would have to quit school, or could not afford to raise the child; and more agree that their partner would be happy and that it wouldn't be that bad to get pregnant.

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female to have a child," there was no race difference, but African-American women in the RDSL responded more negatively than white women (pregnancy question #3).

There were no differences in responses to the other NSFG attitude questions, which do not closely correspond to any attitudes measures in the RDSL: "Any sexual act between two consenting adults is all right"; "It is all right for unmarried 18 year olds to have sexual intercourse if they have strong affection for each other"; "It is all right for unmarried 16 year olds to have sexual intercourse if they have strong affection for each other"; "What is the chance that if your partner used a condom during sex, you would feel less physical pleasure?"; and "What is the chance that if a new partner used a condom, you would appreciate it?"

However, black women's more tolerant attitudes about the consequences of pregnancy do *not* translate into a stronger desire to get pregnant, or even a weaker desire to avoid pregnancy. In fact, African-American women's low desire for pregnancy and high desire to avoid pregnancy matches white women's desires almost identically. Further, although national trends suggest that black teen's pregnancy rates are about twice as high as whites' (Zolna and Lindberg 2012), black respondents do not perceive a higher risk of pregnancy than do the white respondents.

The Role of Family Background, SES, and Experiences

Before reviewing the OLS models for each measure, it is important to have a sense of the correlations between race, attitudes, and family background/SES/experiences. (These results are presented in the appendix). First, we find that African-American women are more religious than white women, more likely to have experienced almost every childhood and young adulthood disadvantage measured, and to have had adolescent experiences that increase the risk of pregnancy. African-American women are more likely to have had a teen mother, a single mother, or "other" childhood family structure; to have received public assistance during childhood; to have had lower income, earlier age at first sex, more partners, sex without birth control, one or more prior pregnancies, be in a relationship (but not married), to have lower income and income security; and to have lower likelihood of owning a car, higher likelihood of receiving public assistance, and lower likelihood of having completed high school.

In order to account for a portion of the race difference, variables that are positively correlated with being African-American must be correlated *in the same direction with* attitude measure (e.g., Black women are *more* religious than white women, and religious women tend to *agree* that young people should not have sex before marriage; thus, part of why black women believe that young people should not have sex before marriage may be because they are more religious). Variables that are negatively correlated with being African-American must have the *opposite* sign as the race-attitude correlation for that attitude measure (e.g., Black women's parents were *less* likely than white women's parents to be homeowners, and respondents whose parents were homeowners tend to *disagree* that young people should not have sex before marriage; thus black women tend to agree that young people should not have sex before marriage in part because of their disadvantaged childhood SES). Below, we describe some of the factors that are particularly important for each set of attitude measures.

Table 3 presents OLS regression estimates from nested models of the relationship between race and attitudes, net of family background, childhood SES, early experiences related to pregnancy, and current SES. Each coefficient in the table represents a separate OLS model. Column 1 presents the coefficients estimating the bivariate relationship between race and each attitude. Column 2 estimates include the measures of race and family background – religiosity, teen mother, and family structure. Column 3 estimates include family background measures of the previous model as well as measures of childhood socioeconomic status – public assistance, parents' education, parents' income, and whether the respondent's parents owned their home. Column 4 estimates bring in measures of adolescent experiences related to pregnancy – age at first sex, number of sexual partners, sex without birth control, number of pregnancies, and relationship status. Finally, column 5 presents estimates from the full model, including all measures in the other columns, plus current socioeconomic status – income, income security, car ownership, receipt of public assistance, school enrollment, and educational attainment. (Appendix Tables 1 and 2 present correlations between these variables and the attitude measures from Tables 2 and 3.)

The findings in Table 3 suggest that family background, childhood SES, and current SES explain much of African-American women's more negative attitudes toward sex, as measured by questions 1 (people should not have premarital sex), 2 (alright for friends to have premarital sex), 4 (not ready to have a sexual relationship), 6 (desire to have sex in the upcoming year), and 8 (willingness to have sex if partner would get angry). The race differences found in these attitudes are largely explained by African-American women's greater religiosity, which is strongly associated with more negative attitudes toward sex (see Appendix Table 1), but are further explained by variables related to childhood family structure (one parent) and SES (public assistance, low parental income, lack of home ownership), current relationship status (unmarried/unengaged), and current SES (lower income, less income security, lack of car ownership, public assistance, and less enrollment in school).

In fact, for question 1, once we account for the religiosity, disadvantaged family background, SES, and relationship experiences of African-American women, they are actually *more positive* toward premarital sex than their white counterparts. In other words, African-American women tend to be more negative toward premarital sex than white women, on average, because they had more religious and less affluent upbringings, and because they currently have less serious relationships and lower current SES, but less negative than white women with these same experiences.

These factors do not, however, entirely explain why African-American women are less willing to refuse sex if it would make their partner angry (question 8). Although religiosity explains 18% of this race difference, strong differences between African-American and white women remain, even accounting for the strong differences in socioeconomic, family background, and pregnancy-related experiences of these women.

