Marital Quality and Parent-Adolescent Relationships

Effects on Adolescent Religiosity and Religious Practice

U.S. Department of Health & Human Services
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Office of the Assistant Secretary for Planning and Evaluation

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Prepared for: **The Office of the Assistant Secretary for Planning and Evaluation**

Department of Health and Human Services

Prepared by: Randal D. Day
Hinckley Jones-Sanpei
Jessica Price
Brigham Young University

With: Dennis K. Orthner
University of North Carolina at Chapel Hill

Elizabeth Hair
Kristin Anderson Moore
Child Trends, Inc.

Kelleen Kaye
NORC at the University of Chicago

February 2008

This report was produced as part of a series of reports and briefs on the effects of marital quality and parent adolescent relationships on outcomes for adolescents and young adults. The series was prepared under the direction of Linda Mellgren under ASPE contract HHSP23320045020XI06, Task Order #3 with NORC and Child Trends. Any opinions, findings, conclusions, or recommendations expressed in this report are those of the authors and do not necessarily reflect the views of ASPE or DHHS.

The entire series can be found at http://aspe.hhs.gov/hsp/08/RelationshipStrengths/. This report can be found at http://aspe.hhs.gov/hsp/08/RelationshipStrengths/Religiosity. A version of this report, was also published under the title *Family Processes and Adolescent Religiosity and Religious Practice*, in *Marriage and Family Review*, Volume 45, Issue 2/3.

Marital Quality and Parent-Adolescent Relationships:

Effects on Adolescent Religiosity and Religious Practice

Executive Summary

This report focuses on family processes and adolescent religious attendance and personal religiosity among youth who were raised primarily in married-parent families. We find that the closeness and quality of the marital relationship and relationship between adolescent and parents significantly contributes to the strength of adolescent religious conviction and practice. The study used data from the National Longitudinal Survey of Youth, 1997 cohort (NLSY97). Sample includes only youth living in married-parent families at the time of the first wave of data collection. Predictors include family processes (parenting style, closeness, and parent/child closeness); marital/family structure (divorce and length of marriage); family characteristics (e.g., income, employment, parental education, mother's age at first birth, and number of siblings); adolescent characteristics (e.g., age, gender, race/ethnicity, disability, lying or cheating); and environmental characteristics (e.g., region of country, urbanicity, and physical environment risk).

Additional findings indicate that when these adolescents were age 16, family religious attendance was dramatically influenced by race: Black, non-Hispanic adolescents were 138% more likely to attend religious services weekly with their families than White adolescents. Hispanic adolescents were 56% more likely to attend church weekly than White adolescents. Adolescents living in any other region of the country were more likely to attend weekly worship services than adolescents living in the Northeast. Adolescents living with married, biological parents in 1997 were 36% more likely to attend worship services than those living with stepfamilies. Also, when 16-year-old adolescents had siblings and peers who attended services and planned on going to college, and their parents were more involved in school-related

activities, they were more likely to attend services. On the other hand, adolescents who lived in a more physically risky environment, with peers who belonged to gangs, cut classes, or had sex, were less likely to attend weekly worship services with their families. Finally, compared with adolescents whose parents had a high quality marital relationship and who had good relationships with both parents, all other adolescents were less likely to attend weekly worship services with their families.

We also examined similar influences on religious attendance by the time the target child turned 20 years old. Although other factors (gender, race, region) significantly influenced religious attendance when the adolescent was 20 years old, the overwhelmingly single most important indicator of religious attendance at 20 years old was family religious attendance when the adolescent was 16 years old.

Marital Quality and Parent-Adolescent Relationships: Effects on Adolescent Religiosity and Religious Practice

Introduction

This report focuses on the associations of parental marital quality and the parent-adolescent relationship with adolescent religious attendance and personal religiosity. To that end, we find that the closeness and quality of the marital relationship and the relationship between adolescent and parents significantly contributes to the strength of adolescent religious conviction and practice.

