

# TALKING ABOUT SEX: Religion and Patterns of Parent–Child Communication about Sex and Contraception

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Despite the association between religiousness and conservative sexual attitudes, links between religion and patterns of parent–child communication about sex and birth control are largely undocumented. This study examines these relationships using two nationally representative data sets of parents and adolescents. I evaluated a conceptual model of religious influence on the sexual socialization of adolescents. Results suggest that parental public religiosity curbs the frequency of conversations about sex and birth control, and after accounting for conversations about sexual morality, so does parental religious salience. Despite notable relationships with religious affiliation, age, race, and gender still shape parental communication patterns most consistently.

There are numerous ways in which religion can affect adolescent sexuality and its practice, that is, religion can factor into attitudes and beliefs about contraception, permissible premarital sexual activities, pornography, and homosexuality, as well as indirectly through its effects on friendship choices, dating patterns, and so on (Wallace and Williams 1997). Overall, recent research suggests that multiple facets of adolescent religion—including attendance, the importance of religious faith, and denominational affiliation—typically correspond to such outcomes as more conservative sexual attitudes, later virginity loss, and fewer sexual partners (Hayes 1987; Thornton and Camburn 1989; Murry 1994). What researchers are much less sure about, however, is the sexual socialization of adolescents. That is, what do youth know about sex, what do they think about it, and where did they acquire their information and attitudes?

Parents of American adolescents are often thought to play a *modest* role in the transmission of information about sex and birth control (Moran and Corley 1991; Ansuini, Fiddler-Woite, and Woite 1996). Although such conversations can be uncomfortable for both parent and child, adolescents who have no communication with their parents about sex tend to evaluate such silence negatively both in the short run and later as adults (Hepburn 1983; Bartle 1998; Feldman and Rosenthal 2000). Nearly 70 percent of adults in one study indicated that inaccurate sexuality information had had a negative effect on their emotion or physical well-being at some point in their life (Ansuini et al. 1996). Adolescents who communicate little with their parents also appear most likely to misunderstand their parents' attitudes about sex (Jaccard, Dittus, and Gordon 1998).

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What parents tell their children about sex and birth control—and how frequently they have such conversations—is often linked with their own beliefs and attitudes about sex and its appropriateness for adolescents (Jordan, Price, and Fitzgerald 2000; O’Sullivan, Meyer-Bahlburg, and Watkins 2001). Yet while the connection between religion and sexual attitudes and behaviors has been actively pursued and documented in several recent studies (e.g., Jaccard and Dittus 1991; Peterson and Donnerwerth 1997; Meier 2003), any link between religion and patterns of parent–child communication about sex and birth control remains largely speculative and inferred. The same can be said for adolescent knowledge about sex and awareness of pregnancy risk. More is known about other influences on such communication (e.g., age, parent and child gender), although few studies used national data or large samples, and many of them rely upon unrepresentative populations. Although religion is a control variable in many studies of adolescent sexual attitudes and behavior, it seldom appears in studies about sexual socialization. Thus while the evidence suggests that more devoutly religious adolescents, as well as conservative Protestant and traditional Catholic youth, hold more conservative sexual attitudes, exactly how this attitude transference or socialization occurs is quite unclear (Peterson and Donnerwerth 1997; Meier 2003). Little sustained attention has been paid to whether religion shapes how parents communicate with their adolescent about sexuality.

This study examines religious influences on parent–child communication about sex, birth control, and the morality of adolescent sex, and the ease with which parents communicate with their adolescent children about sex. In particular, this study pursues answers to the following research questions: does religion influence the frequency of and ease with which parents communicate about sexual topics? When religious parents say they talk to their kids about sex or birth control, do they primarily communicate values? Do more devoutly religious parents communicate less frequently about birth control? By applying method variance (parent and child respondents) and two nationally representative data sets to the evaluation of a conceptual model of religious influence on adolescent sexual socialization, this study distinguishes itself from the limited previous research available on the subject.

## TALKING ABOUT SEX

There is evidence to suggest that parents appear more likely to shape adolescents’ attitudes and beliefs about sex than their particular knowledge about sex (Fisher 1986; Sanders and Mullis 1988). Indeed, some parents believe their primary responsibility is to convey normative, rather than informative, messages about sexual behavior (Sanders and Mullis 1988). Still others display evidence of indirect forms of communication about sex, in which some conversations are meant to impart information, whereas others are meant to teach values and convey proscriptions (Hepburn 1983). Many conversations, it appears, are motivated by perceptions of risk to their adolescent child (Jaccard and Dittus 1991). In one particular study, parents cited the immorality of adolescent intercourse less often than more immediate risks (e.g., sexually transmitted disease [STD], pregnancy) in the reasons conveyed to their adolescent children for avoiding sex (Jordan et al. 2000).

Parents in a similar study were more likely to discuss the emotional impact of sex, the loss of respect, immorality, and the virtues of virginity with girls than with boys (Jaccard and Dittus 1991).

In most research on this topic, friends, educators, and siblings topped parents as reported sources of sexual information (Andre, Frevert, and Schuchmann 1989; Moran and Corley 1991; Ammerman et al. 1992). Many parents find conversations with their adolescent children about sex to be uncomfortable and potentially embarrassing to both. Yet most parents still attempt to communicate about sex and birth control with their adolescent children, especially girls. While communication patterns may vary by race or ethnicity (Moran and Corley 1991), they clearly vary by gender. In a study involving 210 couples with adolescent children, Jaccard and Dittus (1991) found that only about half of the boys had a parent who agreed that they had talked about sex, compared to 85 percent for girls. Indeed, only the mother–daughter combination appears to display something besides negligible sexual socialization or education patterns (Fisher 1986). Moreover, parents' own perception of themselves as a key source of sexual information tends to considerably outpace or contradict children's assessments of parents as sex educators (Newcomer and Udry 1985; Jordan et al. 2000). Yet interestingly enough, youth often prefer a parent to a peer as a source of information (Hutchinson and Cooney 1998; Whitaker and Miller 2000).

Significantly higher levels of communication about contraception and postponement of sex appear to occur in African-American families. Indeed, the more "sensitive" the subject matter (e.g., intercourse versus dating), the greater the disparity that Fox and Inazu (1980) document between the proportion of black and white mothers who have never talked with their daughters about contraception, as well as the larger proportion of white mothers who have never talked about it. The topic of contraception merited comparable numbers and racial/ethnic variations. Other factors also appear to shape the frequency of communication about sexuality. Daughters with older mothers reported slightly lower frequencies of communication about sexual risks (Hutchinson and Cooney 1998), whereas relationship satisfaction predicts more extensive conversations (Jaccard, Dittus, and Gordon 2000).