In terms of contraception, we found that virtually all of our measures of childhood family background, childhood SES, adolescent experiences related to pregnancy, and current SES are related to at least some of the measures of attitudes toward contraception (see appendix). However, race differentials in attitudes toward contraception persist, even after accounting for the experiential differences.

Recall that African-American women tend to hold more positive attitudes toward access to birth control (questions 1 through 4) -- they agree less that it is expensive and that they can't afford it, and agree more that it is easy to get birth control. For the questions about money (questions 1 and 2), rather than being explained by family background, childhood SES, or current SES, these race differences are actually *intensified* by controlling for these variables. That is, in spite of being disadvantaged in terms of family background and having lower SES, black women *still* perceive that they can afford contraception more than white women. The race difference in the perception of whether birth control is easy to get is not explained by the other variables in the model. And the perception that it takes to much planning to use birth control is largely explained by family background.[3]

In terms of side effects (questions 5 through 7), recall that African-American women tend to agree more strongly than white women that birth control is too much of a hassle to use, and that using birth control makes women feel sick. Many of the family background, SES, and pregnancy-related experiences are related to these attitudes (see appendix). But only family background explains a substantial portion of the bivariate race effects (24% of question 5 and 31% of question 6).[4] This is largely due to religiosity and having a teen mother – both of which

[3] In the ordered probit models, this effect is largely explained by childhood SES, rather than childhood family background.

[4] Note that if we enter the childhood SES variables into the model first, followed by the family background variables, the family background variables still explain a larger portion of the bivariate effect. However, in the ordered probit models, the childhood SES variables explain more of the bivariate effect than the family background variables.

heighten the perceived side effects of contraception. Only a small fraction of the race differences in these attitudes is explained by differences in African-American women's childhood family income, perceived income security, or pregnancy-related experiences.

Finally, recall that African-American women are significantly more negative than white women about the morality of contraception (questions 8 through 10), more strongly believing that asking for a condom will signify mistrust to a partner, that birth control is morally wrong, and that a girl who uses birth control is looking for sex. Although nearly every family background and SES variable in the models is significantly correlated with these attitudes (see appendix), only the family background measures explain a substantial portion of the bivariate race effect (6%, 67%, and 26%, respectively).

African-American women also tend to be more negative than white women about early/premarital pregnancy, disagreeing that young bodies recover more quickly from pregnancy (question 1) and that it is alright for a woman to have a child without being married (question 3). Few of our family background, SES, and pregnancy-related experiences variables explain the differences in attitudes toward early pregnancy, in part because relatively few of these variables are correlated with the attitude itself. However, the family background measures explain all of the bivariate race difference found in attitudes toward premarital childbearing (alright to have a child without being married), largely because of African-American women's stronger religiosity, and also because they are more likely not to know (or not to report) their family's income.

Family background also explains a great deal of why young African-American women are more optimistic on the attitude measures concerning the potential consequences if they were to get pregnant. For four of the seven statistically significant differences (on questions 5, 6, 7, 12), higher rates of having a teen mother, a single mother, or some "other" childhood living arrangement explains all or most of the race difference in these pregnancy attitudes. The differences are further explained by childhood receipt of public assistance and lower family income, by adolescent experiences related to pregnancy, and by current SES. In other words, these young African-American women are more positive toward the prospect of pregnancy than are their white counterparts largely because they had a greater likelihood of growing up with teen and/or single mothers, but also because they had lower family incomes, had earlier and more sexual experiences, and have lower current incomes.

Answers to pregnancy questions 8 (would have to quit school), 9 (would make partner happy), and 10 (could not afford) differ by race *net* of childhood family background, childhood SES, pregnancy-related experiences, and current SES. That is, although growing up with a teen and/or a single mother, having had lower family income and earlier and more sexual experiences, and having a lower current income are all associated with more positive outlooks on the consequences of getting pregnant while young, and although African-American respondents had more of these life experiences than did white women, African-American women are even more likely to report positive attitudes about getting pregnant "now" than white women with similar experiences.

Black women's positive attitudes toward the personal consequences of getting pregnant/having a baby "now" do *not* correspond to their responses to questions 13 (want to get pregnant in the next month), 14 (want to *avoid* getting pregnant in the next month), or 15 (*expect* to get pregnant in the next year). That is, African-American respondents are no more desirous of pregnancy, no less desirous of avoiding a pregnancy, and no more likely to expect a pregnancy in the near future than are white respondents.

DISCUSSION

Using a population-based sample of young women ages 18-19 from the RDSL, we find substantial black-white differences in a broad range of attitudes toward sex, contraception, and pregnancy. Compared to white women, African-American women are less positive about sex and less desirous of sex in the coming year, but are less willing to refuse to have sex with a partner if it would make him angry. They perceive greater access to contraception, but also more side effects and immorality issues with use of birth control. They have more negative general attitudes toward pregnancy, but anticipate fewer negative consequences if they themselves were to experience a pregnancy/birth at this time in their lives. In spite of positive attitudes toward the consequences of pregnancy for themselves, they do not desire or expect a pregnancy in the near future. We found a substantial portion of these race differences in attitudes are explained by racial differences in family background, childhood SES, adolescent experiences related to pregnancy, and current SES. However, we also found that important race differences in attitudes toward sex, contraception, and pregnancy remain even after accounting for these experience factors.