Researchers care about the concept of religiosity for a variety of reasons. As a cultural phenomenon, it is clear that, in the United States at least, the vast majority of the population claims a belief in God (albeit that belief takes on an immense variety of forms) (Smith, 2005). Additionally, while attendance at religious services, *per se*, had decreased dramatically in the past 50 years, most U.S. parents think that the transmission of religious orientation or some form of universal moralistic ideals to their children is important (Smith, 2005). Parents generally believe that adherence and subscription to moral ideals (of whatever sort) will favorably influence children to make more risk-averse choices as they transition into adulthood. Belonging to community-based organizations creates social capital (Coleman 1991; Putnam, 2004), which can be converted into tangible resources during key life transitions and can be cashed in during times of difficulty, stress, and crisis.

More specifically, adolescent religiosity has been associated with a number of positive outcomes. For example, adolescents who report regular attendance at religious services and who pray are less likely to smoke cigarettes and are more likely to quit smoking if they have already

begun than their peers who do not attend services (Van Den Bree, Whitmer, & Pickworth, 2004). Internal manifestations of spiritual beliefs can be used to cope with difficulties and have been linked to a variety of positive health outcomes including healthier diets, higher seatbelt use, and less drug use than adolescents who do not report that spirituality or religion is influential in their lives (for review, see Rew & Wong, 2006).

Other studies have found similar associations between adolescent religiosity and drug use: Bahr, Maughan, Marcos, & Li (1998) found that adolescent religiosity was a more powerful protective factor for drug use than parenting style, and in some cases was a more significant predictor of lower drug use than monitoring and the father-adolescent relationship. Additionally, these authors found that religious adolescents were more likely to have close friends who did not use drugs.

Adolescent religiosity is also associated with issues related to sexual behavior and certain health outcomes. Researchers found that religious adolescents were more likely to delay the onset of sexual activity past early adolescence (Hubbard-McCree, Wingood, DiClemente, Davies, & Harrington, 2003; Lammers, Ireland, Resnick, & Blum, 2000) and when they did choose to become sexually active were more likely to use condoms (Hubbard-McCree et al., 2003). In like manner, adolescents who attended religious services more frequently were also more likely to perceive the risks associated with sex, including disease transmission and pregnancy, as higher than adolescents who attended religious services less frequently (Miller & Gur, 2002). Other positive outcomes associated with adolescent religiosity include building social capital and developing trust (Ebstyne-King & Furrow, 2004). Additionally, religiosity appears to serve as a buffer for negative life events, such as experiencing violence in the community, with more religious adolescents being less likely to develop negative conduct

problems after witnessing or experiencing violence (Pearce, Jones, Schwab-Stone, & Ruchkin, 2003).

Religiosity has frequently been measured using two conceptual domains: proximal religiosity and distal religiosity (Cotton, Zebracki, Rosenthal, Tsevat, & Drotar, 2006). Proximal religiosity focuses on the internal processes associated with being religious and measures such things as spiritual beliefs, how spiritual beliefs influence perceptions and actions, and what religion or spiritual beliefs mean to adolescents. Distal religiosity measures more overt religious behaviors including prayer, attendance at religious services, attendance at adolescent-oriented religious programs, and family religious activities, such as family prayer or studying religious texts together (Cotton et al., 2006). Although some studies have examined these proximal and distal processes separately, most researchers combine items and measure the two domains but treat them as one overall general measure of religiosity (Rew & Wong, 2006).

Religious beliefs and behaviors are, in general, an excellent example of how researchers can develop measures of positive behaviors and attitudes in adolescents. In addition, most researchers would subscribe to the idea that one's positive value systems, including political orientations, lifestyles, and personal ethical codes, are transmitted from their parents and other family members. Researchers also have asserted that development of ethics and values can be directly connected to the development of pro-social behaviors and perceptions (Rew & Wong, 2006).