Religion, together with peers, parents, and the media, remains a key socialization agent of children and adolescents (Wallace and Williams 1997). Nevertheless, few have directly considered religion's role in sexual socialization, despite its widely documented relationship with more conservative sexual values (Thornton and Camburn 1989; Meier 2003). Fox and Inazu (1980) note that mothers raised as Catholics were less likely to have discussed birth control and sexual intercourse, but were more likely to have discussed sexual morality and conception. In one particularly compelling study, González-López (2003) notes that generation, regional patriarchal (i.e., threat of machismo) differences, and immigration experiences all affect how Mexican immigrant (Catholic) women sexually socialize their daughters. The threat of premarital loss of virginity principally constituted less of a religious norm violation than the loss of a commodity that could be traded for financial stability and marital happiness. Mothers, González-López suggests, are keenly aware of this. As one of her interviewees confessed, "I did not follow them [reli-

gious teachings regarding virginity] because of religion. . . . I followed them because of fear of my mother!" (González-López 2003:234).

### CONCEPTUAL PATHWAYS CONCERNING RELIGION

Most traditional religious institutions in America have tended to promote particular (albeit varying) sexual ideologies that are meant to assert social influence and control over sexual behavior by prescribing and proscribing the cultural scenarios and behavioral standards (the with whom, what, when, where, and how) of sexual activity. In contrast to most religiously based sexual ideologies, American popular culture and mass media often are understood to actively promote a sexual ideology characterized primarily (often entirely) by pleasure. In his theoretical models about the social control of human sexuality, DeLamater (1989) gives considerable weight to socialization as providing a proximate direct and indirect effect on actual sexual behavior, yet he largely infers that control-oriented sexual ideologies are socialized *passively* by church attendance, youth groups, and Bible classes. Andre et al.'s (1989) social learning approach to the study of sexual socialization suggests that through consistent modeling and conditioning, parents tend to socialize children with more restrictive attitudes about sexuality, yet as their children age, parents often "find it difficult to switch gears and provide open communicative information sources during their child's adolescence" (p. 243).

Although informative, the collection of relevant studies and theoretical suggestions noted above nevertheless fails to *directly* suggest any hypotheses about how religion may shape the parent-child sexual socialization process. Indirectly, however, these research conclusions collectively suggest a conceptual model of how this process may occur. Figure 1 displays a conceptual model that links parental religious and demographic factors to communication outcomes as a series of general relationships. In particular, parental religious factors and demographic characteristics (of both parent and child) are thought to both affect and condition their communication habits via parental values about sex as well as parental perceptions of the adolescent's own knowledge, values, readiness for information, and presumptions about their sexual experiences (or lack thereof). In other words, the model asserts that more devoutly religious parents make communication decisions in part as a response to their particular perceptions about their children (e.g., relative "risk" of virginity loss, awareness of the adolescent's sexual activity, the ado-

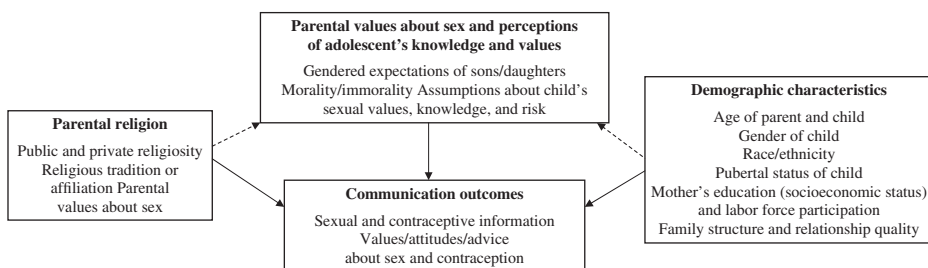


FIGURE 1. Conceptual Model of Religious Influence on the Sexual Socialization of Adolescents.

lescent's own stated sexual values, gendered expectations of sexual behavior, etc.). Given that religion is seldom a focus in existing sexual socialization studies, such a model is fairly novel (for at least one related model, see González-López 2003).

## DATA AND METHODS

### Data Sources

The data for this study come from two sources: the first wave of the National Longitudinal Study of Adolescent Health and the National Study of Youth and Religion. The first of these is a longitudinal nationally representative study of adolescents in grades 7–12. “Add Health,” as it is commonly referred to, is a school-based study of health-related behaviors designed to explore the causes of these behaviors with an emphasis on social context. The Add Health study was funded by the National Institute of Child Health and Human Development (NICHD) and 17 other federal agencies. Fieldwork was conducted by the National Opinion Research Center of the University of Chicago. A stratified sample of 80 high schools was selected with probability proportionate to size. These schools were stratified by region, urban location, school type (public, private, and parochial), ethnic diversity, and enrollment size. Additionally, a feeder school (typically a middle school) for each high school was also identified and selected, yielding a pair of schools in each of the 80 communities. The schools ranged in size from less than 100 students to more than 3,000 students, and included urban, rural, and suburban locations. The schools, and their students, are thus representative samples. Almost 80 percent of the schools contacted agreed to participate, and refusals were replaced with another pair of schools.

Data were gathered from the adolescents themselves, from their parents, siblings, friends, romantic partners, fellow students, and from school administrators. Additional details regarding the sample and methods of study can be found in Bearman, Jones, and Udry (1997). Respondents were interviewed in their homes twice, with an approximate one-year interval between interviews. The first wave of in-home interviews was conducted between April and December 1995. Although a second wave of data collection followed the first by approximately one year, parents were only interviewed at the first wave. Prior to listwise deletion of missing values, the working sample sizes for analysis began at 11,727.