Together, this constellation of race differences in attitudes suggests a path toward early and/or premarital pregnancy. If African-American women are more willing to have sex, more negative toward using contraception, and perceive fewer negative personal consequences of pregnancy, these attitudes are likely to translate into more and earlier sex, less contraceptive use, and higher pregnancy rates. In fact, we know that, compared to white women, African-American women tend to have sex earlier (Abma et al. 1997; Browning et al. 2004; Ku et al. 1993; Upchurch et al. 1999), are less likely to use barrier (Rocca and Harper 2012; Frost et al. 2007) or hormonal methods (Mosher and Jones 2010) of birth control, and are more likely to get pregnant. These attitudinal factors are likely to play a role in these behavioral differences.

Further research should address the extent to which the black-white differences in attitudes found here predict subsequent behavior and explain racial disparities in sex, contraception, and pregnancy. In another study, Rocca and Harper (2012) demonstrated that perceptions about contraception (safety, side effects, and overall knowledge) do not explain race differences in contraceptive use behavior. However, the additional attitudes toward contraception studied here may play important roles, particularly those about the morality of contraception, which may be motivated by religiosity. Other attitudes toward sex and pregnancy examined here may play important roles in contraceptive behavior as well. For example, because young African-American women tend to have more negative attitudes toward premarital sex, they may be less motivated to adopt hormonal contraceptive methods, which require advance planning. Additionally, because African-American women seem to perceive fewer negative personal consequences of an early and/or premarital pregnancy, they may be less motivated to adopt a contraceptive method, even though pregnancy is not specifically desired.

In addition, the strong *pattern* of race differences in attitudes found here suggests that the consequences of these attitudes could be cumulative and substantial. Each of the black-white attitudinal differences uncovered in this paper, although statistically significant, is small in magnitude (e.g., a .1 difference between black and white women in mean response to a specific question). However, the *pattern* of differences is strong and substantively meaningful. To avoid pregnancy, young women must be motivated to avoid pregnancy and then act in accordance by either avoiding sex or using effective contraception. The race differences in attitudes presented here may have an impact on each step in the transition from preference to motivation to behavior. First, we have demonstrated that young women, regardless of race, state a strong desire to avoid pregnancy and very little desire to become pregnant. However, young black women, because of their tolerance of the personal consequences of pregnancy, may be less committed to implementing these desires. Second, because of their lower levels of willingness to refuse sex, even when they do not want to have sex, black women may begin having sex earlier and are more likely to have sex even when they don't desire pregnancy. Third, because they perceive contraceptive use as difficult, fraught with side effects, and morally questionable, black women may use contraception less often and choose less effective methods. Through these three processes, even small differences in attitudes may accumulate into substantial effects.

In addition, future research should address how these attitudes change as young women make the transition to adulthood. Although we see a strong pattern of race differences in attitudes, even net of past experiences, these attitudes may diverge even further in young adulthood. Our measures were assessed at age 18 or 19, either during or shortly after high school. As young women leave high school, life experiences further diverge based on race, with more white women pursuing postsecondary education than black women (Ross et al. 2012), and subsequently having greater access to labor market opportunities. With these new experiences will come new attitudes. We believe it is likely that the racial differences in attitudes at ages 18-19 observed in this paper are substantially smaller than the racial differences that would be observed among women in their early and mid-20s.

The importance of understanding differences in attitudes, and the experiential antecedents of those attitudes, cannot be overstated. Demographers have long been interested in people's desires, whether they achieve those desires, and what predicts who will and will not achieve their desires. In the case of African-American women's early pregnancy rates, it may be that they have achieved their desires, in some ways. The question remains, however, as to *why* their attitudes toward sex, contraception, and pregnancy differ from whites'. Our relatively long list of demographic variables does not fully explain the differences. Future research must address further sources of the variation in these attitudes.

The present study has important limitations. The narrow geographic focus (a single county in Michigan) of the RDSL study is a notable limitation. However, although the sample is not nationally representative, Michigan falls around the national median in measures of cohabitation, marriage, age at first birth, completed family size, non-marital childbearing, and teenage childbearing (see Lesthaeghe and Neidert, 2006). This is not, of course, to suggest that Michigan is representative of the nation, rather that it is not an outlier in behaviors relevant to this study. More important, the county has a large African American population, at about 35%, and the proportion of African Americans in the major city within the county is even larger.[5] This is not typical of U.S. cities, and thus we speculate that the differences between the whites and African Americans in our sample may be larger than the differences in cities with a smaller percentage of African Americans. However, the U.S. has 65 cities that are at least 25% African American, comprising at least 10 million of the United States' 39 million African Americans. Thus, the women in the RDSL sample live in a situation that is similar to many African Americans in the United States. On the other hand, the study includes only a small number of Latinas – a limitation that we hope motivates future researchers to implement similar studies on larger and more diverse populations.