Family Processes

Family processes have been suggested as one potential mechanism for the development or continuation of religiosity in adolescence (Bahr, Hawks, & Wang, 1993; Giesbrecht, 1995). Within the current collection of reports and briefs for this project, the conceptualization and

definition of family processes has been presented elsewhere. See Hair, et.al., "Marital Quality and Parent-Adolescent Relationships: Components of Relationship Strengths in Married Parent Families" Also see Day, Gavazzi, Miller, and van Langeveldt (in press) for a further clarification and elaboration of what is meant by *family processes*. With regard to this report, we note that family processes have been suggested as one potential mechanism for the development or continuation of religiosity in adolescence (Bahr et al., 1993; Giesbrecht, 1995). As is mentioned in other reports within this project, family processes are considered to be the strategies, interactions, and patterns families use to achieve goals, such as the socialization of children or the transmission of values (Day, Gavazzi, & Acock, 2001). These processes can be understood in terms of domains that represent the goals family systems work toward: provisioning, providing, protecting, teaching, and nurturing. The interactions, or processes, family members enact represent these domains. For example, parental monitoring is a strategy parents may use in order protect their children from negative outcomes, such as delinquency or sexual activity, and relationships within the family provide opportunities to nurture and teach family members.

Parenting styles (defined and assessed as a kind of family process) have been linked to adolescent religiosity in previous studies. Specifically, adolescents with parents who engage in authoritative parenting, indicating high parental expectations with high supportiveness, have higher levels of religiosity related to personal feelings of spirituality (Giesbrecht, 1995). In a study by Luft (1987), the interaction of parental control and parental nurturing for both mothers and fathers was significantly associated with adolescent religiosity. Agreement in parenting style between spouses is also an important predictor of adolescents' internal religious and spiritual

feelings (Giesbrecht, 1995). In one study, these findings were significant even when controlling for parents' own religious feelings and commitments (Giesbrecht, 1995).

Parent/Adolescent Relationships and Religiosity

The relationships between parents and adolescents are also associated with adolescent religiosity. Adolescents with secure attachments to their mothers are more likely to report high religiosity due to personal conviction and the transmission of values from their mothers. These adolescents were also less likely to report their reasons for religiosity as being related to intense emotionality or compensation for insecurities, unlike less securely attached adolescents (Granqvist, 2002). Strong and positive parent-child relationships are also associated with an increase in the likelihood of the parents' religious values being transmitted to and embraced by their adolescents (Hodge, Petrillo, & Smith 1982). More specifically, adolescents who feel that their family relationships are warm and close are more likely to have religious beliefs and engage in religious practices (for review, see Clark & Worthington, 1990).

Relationships between parents are also important in predicting adolescent religiosity. Adolescents whose parents have low levels of conflict are more likely to be religious. Additionally, adolescents who report that their parents have low marital discord are more likely to be influenced by their parents' religious beliefs (for review see Clark & Worthington, 1990). When moderated by a nurturing relationship, higher parental control is associated with religiosity and the transmission of religious values from parents to children (Luft, 1987).

Purpose of the Present Study

In this report we seek to understand the role that parental marital quality, the parent-adolescent relationship, and key family processes play in fostering higher levels of adolescent religiosity net of other predictors. Given that adolescent religiosity is related to adolescent

development, we examine whether and how patterns and processes of daily family life can and do significantly contribute to the strength of adolescent religious conviction and practice. Of course, we are assuming in this report that the connections between family process constructs and adolescent religiosity reflect a causal linkage between family and greater child religiosity; however, we control for many other factors to account for confounding influences. We also assume that this linkage would be most important when a family's ideological orientation locates religiosity in a high priority. While we cannot test that linkage or ideological assumption in this report, we do explore if similar family process effects that occur in early adolescent life extend in influence once the child reaches young adulthood.

Data and Methods

Data

The National Longitudinal Survey of Youth, 1997 cohort (NLSY97), is a nationally representative sample of 8,209 adolescents, ages 12–16 in 1997, who have been surveyed over time. The survey is sponsored by the Bureau of Labor Statistics of the U.S. Department of Labor and examines school progress, labor force behavior, and the transition from school to work. To accomplish this task, extensive information is collected on the adolescent's labor market behavior and educational experiences. The NLSY97 also collects data on a broad array of child and family interactions and relationships, as well as adolescent health-related behaviors.