The second data source is the National Survey of Youth and Religion (NSYR) telephone survey. The NSYR is a nationally representative telephone survey of 3,290 U.S. English- and Spanish-speaking teenagers between the ages of 13 and 17, and of their parents. The NSYR also included 80 oversampled Jewish households, bringing the total number of completed NSYR cases to 3,370. The NSYR was conducted from July 2002 to April 2003 by researchers at the University of North Carolina at Chapel Hill using a random-digit-dial (RDD) telephone survey method, employing a sample of randomly generated telephone numbers representative of all household telephones in the 50 states of the United States. The national survey sample was based on the proportion of working household telephone exchanges nationwide. This RDD method ensured equal representation of listed, unlisted, and not-yet-listed household telephone numbers. Eligible

households included at least one teenager between the ages of 13–17 living in the household for at least six months of the year. In order to randomize responses within households and also to help attain representativeness of age and gender, the interviewers were asked to conduct the survey with the teenager in the household who had the most recent birthday. The NSYR was conducted with members of both English- and Spanish-speaking households. Participants were offered a financial incentive. Ninety-six percent of parent-complete households also achieved teen completes. Diagnostic analyses comparing the NSYR data with the 2002 U.S. Census data on comparable households and with comparable adolescent surveys—such as Monitoring the Future, the National Household Education Survey, and the National Longitudinal Study of Adolescent Health—confirmed that the NSYR provides a nationally representative sample without identifiable sampling and nonresponse biases of U.S. teenagers with ages from 13–17 years and their parents living in households (for details, see Smith and Denton 2003). For descriptive purposes, a weight was created to adjust for the number of teenagers in the household, the number of household telephone numbers, census region of residence, and household income. A separate weight was used in multivariate analyses that control for census region and household income, which adjusts only for the number of teenagers in the household and the number of household telephone numbers.

## Dependent Variables

### *Add Health*

The Add Health outcomes I studied were measures of the extent to which the parent communicates with his/her adolescent child about the morality of adolescent sexual intercourse, about contraception, and about sex. Regarding the morality of intercourse, the parent was asked, “How much have you and (name) talked about his/her having sexual intercourse and the moral issues of not having sexual intercourse?” Questions about the last two were posed to the parent respondent as follows, “How much have you talked with (adolescent child’s name) about birth control?” The same format was followed with sex. For each of these three questions, the respondent parent could select one of four possible answers: “not at all,” “somewhat,” “a moderate amount,” or “a great deal.” The questions were asked in the order listed above. It should be emphasized that communication frequency may be a relative measure. That is, parents may consider one or two conversations to be a “moderate amount” or “a great deal,” especially when compared with their own experience while growing up. That this might vary systematically and affect data analysis, however, was unclear. Additionally, although the sexual morality question appeared to be double-barreled, it nevertheless served the purpose for which it was intended—to constitute an indicator of the frequency of sexual morality conversations in which the respondent parent has engaged.

### *NSYR*

I examined two NSYR outcomes, one of which was largely comparable to an Add Health measure. Parent respondents were asked, “How many times, if ever, have you talked with

[your teen] about sex? Would you say: never, once or twice, 3–5 times, or 6 times or more?” If parents asked for clarification, interviewers were instructed to state, “That is: how many times has the parent talked to his/her teen about the teen’s own sexuality and sexual practices, not about sex as a topic in general.” Few parent respondents indicated “never” (N = 159, or 4.7%). For those parents who gave a positive response, interviewers asked, “How easy or hard is it for you to talk with [your teen] about sex? Is it very hard, somewhat hard, fairly easy, or very easy?” All dependent variables were analyzed as ordinal outcome variables.

## Independent Variables

### *Add Health*

Religion measures for the parent included church or religious service attendance as a gauge of public religiosity, in contrast to the inward, private form of religiosity manifested in the self-reported importance of religious faith. Several recent studies have advocated different measures of religiosity, citing their differential effects on adult and adolescent behavior (Kendler et al. 2003; Nonnemaker, McNeely, and Blum 2003; Regnerus 2003). For parents, I included an ordinal measure (1–4) of religious service attendance and an ordinal measure (1–4) of the importance of religion. I also included a series of dichotomous religious affiliation measures—a rough indicator of conservative Protestant affiliation (includes Assemblies of God, Baptist, Adventist, Holiness, and Pentecostal), mainline Protestant (Lutheran, Presbyterian, etc.), Roman Catholic, Black Protestant (African Methodist Episcopal [AME], AME Zion, African-American respondents who reported being “Baptist,” “Methodist,” etc.), Jewish, Latter-Day Saints/Mormon, other religion, and religiously unaffiliated.

Parental control variables included whether the respondent’s mother holds a college degree (dichotomous), the race/ethnicity of the parent (white, Asian, and Hispanic, with African American as the reference category), age, gender, and a dichotomous measure of whether the child is in a two-biological parent, intact family. As indicators of parental values and parental estimates of perceived knowledge, I included an ordinal measure (1–5) of whether the respondent parent disapproves of his/her adolescent child having sex at his/her age and a dichotomous measure indicating whether the parent thinks their respondent child has already had sex. Adolescent controls included gender, age, whether their school offers a sex education curriculum, whether they have signed a pledge to abstain from sex until marriage, whether they report being a nonvirgin at Wave I, and their perceived sense of family well-being or satisfaction (an index of three measures, ranging from 3–15). Each of these variables reflected theoretical and/or empirical concerns, outlined in the review of research and conceptual model. Descriptive statistics for all variables are displayed in Table 1.

### *NSYR*

The NSYR data includes more extensive religion measures than can be found in Add Health. I included comparable measures of parental church or religious service atten-



TABLE 1. Unstandardized Descriptive Statistics for All Variables

Add Health <sup>a</sup> variables	Range	Mean	Standard deviation	NSYR <sup>b</sup> variables	Range	Mean	Standard deviation
Parent variables							
Frequency of talk about morality of sex	1-4	2.934	1.04	Frequency of talk about sex	1-4	3.386	.88
Frequency of talk about sex	1-4	2.948	.93	Ease of talking about sex (N = 2,840)	1-4	3.219	.84
Frequency of talk about birth control	1-4	2.677	1.05	Church/religious service attendance	1-7	4.302	2.19
Church/religious service attendance	1-4	2.773	1.16	Importance of religious faith	1-6	4.979	1.28
Importance of religion	1-4	3.447	.87	Evangelical/conservative Protestant	0,1	.313	.46
Evangelical/conservative Protestant	0,1	.180	.38	Mainline Protestant	0,1	.146	.35
Mainline Protestant	0,1	.209	.41	Roman Catholic	0,1	.240	.43
Roman Catholic	0,1	.307	.46	Black Protestant	0,1	.131	.34
Black Protestant	0,1	.117	.32	Jewish	0,1	.038	.19
Jewish	0,1	.010	.10	Latter-Day Saints/Mormon	0,1	.023	.15
Latter-Day Saints/Mormon	0,1	.012	.11	Religiously unaffiliated	0,1	.061	.24
Religiously unaffiliated	0,1	.059	.23	Other religion	0,1	.029	.17
Other religion	0,1	.106	.31	Parents' average education level	0-10	6.598	2.37
Parents' college education (average)	0-1	.248	.38	Parent respondent is married	0,1	.682	.47
White	0,1	.647	.48	Parent knows/thinks child is dating	0-2	.571	.86
Asian American	0,1	.056	.23	Age	25-80	42.84	7.10
Hispanic	0,1	.134	.34	Female	0,1	.816	.39