Our findings have implications for policy and program approaches to reducing teen pregnancy, which are particularly relevant given the inclusion of this goal in Healthy People 2020. Substantially reducing teen pregnancy will likely require approaches that reduce black-white disparities in teen pregnancy.

Clearly, strategies for reducing teen pregnancy must go beyond encouraging individuals to "delay parenthood," because young women – white and black – seem to want to avoid pregnancy. The race differences in attitudes found here suggest that a fruitful area might be increasing women's satisfaction with methods of birth control. Although black women report adequate access to birth control, they perceive more side effects and hassle to use it. New methods of birth control may be needed that are perceived as safer, hassle-free, and better tailored to women's individual needs. Other research has reported that African-American women are more negative than white women toward hormonal methods (Kaye et al. 2009). Increased education about present methods, particularly long-acting non-hormonal methods, such as the ParaGard IUD, may lead to improved satisfaction with birth control methods.

Finally, we find a strong pattern of racial differences in attitudes related to partners, including whether the respondent is willing to refuse sex if it would make her partner angry, whether asking a partner to use a condom signifies distrust, and whether she thinks a partner would be happy about her becoming pregnant. That these partner attitudes represent the largest black-white differences we found in our analyses suggests the importance of relationship skill building in pregnancy prevention programs, and the need to include men as well as women.

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[5] We do not give the percentage in order to protect the anonymity of the study location.

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Table 1 Descriptive statistics for the RDSL sample at baseline (N=961)

Measure	Mean (SD)	Range
African American	.35	0,1
Family background		
Religiosity	2.69 (.9)	1,4
Biological mother less than 20 years old at first birth	.37	0,1
Family structure		
Biological parents/biological and step parent	.52	0,1
One biological parent only	.40	0,1
Other	.08	0,1
Childhood Socioeconomic Status		
Received public assistance growing up	.36	0,1
Mother's education less than high school graduate	.09	0,1
Father's education less than high school graduate	.08	0,1
Parents' income		
$14,999 or less	.15	0,1
$15,000 to $44,999	.27	0,1
$45,000 to $74,999	.19	0,1
$75,000+	.18	0,1
Don't know/Refused	.20	0,1
Parents were home owners	.71	0,1
Adolescent Experiences Related to Pregnancy		
Age at first sex 16 years or less	.51	0,1
Number of sexual partners 2 or more	.60	0,1
Ever had sex without birth control	.48	0,1
Prior pregnancies		
0 prior pregnancies	.78	0,1
1 prior pregnancy	.14	0,1
2 prior pregnancies	.08	0,1
Current Relationship status		
None	.26	0,1
Married or engaged	.09	0,1
Cohabiting	.10	0,1
Dating	.55	0,1
Current Socioeconomic Status		
Individual income		
Less than $3,000	.57	0,1
$3,000 or greater	.43	0,1
Don't know/Refused	.04	0,1
Income security		
Not enough to make ends meet	.19	0,1
Just enough to make ends meet	.34	0,1
Some money left over	.48	0,1
Owns a car	.49	0,1
Receiving public assistance	.27	0,1
Enrolled in school	.69	0,1
Completed high school	.79	0,1

Table 2 Descriptive statistics for attitude measures, by race

Measure	N	Range	All respondents Mean (SD)	Black Mean (SD)	White Mean (SD)
Sex					
General Attitudes					
1. Young people should not have sex before marriage.	958	1-5	3.2 (1.2)	**3.6 (1.1)**	**3.0 (1.2)**
2. It is alright for young people to have premarital sex even if they are just friends.	955	1-5	2.1 (.9)	**2.0 (.8)**	**2.2 (1.0)**
3. If a girl has been seeing a guy for a while, she should have sex with him.	956	1-5	1.9 (.6)	1.8 (.6)	1.9 (.5)
Respondent Herself					
4. You are not ready to have a sexual relationship with anyone.	959	1-5	2.9 (1.3)	**3.1 (1.3)**	**2.9 (1.3)**
5. If you had sexual intercourse now, you would feel guilty.	957	1-5	2.6 (1.2)	2.6 (1.1)	2.6 (1.2)
6. How much do you want to have sexual intercourse in the next year?	950	0-5	2.1 (1.6)	**1.8 (1.4)**	**2.3 (1.6)**
7. What are the chances that you will have sexual intercourse in the next year?	959	0-100	63.4 (39.6)	61.0 (37.4)	64.7 (40.7)
8. Imagine being with a partner who wants to have sex, but you do not. How willing would you be to refuse to have sex with your partner, even if it made him angry?	960	0-5	4.1 (1.6)	**3.8 (1.9)**	**4.3 (1.3)**
9. Imagine being with a partner who wants to have sexual intercourse, and you want to have sex, but you have no birth control available. How willing would you be to have sex without birth control?	958	0-5	1.1 (1.4)	1.2 (1.5)	1.1 (1.4)
Contraception					
Access					
1. In general, birth control is too expensive to buy.	939	1-5	2.1 (.9)	**2.0 (.8)**	**2.1 (.9)**
2. You can't afford to pay for birth control.	950	1-5	2.1 (.9)	**2.0 (.9)**	**2.1 (.9)**
3. It is easy for you to get birth control.	951	1-5	4.0 (.8)	**4.1 (.8)**	**4.0 (.9)**
Use					
4. It takes too much planning ahead of time to have birth control on hand when you're going to have sex.	955	1-5	1.8 (.6)	**1.9 (.7)**	**1.8 (.6)**
5. In general, birth control is too much of a hassle to use.	952	1-5	1.8 (.8)	**2.0 (.9)**	**1.7 (.8)**
6. Using birth control is likely to make a woman feel sick.	934	1-5	2.6 (1.1)	**2.9 (1.1)**	**2.5 (1.0)**
7. Using birth control interferes with sexual enjoyment.	934	1-5	1.9 (.7)	1.9 (.7)	1.9 (.6)
Morality					
8. If a woman asks her partner to use a condom, he will think that she doesn't trust him.	959	1-5	2.3 (1.2)	**2.8 (1.4)**	**2.0 (1.0)**
9. Using birth control is morally wrong.	957	1-5	1.7 (.7)	**1.9 (.8)**	**1.7 (.7)**
10. If a girl uses birth control, she is looking for sex.	959	1-5	1.9 (.8)	**2.1 (.9)**	**1.9 (.7)**