Sample

We limited our sample to 3,316 respondents who were 12 to 14 years old in December 1996 and whose parents were married at the time of the interview in 1997. We included individuals who had valid data for our outcome variables (i.e., *physical health, mental health, smoking, drug use,* and *drinking*). The total sample (N = 3316) was 52.35% males (n = 1736) and

47.65% females (n = 1580). The race and ethnicity breakdown was as follows: 59.74% non-Hispanic White (n = 1981), 21.53% Hispanic (n = 714), 17.79% non-Hispanic Black (n = 590), and 0.93% mixed race (n = 31).

Religiosity Outcome Measures

Three religiosity outcome measures are used. The first religiosity outcome measure is a dichotomous variable indicating whether or not the family attended a religious activity at least once a week when the adolescent was 16 years old. Just over 50% of the respondents (51.39%) indicated that their family attended a religious activity at least once a week; 32.54% of the respondents reported their family did not attend weekly religious activities (Table 1). The second religiosity outcome measure is a dichotomous variable indicating whether the respondent attended a religious activity at least twice a month when 20 years old. Just over 20% of the respondents (21.98%) reported they attended worship services at least twice a month; 59.75% of the respondents indicated they did not attend worship services, or attended less than two times each month (note that the remaining percentage was do to missing data).

The third religiosity outcome measure is a scale summing five dichotomous items. The items included questions on values, religious writings, prayer, and whether the adolescent involved God in his or her life. The mean was 2.73 on a range of 0 to 5, the standard deviation was 1.52, and the distribution approximately normal. A description of the respondent sample with respect to the religiosity outcome indicators is provided in Table 1.

Table 1. Description of Outcome Measures

	Yes	**No**	**missing**
Family weekly religious activity at youth age 16	1704 (51.39%)	1079 (32.54%)	533
Youth attended worship services at least twice a month at age 20	729 (21.98%)	1981 (59.74%)	606
Youth religiosity in 2002	Mean 2.73	St. Dev. 1.52	329

Note: The third row of the table is not parallel in content with the Yes and No columns

Predictor Variables

We examined the quality of the parent marital relationship and the quality of the parent-adolescent relationships as potential predictors of the religiosity outcome measures. In order to assess marital quality, we examined Round 1 adolescent perceptions of the levels of support and conflict that characterized the marital relationship. Adolescents were asked to report on both their father's behavior toward their mother and their mother's behavior toward their father. The support behaviors that were addressed included willingness to compromise, expression of affection, and expression of encouragement. The conflict behaviors that were addressed included screaming, criticism, and tendency to place blame on the other. The likelihood of each behavior was assessed on the following scale: 0 = Never, 1 = Rarely, 2 = Sometimes, 3 = Usually, and 4 = Always. Negative behavior items were reverse-coded for data analysis.

Quality of the parent-adolescent relationships was measured by examining adolescent perceptions during Rounds 1, 2, and 3 of their relationships with their mothers and their relationships with their fathers. Respondents were asked to report on a number of perceptions, including the following: admiration for the parent, the degree to which he or she enjoys spending time with the parent, frequency of praise received from the parent, frequency of criticism from the parent, frequency of help from the parent, reliability of the parent, and frequency of blame placed on the respondent by the parent.

We conducted a latent class analysis in order to determine the marital relationship and the parent-adolescent relationship profiles that were occurring within the sample. Latent class analysis (LCA) is a statistical technique for examining relationships in categorical data. LCA identifies a set of mutually exclusive latent classes that account for the distribution of cases

occurring within a cross tabulation of discrete variables (McCutcheon, 1987). An extension of LCA is Latent profile analyses (LPA). LPA allows for the use of continuous variables. This technique determines the number of classes needed for describing the associations among the variables addressing the construct. For the LPA, we examined the associations between 12 marital quality variables. The 12 marital quality variables included six variables addressing adolescent reports of mothers' behaviors towards the fathers and six variables addressing adolescent reports of fathers' behaviors towards the mothers. The LPA yielded four profiles of parental marital quality: (1) high support and low conflict; (2) high support and high conflict; (3) low support and low conflict; and (4) low support and high conflict.