Native American	0,1	.012	.11	White	0,1	.696	.46
African American	0,1	.148	.36	African American	0,1	.157	.36
Age	25-77	41.65	6.00	Asian American	0,1	.015	.12
Female	0,1	.947	.50	Hispanic	0,1	.103	.30
Family structure (0 = intact, 1 = broken)	0,1	.664	.47	Native American	0,1	.013	.11
Disapproves of sex at child's age	1-5	4.352	1.10	Other race/ethnicity	0,1	.016	.12
Thinks his/her child has already had sex	0,1	.192	.39				
Adolescent variables				Adolescent variables			
Female	0,1	.504	.50	Female	0,1	.494	.50
Age	15-21	16.40	1.11	Age	12-18	15.49	1.43
Respondent's school has sex education curriculum	0,1	.970	.17	Virginity status, T1 (1 = nonvirgin)	0,1	.209	.41
Virginity status, T1 (1 = nonvirgin)	0,1	.436	.50	Thinks people should practice abstinence	0,1	.560	.50
Pledged virginity until marriage	0,1	.126	.33	Quality of relationship with parent(s)	3-12	10.63	1.57
Number of romantic partners in past 18 months	0-4	.619	.89				
Self-reported family well-being	3-15	11.12	2.38				

N = 11,150

N = 3,089

<sup>a</sup>Add Health, National Longitudinal Study of Adolescent Health and the National Study of Youth and Religion.

<sup>b</sup>NSYR, National Survey of Youth and Religion.

dance, as well as religious salience. The religious affiliation of the parent respondent was measured in considerable detail, and then reduced to one of seven categories for ease of interpretation. Closely following Steensland et al.'s (2000) affiliation schema, the respondents were identified as "mainline Protestant," "evangelical Protestant," "Catholic," "Jewish," "Mormon," "other religion," "religiously unaffiliated," or "an undetermined religion" (Black Protestant was used as the comparison category). Attention was paid to potential collinearity problems between race/ethnicity and affiliation variables (e.g., Black Protestant, Mormon/Latter-Day Saints). Despite high correlations, removing one or the other (i.e., race or religious affiliation variable sets) offered no key gains either in model stability or interpretative sense; thus, both were included. Additionally, I paid close attention to the effects of two religiosity variables and a set of religious affiliations in the regression models. Given the relatively large sample sizes, low impact on shared variance in the estimates, recent indications that distinct forms of religiosity may influence behavior differently, and the reality that many people express a religious affiliation but vary widely in religiosity (and vice versa), the modeling decisions reflected here seemed appropriate and kept up with the research protocols in the study of religious effects.

Parallel with the Add Health data, I included measures of parent respondent's age and gender, child's gender and age, parent's education (average level between resident father and mother), a dichotomous indicator of family structure (parent respondent is currently married), parent's race/ethnicity (white, Asian, Hispanic, and other—compared with African American), and a three-item summed index of how satisfied the respondent is with how he/she relates to his/her parents (do they understand, love, and pay attention to the child;  $\alpha = .70$ ). As roughly parallel measures to the Add Health indicators of parental sexual values and children's values and knowledge/experience/opportunity about sex, I included the following: a dichotomous measure of the parent respondent's answer to the question, "Do you think that people should wait to have sex until they are married, or not necessarily?" (1 = should wait); a measure of whether the parent thinks the child is currently dating someone or not; a dichotomous measure of whether the child reported having already had sex (1 = yes); and a dichotomous indicator of the child's attitude about premarital sex (1 = people should wait until marriage for sex).

### Method of Analysis

I began by assessing bivariate relationships between the select frequencies of parent-reported communication and several of the independent variables for both data sets. For ease of comparison and interpretation, I dichotomized several variables (e.g., Add Health attendance and importance of religion) for this step only. This approach was meant to provide only a partial sense of the relationship between variables, focusing on the most extreme answers, and was not intended to convey a sense of the overall relationship. Presenting a comparison of means of ordinal variables, however, seemed needlessly confusing, and was thus not used. After this, I employed a series of ordered logit regression models in Add Health to assess the influence of the religion measures on parent-child communication in a multivariate setting. I examined religious effects first before adding other predictors. I also controlled in select models for the frequency of communication

about the morality of sex as a means to assess whether value transmission accounts for some of the frequency with which parents self-report communication about sex and birth control because some (but perhaps not all) parents may interpret conversations about “sex” and “sexual morality” similarly. Next, I focused on the NSYR analyses, generating comparable ordered logit models predicting both frequency of communication about sex and level of ease/difficulty with which parents rate such communication efforts. In keeping with the Add Health model-building strategy, I included a frequency of communication variable in my assessment of the ease with which the parent respondent reported communicating about sex. Because Add Health is a school-based sample, I controlled for three survey design effects (region, school identifier, and the probability of selection within classroom) using Stata’s survey estimators (e.g., *svytab*, *svylog*), which ensure nationally representative results. For the NSYR, I weighed to adjust for the number of household phone numbers and for modest unequal representation by region and household income and for the number of adolescents in the household.

## RESULTS

Table 2 provides basic frequencies of select responses (i.e., the top and bottom end of the ordinal scale) from Add Health and NSYR parents about their communication about sex-related topics, by select characteristics of interest. Almost 22 percent of parents who attended church at least once per week reported never talking about birth control with their adolescent child, compared with 15 percent of parents who attended services less often. No clear difference appeared with respect to talking about sex. More than 47 percent of regular churchgoers reported talking “a great deal” about the moral issues of sex compared with 32 percent of less frequent churchgoers. Comparable numbers appeared for parents who hold their religious faith to be “very important” and for those whose religion’s salience is less than that (except for talking “a great deal” about sex, where the numbers are reversed when compared with attendance). In contrast, there are few notable differences in the bivariate statistics about parental religiosity and the NSYR outcomes.