Measure	All respondents N	Range	Mean (SD)	Black Mean (SD)	White Mean (SD)
Pregnancy					
General Attitudes					
1. It is better to get pregnant young because young women's bodies recover faster.	958	1-5	2.2 (1.0)	**2.0 (1.0)**	**2.3 (1.0)**
2. It is easier for young women to lose weight after a pregnancy.	919	1-5	2.8 (1.1)	2.8 (1.2)	2.8 (1.1)
3. It is alright for a woman to have a child without being married.	951	1-5	3.2 (1.1)	**3.0 (1.1)**	**3.3 (1.1)**
Respondent Herself					
4. Getting pregnant at this time in your life is one of the worst things that could happen to you.	961	1-5	3.9 (1.3)	3.8^{+} (1.3)	3.9 (1.2)
5. If you had a baby now, you would feel less lonely.	958	1-5	2.1 (.9)	**2.2 (1.0)**	**2.0 (.8)**
6. If you got pregnant now, you could handle the responsibilities of parenting.	961	1-5	2.8 (1.3)	**2.9 (1.4)**	**2.7 (1.3)**
7. If you got pregnant now, you would be forced to grow up too fast.	960	1-5	3.2 (1.2)	**3.1 (1.3)**	**3.3 (1.2)**
8. If you got pregnant now, you would have to quit school.	959	1-5	2.3 (1.0)	**2.0 (.9)**	**2.5 (1.0)**
9. If you got pregnant now, your partner would be happy.	939	1-5	2.5 (1.2)	**2.9 (1.2)**	**2.3 (1.1)**
10. If you got pregnant now, you could not afford to raise the child.	961	1-5	3.4 (1.2)	**3.1 (1.2)**	**3.6 (1.2)**
11. If you got pregnant now, your family would help you raise the child.	957	1-5	4.0 (.9)	4.0 (1.0)	4.0 (.9)
12. It wouldn't be all that bad if you got pregnant at this time in your life.	959	1-5	2.2 (1.1)	**2.4 (1.2)**	**2.1 (1.0)**
13. How much do you want to get pregnant during the next month?	958	0-5	.2 (.9)	.3 (.9)	.2 (.9)
14. How much do you want to avoid getting pregnant during the next month?	956	0-5	4.7 (1.0)	4.7 (1.0)	4.7 (1.0)
15. What are the chances that you will get pregnant during the next year?	960	0-100	11.4 (22.4)	11.5 (23.3)	11.4 (22.0)

Bold numbers indicate statistically significant (p<.05) difference between black and white respondents, two-tailed independent-sample t-tests.
1-5 corresponds to 1: strongly disagree, 2: disagree, 3: neither agree nor disagree, 4: agree, 5: strongly agree.
0-5 corresponds to: 0: not at all, 5: very much
0-100 corresponds to 0: no chance, to 100: 100% chance.