In addition, we conducted latent growth profile analyses (LGPA) on six composite parent-adolescent relationship scores. The six composite parent-adolescent relationship scores included assessments of the adolescent-father relationship and assessments of the adolescent-mother relationship at Rounds 1, 2, and 3. The LGPA also yielded 4 profiles: (1) low quality relationship with both parents over time; (2) sustained high quality relationship with the mother only; (3) sustained high quality relationship with the father only; and (4) sustained high quality relationship with both parents.

By combining these two sets of profiles, we found the following six distinct combined marital quality and parent-adolescent groups: (1) high marital quality and good relationships with both parents, (2) high marital quality and a good relationship with one parent, (3) high support and high conflict marital quality and a good relationship with at least one parent, and (4) low marital quality and a good relationship with at least one parent, (5) high marital quality and bad relationships with both parents, and 6) low marital quality and bad relationships with both parents.

Class one accounted for 47.81% of the sample. Adolescents in this group reported that their parents' marriage was characterized by supportive behaviors and low levels of conflict. Additionally, these adolescents reported high levels of supportive behaviors and low levels of conflict with both parents. Class two accounted for 12.27% of the sample. Adolescents in this group reported that their parents' marriage was characterized by supportive behaviors and low levels of conflict. Additionally, these adolescents reported sustaining a high quality relationship with one of their parents. Class three accounted for 18.26% of the sample. Adolescents in this group reported that their parents' marriage was characterized by high levels of supportive behaviors and high levels of conflict and unsupportive behaviors. These adolescents also reported having a good relationship with one or both of their parents. Class four accounted for 13.63% of the sample. Adolescents in this group reported that their parents' marriage was characterized by either low levels of support and low levels of conflict or low levels of support and high levels of conflict. Additionally, these adolescents reported having a good relationship with one or both of their parents. Class five accounted for 3.77% of the sample. Adolescents in this group reported that their parents' marriage was characterized by high levels of support and low levels of conflict. Adolescents in this group also reported engaging in few supportive behaviors and high levels of conflict with both parents. Finally, class six accounted for 4.25% of the sample. Adolescents in this group reported that their parents' marriage was characterized by either low levels of support and low levels of conflict, low levels of support and high levels of conflict, or high levels of support and high levels of conflict. These adolescents also reported engaging in few supportive behaviors and high levels of conflict with both parents.

Contextual Variables

We also examined a number of variables as potential covariates in the relationship between marital quality/parent-adolescent relationship and religious activity outcomes. These covariates can be divided into the following five categories: (1) marital characteristics, (2) family characteristics, (3) adolescent characteristics, (4) peer characteristics, and (5) environmental characteristics.

The *marital characteristics* that we examined as potential covariates were as follows: (1) Whether or not the adolescents' married parents were the adolescent's biological parents, (2) the length of the marriage between the two parents, and (3) whether or not the parents experienced a marital disruption between Rounds 1 and 3 (between 1997 and 1999). Though all of the parents in our sample were married during the time of the Round 1 interview, some of the parents in the relationship were step or adoptive parents to the adolescents and some were biological parents. For this covariate, we divided respondents based on whether or not they lived with two biological parents. For the length of the parent's marriage covariate, we divided respondents into the following four categories: (1) 0 to 9 years, (2) 10 to 19 years, (3) 20 to 29 years, and (4) 30 years or more. A marital disruption was defined as any change in the marital structure of the parents.

The *family characteristics* that were examined as potential covariates included the following: (1) family income, (2) number of siblings, (3) age of the biological mother at the time of the adolescent's birth, (4) parental employment status, (5) the highest level of education between both parents, (6) parent involvement in the respondent's school, and (7) family religious activities when the adolescent was 16 years old. *Family income* was assessed using an income-to-poverty ratio calculation. Respondents were divided into the following four categories based