The different religious affiliations presented a more nuanced portrait. Parents who affiliate with traditionally Black Protestant churches clearly appeared to talk the most (and with the greatest ease) about all sex-related topics, whereas Jewish and unaffiliated parents can be distinguished by their lower levels of communication about sexual morality. Mormon parents appeared more likely to shun conversations about birth control than most other religious types. Few of the NSYR parents (and none among the Mormons) never talked with their adolescent child about sex. Mainline Protestants (in the NSYR) exhibited the smallest percentage of frequent communicators, as well as the smallest percentage of parents who felt considerable ease in talking about sex. Roman Catholic, Jewish, and Mormon parents reported comparably low levels of ease in communication. Black Protestant parents, on the other hand, reported considerable ease with only about 11 percent reported feeling great difficulty in talking about sex. Religiously unaffiliated parents were also unlikely to report difficulty in communication. The race/ethnicity measures displayed quite strong differences in both data sets. African-American parents

TABLE 2. Comparisons of Statistics on Parent–Child Communication about Sex, Birth Control, and the Morality of Adolescent Sex, Add Health and NSYR

Parent characteristics	Add Health percent of parents who do “not at all” talk to their children about . . .		Add Health percent of parents who talk a “great deal” to their children about . . .		NSYR percent of parents who talk to their adolescent about sex . . .		NSYR percent of parents who find talking about sex . . .		
	Sex	Birth control	Sex	Birth control	6 + times	Never	Very easy	Somewhat or very hard	
Attends religious services weekly or more	8.0	21.6	9.1	29.4	21.1	47.4	4.1	43.9	20.9
Attends religious services less than weekly	6.9	14.9	14.8	33.6	29.5	32.4	4.9	47.9	20.2
Religion is “very important”	7.5	19.0	10.3	33.8	26.0	45.8	4.2	47.0	20.0
Religion is not “very important”	7.1	14.9	16.3	29.4	26.8	26.0	5.5	43.5	22.1
Evangelical/conservative Protestant	5.6	16.1	9.0	36.7	26.3	47.9	3.3	45.8	19.0
Mainline Protestant	5.4	16.4	10.7	26.5	22.6	31.0	4.8	37.3	29.1
Black Protestant	5.2	12.2	10.7	53.4	44.6	55.2	2.8	67.4	11.1
Roman Catholic	9.8	20.0	14.9	28.3	23.9	34.1	6.0	40.4	23.1
Jewish	2.1	13.0	20.3	27.2	24.3	17.1	2.0	41.3	24.2

Latter-Day Saints/Mormon	5.6	23.7	11.5	25.1	11.6	52.5	63.6	0.0	40.3	27.4
Other religion	9.2	20.1	11.9	31.7	27.2	40.6	57.4	14.4	49.0	22.0
Religiously unaffiliated	9.4	14.9	24.5	27.9	28.4	21.8	63.3	7.2	48.9	15.1
African American	5.4	13.0	10.1	53.2	44.5	55.1	69.1	2.8	65.4	13.5
Asian American	26.1	39.4	24.8	19.7	18.5	32.4	24.7	22.7	36.0	40.0
Hispanic	16.1	23.6	17.9	29.5	26.3	39.7	53.0	6.5	46.1	22.9
White	5.7	16.2	11.7	30.2	24.4	36.1	61.1	4.2	41.6	21.3
Adolescent child is female	6.0	16.5	9.2	37.2	28.9	43.6	67.5	3.4	51.7	17.4
Adolescent child is male	8.6	18.2	16.0	27.1	23.9	32.6	54.4	5.7	40.6	23.7
N	10,278	10,278	10,278	10,278	10,278	10,278	3,089	3,089	2,714	2,714

Note: In NSYR, the comparison is between parents for whom religion is “extremely” or “very” important and those for whom religion is not so important as this.

reported significantly more communication both about sex and birth control than parents of any other race or ethnic group. Indeed, African-American parents were almost three times as likely as Asian-Americans to talk “a great deal” to their children about sex (in the Add Health). Finally, parents of adolescent girls were more likely to communicate “a great deal” about sex and the morality of sex than parents of adolescent boys. The gender and racial/ethnic differences in NSYR appeared comparable to those found in Add Health, and were consistent across both frequency of conversation and its ease/difficulty.

Table 3 displays odds ratios from a pair of ordered logit regression models of parent’s reported frequency of discussing the morality of sexual intercourse (Add Health). The first model simply examines the effect of religious affiliation, holding out Black Protestants as the comparison group. Only Mormon parents reported discussing sexual morality at a frequency similar to that of Black Protestants. Parents of all other religious affiliations reported significantly less conversation, especially Jewish and unaffiliated parents. In the second model, I added two religiosity measures and a number of parental and adolescent control variables. Net of other effects, unit increases in parental attendance and the importance of religion corresponded with more frequent communication about the morality of sex. When controlling for religiosity, only Jewish parents reported less frequent communication about the morality of sex when compared with Black Protestant parents.

Asian-American parents reported considerably less frequent communication about the morality of sex than African Americans (although white and Hispanic parents also appeared to talk less about morality). Morality conversations are also more common where the adolescent child is older, female, dating, displays above-average family well-being, and has taken a pledge of abstinence until marriage.

When the subject moved from morality to sex and birth control—in Table 4—a number of relationships changed. One that does not, however, is the clear likelihood of Black Protestants to discuss sex and birth control with their children consistently more frequently (from the initial models on both outcomes). Unlike with sexual morality conversations, there was clear evidence of misgivings about such communication on the part of parents who attend church regularly. With each unit increase in parental attendance, the frequency of communication about sex and birth control dwindled. In contrast, the importance of religious faith (a measure of personal religiosity) displayed an altogether different relationship. The more important religion is to the parent respondent, the *more* frequently they reported talking to their adolescent about both sex and birth control. Even with the religiosity and control variables, mainline Protestant, Roman Catholic, and respondents from other religions reported significantly lower frequency of communication about sex than Black Protestants. Moreover, when the subject turned to birth control, parents of every religious affiliation except Judaism reported lower levels of communication than Black Protestant parents.