Table 3 Regression estimates of effects of race on attitudes, net of family background, childhood SES, pregnancy-related experiences, and current SES

	(1)	(2)	(3)	(4)	(5)
		Black differential net of…..			
	Bivariate black effect	….family background	…and childhood SES	…and early pregnancy-related experiences	…and current SES
Sex					
General Attitudes					
1. Young people should not have sex before marriage.	.62*** (.08)	.28** (.09)	.20* (.09)	.28** (.09)	-.17** (.06)
2. It is alright for young people to have premarital sex even if they are just friends.	-.17** (.06)	.06 (.07)	.11 (.08)	.04 (.08)	.04 (.08)
3. If a girl has been seeing a guy for a while, she should have sex with him.	-.03 (.04)	-.01 (.05)	-.02 (.05)	-.02 (.05)	-.05 (.05)
Respondent Herself					
4. You are not ready to have a sexual relationship with anyone.	.27** (.09)	.13 (.10)	.07 (.11)	.09 (.09)	.06 (.10)
5. If you had sexual intercourse now, you would feel guilty.	-.02 (.08)	-.15 (.09)	-.16 (.09)	-.13 (.08)	-.16 (.09)
6. How much do you want to have sexual intercourse in the next year?	-.45*** (.11)	-.29* (.12)	-.19 (.13)	-.19 (.12)	-.20 (.12)
7. What are the chances that you will have sexual intercourse in the next year?	-3.61 (2.69)	.60 (3.05)	1.47 (3.21)	-1.22 (2.56)	-.17 (2.60)
8. Imagine being with a partner who wants to have sex, but you do not. How willing would you be to refuse to have sex with your partner, even if it made him angry?	-.57*** (.10)	-.47*** (.12)	-.45*** (.13)	-.44** (.13)	-.45** (.14)
9. Imagine being with a partner who wants to have sexual intercourse, and you want to have sex, but you have no birth control available. How willing would you be to have sex without birth control?	.07 (.10)	-.04 (.11)	.00 (.12)	-.10 (.11)	-.11 (.11)
Contraception					
Access					
1. In general, birth control is too expensive to buy.	-.17** (.06)	-.26*** (.07)	-.28*** (.07)	-.26*** (.08)	-.28*** (.08)
2. You can't afford to pay for birth control.	-.13* (.06)	-.22** (.07)	-.27*** (.07)	-.25** (.08)	-.27*** (.08)
3. It is easy for you to get birth control.	.16** (.06)	.16* (.07)	.18* (.07)	.14 (.07)	.15* (.07)
4. It takes too much planning ahead of time to have birth control on hand when you're going to have sex.	.16*** (.04)	.09 (.05)	.08 (.05)	.09 (.05)	.08 (.05)
Side Effects					
5. In general, birth control is too much of a hassle to use.	.25*** (.06)	.19** (.07)	.19** (.07)	.16* (.07)	.15* (.07)
6. Using birth control is likely to make a woman feel sick.	.39*** (.07)	.27** (.08)	.26** (.09)	.26** (.09)	.25** (.09)
7. Using birth control interferes with sexual	.01	-.05	-.04	-.06	-.05

	(1)	(2)	(3)	(4)	(5)
		Black differential net of…..			
	Bivariate black effect	….family background	…and childhood SES	…and early pregnancy-related experiences	…and current SES
enjoyment.	(.04)	(.05)	(.06)	(.06)	(.06)
Morality					
8. If a woman asks her partner to use a condom, he will think that she doesn't trust him.	.86*** (.08)	.81*** (.09)	.79*** (.09)	.80*** (.10)	.78*** (.10)
9. Using birth control is morally wrong.	.18*** (.05)	.06 (.06)	.06 (.06)	.08 (.06)	.06 (.06)
10. If a girl uses birth control, she is looking for sex.	.19*** (.05)	.14* (.06)	.12 (.06)	.12 (.07)	.13 (.07)
Pregnancy					
General Attitudes					
1. It is better to get pregnant young because young women's bodies recover faster.	-.24*** (.07)	-.27** (.08)	-.25** (.09)	-.22* (.09)	-.23* (.09)
2. It is easier for young women to lose weight after a pregnancy.	.01 (.08)	.01 (.09)	.08 (.10)	.07 (.10)	.07 (.10)
3. It is alright for a woman to have a child without being married.	-.20** (.07)	.05 (.08)	.07 (.09)	.00 (.09)	.01 (.09)
Respondent Herself					
4. Getting pregnant at this time in your life is one of the worst things that could happen to you.	-.14 (.09)	.06 (.10)	.09 (.10)	.08 (.10)	.07 (.10)
5. If you had a baby now, you would feel less lonely.	.17** (.06)	.06 (.07)	.03 (.07)	.06 (.07)	.08 (.08)
6. If you got pregnant now, you could handle the responsibilities of parenting.	.24** (.09)	-.03 (.10)	-.04 (.11)	-.08 (.11)	-.05 (.11)
7. If you got pregnant now, you would be forced to grow up too fast.	-.24** (.08)	-.04 (.10)	.04 (.10)	.03 (.10)	.01 (.10)
8. If you got pregnant now, you would have to quit school.	-.43*** (.07)	-.43*** (.08)	-.46*** (.08)	-.47*** (.09)	-.49*** (.09)
9. If you got pregnant now, your partner would be happy.	.60*** (.08)	.42*** (.09)	.34*** (.09)	.49*** (.09)	.49*** (.09)
10. If you got pregnant now, you could not afford to raise the child.	-.41*** (.08)	-.24* (.10)	-.28** (.10)	-.30** (.10)	-.36*** (.10)
11. If you got pregnant now, your family would help you raise the child.	-.01 (.06)	.04 (.07)	.06 (.08)	.10 (.08)	.12 (.08)
12. It wouldn't be all that bad if you got pregnant at this time in your life.	.22** (.07)	.05 (.09)	-.03 (.09)	.03 (.09)	.04 (.09)
13. How much do you want to get pregnant during the next month?	.03 (.06)	-.06 (.07)	-.09 (.07)	-.03 (.07)	-.02 (.07)
14. How much do you want to avoid getting pregnant during the next month?	.00 (.07)	.07 (.08)	.12 (.08)	.05 (.08)	.05 (.08)
15. What are the chances that you will get pregnant during the next year?	-.16 (1.51)	-2.13 (1.78)	-2.54 (1.87)	-2.41 (1.82)	-1.94 (1.86)

Notes: Each cell represents a separate regression model. Standard errors are in parentheses.
* p < .05, ** p < .01, *** p < .001 (two-tailed tests).

Appendix Table 1 Correlations between attitudes toward sex and contraception, and childhood family background, childhood SES, adolescent experiences related to pregnancy, and current SES

	African American	Sex									Contraception									
		General Attitudes			Respondent Herself						Access				Side Effects			Morality		
		1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	10
African American	1.0	.24	-.09		.10		-.14		-.17		-.10	-.07	.10	.13	.15	.18		.33	.12	.12
Family background																				
Religiosity	.38	**.45**	**-.33**	-.15	**.23**	.28	**-.22**	-.26				.06		**.09**	**.11**	**.11**		**.07**	**.20**	**.08**
Biological mother less than 20 years old at first birth	.27			.08		-.14		.10	-.12	.11			**.08**	**.09**	**.07**	**.13**		**.16**		**.10**
Family structure																				
One biological parent only	.26			.07		-.07		.07	**-.09**					**.07**			.08	**.13**		
Other	.18					-.09											-.07	**.10**		
Childhood Socioeconomic Status																				
Received public assistance growing up	.25								**-.08**	.08				**.08**		.10	.08	**.23**		
Mother's education less than high school graduate																.11		.13		
Father's education less than high school graduate			.08		-.12													.12		
Parents' income																				
$14,999 or less	.16								**-.11**					**.07**		**.13**		**.16**		.07
$15,000 to $44,999																				
$45,000 to $74,999	-.16																	-.08		
$75,000+	-.22			-.07										**-.09**	**-.07**	**-.10**		**-.17**	**-.10**	**-.08**
Don't know/Refused	.22	**.09**	**-.07**				**-.13**											**.07**		
Parents were home owners	-.32	**-.10**							**.09**									-.12		
Adolescent Experiences Related to Pregnancy																				
Age at first sex 16 years or less	.16	-.16	.14	.07	-.32	-.30	.27	.40		.20		**-.09**	**.15**			**.12**		**.12**		
Number of sexual partners 2 or more	.15	-.21	.20	.12	-.40	-.40	.32	.52	**-.08**	.26		**-.08**	**.14**					**.08**		
Ever had sex without birth control	.17	-.14	.19	.09	-.35	-.33	.30	.44	**-.11**	.41				**.09**	**.12**	**.11**		**.18**		

	African American	Sex									Contraception									
		General Attitudes			Respondent Herself						Access				Side Effects			Morality		
		1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	10
Prior pregnancies																				
0 prior pregnancies (ref.)	-.23				.13	.16	-.07	-.19	.08	-.13				**-.09**	**-.12**	**-.13**		**-.16**		
1 prior pregnancy	.14				-.12	-.15		.14	-.09	.09					**.08**	**.07**		**.11**		
2 prior pregnancies	.17							.12		.09	.06			.07	**.08**	**.11**		**.10**		
Current Relationship status																				
None		.15	-.08		.40	.31	-.33	-.45		-.17			**-.07**							
Married or engaged	-.11				**-.21**	-.16	**.18**	.19		.11	**.10**					.07				
Cohabiting		-.10			-.19	-.15	.17	.18				-.08								
Dating	.11	-.07			-.13	-.09	.09	.18					**.07**							
Current Socioeconomic Status																				
Income Less than $3,000	.11	**.08**			**.16**	.11	**-.15**	-.20		-.08								**.08**		
Income security																				
Not enough to make ends meet	.09		.08	.12						.11		.14				**.11**		**.12**		
Just enough to make ends meet					-.07	-.10	.07	.10				-.08								
Some money left over	-.12		-.11	-.08	**.10**	.13	-.10	-.11		-.13						**-.11**		**-.13**		
Owns a car	-.29	**-.09**		-.08	**-.13**	-.09	**.11**	.12	**.08**			**-.08**		**-.13**	**-.13**	**-.11**		**-.18**	**-.09**	
Receiving public assistance	.26					-.11		.10	**-.11**	.06				**.09**	**.12**	**.14**		**.20**		
Enrolled in school			-.11		.15	.12	-.08	-.16	.08	-.13				-.07	-.09	-.09		-.11		
Completed high school	-.09						**.06**		**.09**	-.09		-.13		**-.09**	**-.10**	**-.11**		**-.12**		

Correlations listed are statistically significant (p<.05) (two-tailed tests). Bold numbers indicate variables that may explain the overall race difference in the attitude (i.e., items that are correlated with race, and are correlated with the attitude measure in the same direction as race is correlated with the attitude measure).