The most illuminating story, however, emerged when accounting for the frequency with which parents said they talked to their children about the moral issues of adolescent sexual intercourse (in models 3 and 6). Regular church attendance still predicted significantly less communication about sex and birth control. However, the relationship

TABLE 3. Odds Ratios from an Ordered Logit Regression of the Parent-Reported Frequency of Discussion about Sexual Morality, Add Health

Parental religion measures <sup>a</sup>	Model 1	Model 2
Religious service attendance		1.148*** (.03)
Importance of religion		1.448*** (.06)
Evangelical Protestant	.811* (.07)	1.139 (.16)
Mainline Protestant	.502*** (.05)	.819 (.12)
Roman Catholic	.491*** (.05)	.770+ (.11)
Jewish	.189*** (.05)	.357*** (.09)
Latter-Day Saints/Mormon	.993 (.22)	1.364 (.34)
Other religions	.650*** (.07)	.998 (.15)
Religiously unaffiliated	.254*** (.03)	1.157 (.20)
Parental controls		
Average parental education		.819** (.06)
White		.804+ (.09)
Hispanic		.757+ (.11)
Asian		.559** (.11)
Age		.979*** (.00)
Female		1.306** (.11)
Biological two-parent family		.974 (.06)
Disapproves of sex at child's age		1.188*** (.03)
Thinks his/her child has already had sex		1.244*** (.08)
Frequency of talk about morality of sex		
Adolescent controls		
Female		1.648*** (.08)
Age		1.066** (.02)
School has sex education curriculum		.928 (.10)
Has taken virginity pledge		1.330*** (.08)
Family well-being		1.026** (.00)
Number of recent romantic partners		1.076** (.03)
Model fit statistics		
-2 Log L	37,706.5	36,595.3
Pseudo R-square	.016	.045
N	13,726	13,726

\* $p < .10$ ; \*\* $p < .05$ ; \*\*\* $p < .01$ ; \*\*\*\* $p < .001$ .

<sup>a</sup>Black Protestant is the religious affiliation comparison category.

between parental importance of religion and communication about sex and birth control disappeared. In fact, this variable became significant in an inverse direction (in the birth control model, column 6); that is, parents for whom religion is important appeared to report less communication about birth control than parents whose religious faith is not as important. What this pattern may indicate is that when more devoutly religious parents (as measured by religious salience) reported that they talk frequently with their ado-



TABLE 4. Odds Ratios from an Ordered Logit Regression of the Parent-Reported Frequency of Discussion about Sex and Birth Control, Add Health

Effect	Frequency of talk about sex			Frequency of talk about birth control		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Parental religion measures <sup>a</sup>						
Religious service attendance						
Importance of religion						
Evangelical Protestant	.516*** (.06)	1.224*** (.06)	.970 (.05)	.501*** (.06)	1.101* (.05)	.887** (.04)
Mainline Protestant	.428*** (.05)a	.757+ (.12)	.637** (.10)	.484*** (.06)	.671** (.09)	.582*** (.08)
Roman Catholic	.369*** (.04)	.648** (.10)	.689* (.11)	.424*** (.05)	.705** (.09)	.722** (.08)
Jewish	.394*** (.09)	.638+ (.17)	1.305 (.38)	.517*** (.10)	.664** (.09)	.701** (.08)
Latter-Day Saints/ Mormon	.508** (.11)	.935 (.22)	.696 (.15)	.379*** (.09)	.814 (.09)	1.531+ (.34)
Other religion	.454*** (.06)	.708* (.11)	.635** (.10)	.481*** (.06)	.634* (.05)	.497*** (.10)
Religiously unaffiliated	.365*** (.05)	.679+ (.15)	.531** (.11)	.528*** (.07)	.677** (.09)	.629*** (.08)
Parental controls						
Average parental education						
White		1.063 (.07)	1.241*** (.08)		.946 (.06)	1.036 (.07)
Hispanic		.755* (.09)	.802* (.09)		.841 (.11)	.891 (.10)
Asian		.542*** (.07)	.549*** (.07)		.660** (.09)	.701** (.09)
Age		.295*** (.05)	.340*** (.05)		.407*** (.07)	.479*** (.08)
Female		.965*** (.00)	.972*** (.00)		.962*** (.00)	.968*** (.00)
Biological two-parent family		1.300** (.12)	1.159+ (.10)		1.231* (.10)	1.102 (.09)
		.780*** (.04)	.751*** (.04)		.768*** (.04)	.745*** (.03)

Disapproves of sex at child's age	1.094*** (.03)	.988 (.02)	1.011 (.02)	.921*** (.02)
Thinks his/her child has already had sex	2.359*** (.16)	2.542*** (.20)	2.949*** (.19)	3.116*** (.20)
Frequency of talk about morality of sex		3.787*** (.16)		2.841*** (.09)
Adolescent controls				
Female	1.544*** (.08)	1.201*** (.06)	1.228*** (.06)	.977 (.05)
Age	1.096*** (.02)	1.070*** (.02)	1.134*** (.02)	1.120*** (.02)
School has sex education curriculum	1.132 (.14)	1.230 (.17)	1.143 (.12)	1.205 (.14)
Has taken virginity pledge	1.092 (.07)	.920 (.06)	.983 (.07)	.839* (.07)
Family well-being	1.036** (.00)	1.027** (.01)	1.028** (.01)	1.018* (.01)
Number of recent romantic partners	1.154*** (.03)	1.138*** (.03)	1.128*** (.03)	1.105*** (.03)
Model fit statistics				
-2 Log L	35,159.6	30,060.2	37,806.5	34,324.0
Pseudo R-square	.012	.188	.053	.140
N	13,726	13,726	13,726	13,726

\*p < .10; \*\*p < .05; \*\*\*p < .01; \*\*\*\*p < .001.

<sup>a</sup>Black Protestant is the religious affiliation comparison category.

lescent about sex and birth control, this *may* refer primarily to moral socialization rather than other forms of conversation such as giving information or advice (e.g., how to resist unwanted pressure). Most religious affiliation effects remained largely stable when controlling for discussions about the morality of sex. Inversely, Jewish effects in models 3 and 6 became slightly positive, probably indicating that their initial low communication patterns were primarily a result of their comparative reticence to discuss sexual morality. On the other hand, evangelical Protestants' (and to a less consistent extent Mormons and respondents of other religions) communication patterns about sex and birth control appeared more likely to hinge on sexual morality, that is, their likelihood of talking about either sex and birth control diminishes when controlling for sexual morality conversations.