Appendix Table 2. Correlations between attitudes toward pregnancy, and childhood family background, childhood SES, adolescent experiences related to pregnancy, and current SES

	African American	Pregnancy														
		General Attitudes			Respondent Herself											
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
African American	1.0	-.11		-.09		.09	.09	-.09	-.20	.24	-.16		.10			
Family background																
Religiosity	.38			**-.35**						.08	**-.12**					
Biological mother less than 20 years old at first birth	.27	**-.10**			-.13	**.11**	**.18**	**-.13**	**-.10**	**.20**	**-.11**		**.17**	.09	-.08	
Family structure																
One biological parent only	.26	**-.07**			-.09		**.07**	**-.12**	**-.07**	**.12**	**-.07**	-.08	**.10**	.07		
Other	.18	**-.07**			-.09		**.07**	**-.12**	**-.07**	**.12**	**-.07**	-.08	**.10**	.07		
Childhood Socioeconomic Status																
Received public assistance growing up	.25		-.09		-.10	**.16**	**.12**	**-.14**		**.20**		-.07	**.16**			.06
Mother's education less than high school graduate							.07	-.10	-.07	.06			.08			
Father's education less than high school graduate						.07				.12					-.10	
Parents' income																
$14,999 or less	.16				-.07	**.07**	**.09**	**-.11**		**.11**			**.10**			.08
$15,000 to $44,999																
$45,000 to $74,999	-.16															
$75,000+	-.22		.08		.11	**-.12**	**-.07**	**.15**		**-.19**		.07	**-.16**			
Don't know/Refused	.22	**-.07**		**-.07**	-.08	**.08**		**-.07**		**.13**			**.07**		-.07	
Parents were home owners	-.32					**-.08**		**.10**		**-.14**			**-.11**			
Adolescent Experiences Related to Pregnancy																
Age at first sex 16 years or less	.16	**-.07**		.16	-.24	**.14**	**.23**	**-.20**	**-.16**	**.24**	**-.16**	-.14	**.22**	.10	-.08	.21
Number of sexual partners 2 or more	.15			.18	-.25		**.20**	**-.15**	**-.16**	**.18**	**-.14**	-.14	**.17**	.10	-.11	.22
Ever had sex without birth control	.17			.15	-.34	**.17**	**.29**	**-.21**	**-.19**	**.29**	**-.22**	-.12	**.28**	.22	-.21	.30

	African American	Pregnancy														
		General Attitudes			Respondent Herself											
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Prior pregnancies																
0 prior pregnancies (ref.)	-.23			-.12	.34	**-.16**	**-.34**	**.22**	**.16**	**-.24**	**.28**	.09	**-.26**		.08	-.09
1 prior pregnancy	.14			.12	-.27	**.13**	**.23**	**-.16**	**-.11**	**.18**	**-.20**		**.20**		-.07	
2 prior pregnancies	.17				-.18	**.08**	**.22**	**-.14**	**-.10**	**.13**	**-.16**	-.08	**.15**			.08
Current Relationship status																
None				**-.10**	.17	-.09	-.17	.09	.09	-.16	.11		-.14	-.11	.10	-.22
Married or engaged	-.11	.08			-.27	.16	.18	-.17	-.10	.33	-.16		.28	.19	-.20	.17
Cohabiting				.08	-.16		.15	-.11		.10	-.13		.11	.08	-.07	.09
Dating	.11		.07		.10			.08		-.11	.07		-.10		.07	
Current Socioeconomic Status																
Income Less than $3,000	.11			-.10	.11		-.11		.09		.11					-.09
Income security																
Not enough to make ends meet	.09					**.08**					.10	-.16		.12	-.08	
Just enough to make ends meet			-.08	.07	-.09		.07			**.08**						
Some money left over	-.12		.07	-.09		**-.12**	-.07			**-.11**	-.07	.12	**-.09**	-.11		-.08
Owns a car	-.29									**-.10**		.07				
Receiving public assistance	.26				-.27	**.13**	**.26**	**-.18**	**-.13**	**.25**	**-.21**		**.25**		-.10	
Enrolled in school				-.08	.21	-.16	-.19	.13		-.19	.15	.10	-.19	-.11	.16	-.15
Completed high school	-.09					**-.09**			.10	**-.07**						

Correlations listed are statistically significant ($p<.05$) (two-tailed tests). Bold numbers indicate variables that may explain the overall race difference in the attitude (i.e., items that are correlated with race, and are correlated with the attitude measure in the same direction as race is correlated with the attitude measure).

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