The religious influences documented here exhibit notable influence even while controlling for consistent demographic effects, including mother's education, race/ethnicity, gender, age of parent and child, and family structure. As highlighted in the conceptual model, parental disapproval of adolescent sex and parental notions that their child has already had sex, as well as parents of frequent daters, are all variables that shape communication about sex and birth control. The positive influence of parental disapproval (on communication about sex) before controlling for morality discussions, and its negative effect on communicating about birth control (after controlling for morality discussions) further suggests that talking about sex is, for some, closely connected with discussing sexual morality. Finally, no effect emerged for parents whose children are in schools that offer a sex education curriculum.

Table 5 displays odds ratios from ordered logit regressions of parent-reported frequency and ease with which he/she talked with his/her adolescent child about sex (NSYR). The first and fourth models/columns examined only religious affiliation differences in communication frequency. A glance at the model fit statistics reveals that neither affiliation nor religiosity lends much in the way of predicted variation in communication frequency. Nevertheless, an identical pattern emerges here when compared with the Add Health analyses in Table 4. Parental attendance is inversely related to more extensive communication, whereas religious salience positively predicts greater communication. The religious effects are nevertheless weaker than in Add Health, *perhaps* indicating change in communication practices of religious parents between the mid-1990s and 2002. The odds of mainline Protestants communicating more frequently about sex are only about half that of Black Protestant parents. Roman Catholic (and to a lesser extent evangelical Protestant and other religion) effects appeared comparable to the mainliners.

Models 4–7 examine parental ease of communication about sex. Again, Black Protestant parents seemed most at ease with such conversations, and parental attendance remained related to greater unease, independent of how often such parents talk with their adolescent children about sex. With each unit increase in attendance, there is a 6–8 percent decline in the odds that a parent feels ease in talking about sex. An initially positive influence of religious salience is mitigated by the addition of parental and adolescent control variables. Mainline Protestant parents feel greater unease in communicating about sex than do Black Protestants; a modest Catholic effect here largely disappeared after con-

TABLE 5. Odds Ratios from Ordered Logit Regressions of the Parent-Reported Frequency and Ease/Difficulty of Talking about Sex, NSYR

Effect	Frequency of talking about sex			Ease of talking with child about sex			
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Parental religion measures <sup>a</sup>							
Religious service attendance		.952* (.02)	.980 (.02)		.920*** (.02)	.936** (.02)	.938* (.02)
Importance of religious faith		1.107* (.04)	1.091* (.05)		1.115** (.05)	1.080+ (.05)	1.058 (.05)
Evangelical Protestant	.700* (.10)	.708* (.11)	.587* (.16)	.415*** (.06)	.414*** (.06)	.577+ (.17)	.677 (.23)
Mainline Protestant	.514*** (.08)	.525*** (.09)	.444** (.12)	.273*** (.05)	.266*** (.05)	.414** (.13)	.485* (.17)
Roman Catholic	.533*** (.08)	.544*** (.08)	.519* (.14)	.334*** (.05)	.330*** (.05)	.484* (.15)	.574+ (.19)
Jewish	.625* (.13)	.641* (.14)	.585+ (.19)	.334*** (.08)	.322*** (.08)	.585 (.21)	.655 (.25)
Latter-Day Saints/Mormon	.720 (.21)	.730 (.21)	.544 (.21)	.303*** (.09)	.312*** (.09)	.466+ (.19)	.561 (.23)
Other religion	.474* (.15)	.478* (.15)	.582 (.21)	.438** (.12)	.425** (.12)	.695 (.25)	.719 (.29)
Religiously unaffiliated	.702+ (.15)	.727 (.17)	.728 (.23)	.489*** (.10)	.438*** (.10)	.670 (.23)	.683 (.25)

TABLE 5. *Continued*

Effect	Frequency of talking about sex	Ease of talking with child about sex
Parental controls		
Parents' education	1.007 (.02)	.940** (.02)
White	1.403 (.33)	.757 (.21)
Hispanic	.937 (.25)	.728 (.23)
Asian	.323** (.12)	.515 (.27)
Age	.977***	.991 (.01)
Female	1.982*** (.22)	1.494*** (.15)
Respondent parent is married	.862 (.08)	.902 (.08)
Thinks people should wait to have sex until married	1.037 (.10)	1.132 (.11)
Knows or thinks child is dating	1.200*** (.06)	1.138* (.06)
		1.220* (.12)
		.908 (.08)
		1.136 (.12)
		1.078 (.06)

Frequency of talking about sex					2.923*** (.18)
<b>Adolescent controls</b>					
Female			1.703*** (.14)		1.341*** (.11)
Age			1.084* (.03)		1.005 (.03)
Has already had sex			1.313* (.16)		1.407** (.17)
Thinks people should wait until married to have sex			.999 (.10)		1.070 (.10)
Quality of relationship with parents			1.042 (.03)		1.093*** (.03)
<b>Model fit statistics</b>					
-2 Log L	6391.7	6381.1	6157.8	6344.4	6191.1
Pseudo R-square	.005	.007	.041	.017	.041
N	3089	3089	3089	2840	2840
				6326.8	5776.0
				.020	.105

\*p < .10; \*\*p < .05; \*\*\*p < .01; \*\*\*\*p < .001.

<sup>a</sup>Black Protestant is the religious affiliation comparison category.

trolling for communication frequency (in the final model). Several demographic and behavioral effects (e.g., parent's age and race/ethnicity, mother's education, child's age, gender, dating habits, and sexual experience) displayed comparable relationships with one or both outcomes in a manner consistent to those found using the Add Health data. Interestingly, the parent's gender (i.e., female) mattered substantially *more* in NSYR analyses than it did in Add Health. It should be noted that in both NSYR and Add Health analyses, indirect relationships between religion and the outcome variables are very likely (although unexplored here), because religiosity is linked with sexual attitudes (e.g., pledging virginity) and behavior (e.g., virginity status).

## DISCUSSION

Although few studies of the sexual socialization process have examined religious influences, the results here suggest that parental religion deserves closer scrutiny. Mainline Protestants appear to talk least about sex and with greater unease (in the NSYR), whereas evangelical Protestants, Catholics, Mormons, and the religiously unaffiliated appear to talk the least about birth control. Nevertheless, the collective effect of affiliation is fairly modest. Indeed, there is considerable variation (much of it unexplained) in parental communication about sex and contraception and although some parents find such conversations uncomfortable, most still communicate (Fox and Inazu 1980; Hutchinson and Cooney 1998; Jordan et al. 2000). Few altogether refuse such opportunities, yet among those parents that do communicate, a significant number prefer to stick to moral values about sexual practice and contraception.

The results provide ample evidence that parental religious affiliation and religiosity is, in fact, related to communication frequency, although the story is not a simple one. When religious parents say they are talking to their children about sex and birth control (in Add Health), the results suggest that this primarily refers to conversations about the morality of adolescent sexual involvement. Regular church attendance contributes to less frequent conversations both about birth control and sex (in both data sets), but more frequent conversations about the moral issues involved in adolescent sex. Additionally, parents who attend religious services frequently also display greater unease with sex-related communication, even after controlling for frequency of such communication.

In each Add Health baseline model, religious salience is, at first, positively related to greater communication about both sex and birth control. Yet once conversations about its morality are taken into account, no relationship remains between religious salience and talking about sex, and an inverse relationship appears with communicating about birth control. Using NSYR data, religious salience is positively related to more frequent conversations about sex, but only initially predictive of ease of communication. Unfortunately with the NSYR, there is no ability to assess whether these are primarily conversations about moral aspects of adolescent sexuality.

Why might public religiosity (i.e., attendance) consistently predict less frequent communication while religious salience—at least tentatively—predicts the opposite?



Although it is beyond this study's analytic ability to answer this question without a considerable measure of reserve, the answer may draw upon the public/private divide that such measures are often thought to tap. That is, public religiosity may emphasize parent-child value similarity and outward obedience, and thus relate primarily to sharing moral values about appropriate sexual behavior. More inwardly religious parents may be apt to believe that more frequent conversations about sex in general is not only profitable for its value transmission opportunities but also corresponds with a more well-rounded sexual socialization of their adolescent children. Put differently, such parents may think they *ought* to be talking about sex, and appear to do so with sufficient ease. Yet what remains evident with the Add Health data is that even these parents (i.e., high in religious salience) are still primarily talking about values when they are talking about "sex." Less religious persons appear less likely to equate conversations about the morality of sex with conversations about sex per se. More religious parents, as well as parents from more conservative religious traditions (e.g., evangelical Protestantism, Latter-Day Saints) are conversely more likely to equate the two.

That greater religiosity (and to some extent, religious conservatism) lends itself to a higher frequency of morality-focused communication is not surprising. From popular authors, we know that devoutly religious parents often see themselves as competing with a sex-saturated popular culture and mass media for the sexual socialization of their children (Dobson 1999; McDowell and Hostetler 2002). Moreover, talking about contraception may appear to equip adolescents to engage in planned sexual behavior. The stronger overall influence of religion on less frequent conversations about contraception (compared with conversations about sex) in the Add Health results makes sense in this light. Other studies have noted similarly: Thornton and Camburn (1989) concluded that less open dialogue, information, and support for using birth control followed from their study results concerning devout teenage women.

The conceptual model explored here did not distinguish between sex and contraception conversations, between information and values transmission, or between public and private forms of religiosity. Such alterations, however, appear merited. Nevertheless, defining why some religious parents choose to share information and/or practical advice as well as sexual values, whereas others prefer to stick with values, cannot be ascertained from this analysis. Such requires either more in-depth survey questions on the subject, or better yet, in-person interviews with parents (Bartle 1998).

On other counts the conceptual model makes sense. The model suggested that the parents' decisions to communicate are indeed in part a function of (or response to) how urgent, necessary, or appropriate such conversations appear to be (and this is based on parental perceptions about the adolescent's age, values, experience, and so on—some of which are likely related to parental religiousness). Two measures about the morality of adolescent sex—parental disapproval of it and the adolescent's pledge not to engage in it—display inverse relationships with talking about birth control. Such parents appear more likely to feel that a discussion of birth control is counterproductive or unnecessary. Using either data set, dating behavior also appears to motivate such conversations, as well as the ease with which they are carried out (NSYR). Each of these may indicate

parental perceptions about the importance or urgency (or lack thereof) of such conversations.

Older parents were consistently more likely to refrain from communication (using either data set), suggesting a generational or cohort difference in norms about sexual socialization. That parental age and race is correlated with religious practice (e.g., African Americans are generally more devout than whites) also indicates that some statistical influence of religion may be masked when we include demographic controls. Yet what is clear from the results is that African-American parents make sex-related communication with their adolescent children a notable priority.

Finally, several limitations confront this study. First, religious parents who largely refrain from communicating about sex and birth control have reasons for doing so, although what they are is not ascertainable with either data set. Thus, a study to further pursue exactly why devoutly religious parents are more apt to refrain from discussing sex and birth control, and to ascertain the substance of what they convey to their children, is clearly in order. Second, the data sets used here are restricted to assessing *verbal* communication. Parent-child communication, perhaps even with respect to sexuality, may not always be in the form of verbal, two-way conversations. Parental sentiment about adolescent sexual behavior can be conveyed (1) without the use of much conversation, or (2) indirectly through a parent's comments in response to news about, or televised displays of, others' sexual behaviors. Third, both data sets are more apt to accurately identify mothers' communication habits (especially with their daughters) because they were more likely to complete the parent survey. I am less confident that this study assessed how fathers communicate, especially with their sons. Although parent and child gender were controlled in the analyses, this strategy is no substitute for a more extensive sample of men as well as a more thorough examination of the father-son sexual socialization process. Finally, there remain a variety of important and distinctively religious mechanisms (e.g., sanctions, elective incentives for virginity, modesty, shame, or guilt) that may be important for this study, and that are not easily identifiable using measures of religiosity or religious affiliations.

## CONCLUSION

Popular commentaries suggest that adolescents are being exposed more intensively to sex, and at earlier ages, than ever before. Although many parents claim to be talking to their adolescent children about sex and birth control, what exactly parents are communicating is less clear. Devoutly religious parents (especially when measured by frequency of attendance) appear somewhat less apt to talk to their children about sex and birth control, as well as more likely to report difficulty communicating. When such parents do communicate, they appear most likely to convey sexual values. A similar pattern appears among several religious affiliations when compared with Black Protestants (the most common form of African-American religious allegiance). In general, parental religion still appears to be less influential on communication habits than several demographic characteristics of parent and child (e.g., age, race/ethnicity, gender). This evaluation of a conceptual

model of religious influence on sexual socialization suggests distinguishing between sex and birth control as well as between information and values when examining the role of religion in shaping parental communication habits.

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