on their income-to-poverty ratio: (1) Income-to-poverty ratio was less than 100% (9.50% of the sample), (2) income-to-poverty ratio was between 100% and 199% (13.78% of the sample), (3) income-to-poverty ratio was between 200% and 399% (28.17% of the sample), and (4) income-to-poverty ratio was 400% or above (19.78% of the sample).[1] A respondent's *number of siblings* was counted (M = 1.64, SD = 1.23), and this served as a continuous variable. Respondents were divided into one of the following four groups based on the *age of the biological mother* at the time of the adolescent's birth: (1) Less than 20 years old (8.62% of the sample), (2) 20 to 29 years old (60.43% of the sample), (3) 30 to 39 years old (23.88% of the sample), or (4) 40 years old or above (1.06% of the sample). For the *parental employment* covariate, respondents were placed in one of the following three groups: (1) Neither parent employed (2.80%), (2) one parent employed (24.16%), or (3) both parents employed (58.50%). Finally, for the highest level of education of either parent covariate, respondents were placed in one of the following four groups: (1) Less than high school (18.52% of the sample), (2) high school graduate (27.77% of the sample), (3) some college (24.67% of the sample), or (4) college or higher (29.04% of the sample). *Parent involvement in the adolescent's school* was measured by attendance at PTA/PTO meetings and volunteering to help in the classroom. The scale ranged from 0 to 2 (0—never, 1—sometimes, 2—often) with a mean of 1.84 and a standard deviation of 1.21. *Family religious activities at adolescent's age 16* were measured by whether or not the family attended a religious activity at least once a week when the adolescent was 16 years old. Respondents were placed in the following two groups: (1) family did not engage in weekly religious activity (32.54% of the sample) and (2) family did engage in weekly religious activity (51.39% of the sample).

[1] 1997 poverty guidelines determined by the U.S. Department of Health and Human Services and controlling for family size. *Federal Register*, Vol. 62, No. 46, March 10, 1997, pp. 10856–10859.

The *adolescent characteristics* that were examined as potential covariates included the following: (1) Adolescent age, (2) adolescent gender, (3) adolescent race and ethnicity, (4) adolescent disability status, and (5) whether or not the adolescent lies or cheats. Adolescent age in years during Round 1 (M = 13.12, SD = .79) was used as a continuous covariate. Adolescent gender was a covariate divided into two groups, male (52.35% of the sample) and female (47.65% of the sample). A combined race and ethnicity variable was examined as a potential covariate. The four categories of race and ethnicity that were used were Hispanic (21.53% of the sample), non-Hispanic Black (17.79% of the sample), non-Hispanic White (59.74% of the sample), and mixed race (0.93% of the sample). The potential covariate of whether adolescent lies or cheats was measured through a combined adolescent and parent's report of adolescent's lying or cheating. The respondents were divided into three categories: (1) not true (51.54% of the sample), (2) sometimes true (44.72% of the sample), or (3) often true (3.53% of the sample). A covariate was also used that divided adolescents based on whether or not they reported having a disability at age 16. Disabilities included mental or emotional problems, sensory problems, or other health conditions.

The *peer characteristics* that were examined included positive and negative peer behaviors. The adolescents were asked to rate the percentage of their peers that display these behaviors. The variables were then combined into a composite that represents the average percentage of the adolescent's peers who engaged in these behaviors: (1) Almost none (less than 10%); (2) About 25%; (3) About half (50%); (4) About 75%; (5) Almost all (more than 90%). Positive peer behaviors include regular religious attendance, participation in sports, clubs, or other activities, planning to go to college, and volunteer activity. Approximately, 38% of the adolescents reported that 75% or more of their peers in engaged in positive behaviors. Negative

peer behaviors include belonging to a gang, cutting class, and having sex. Approximately, 77% of adolescents reported that 25% or fewer of their peers engage in these negative behaviors.

The *environmental characteristics* that were examined as potential covariates included the following: (1) region of the country in which the adolescent resided, (2) whether or not the adolescent lived in an urban area, and (3) the adolescent's score on the physical environment risk index. The region of the country covariate was divided into the following four distinct categories: (1) Midwest (23.34% of the sample), (2) South (35.13% of the sample), (3) West (24.00% of the sample), and (4) Northeast (16.52% of the sample). Urban living status was divided into the following two categories: (1) Adolescents that lived in urban areas (75.60% of the sample), and (2) adolescents that lived in rural areas (24.40 % of the sample). Finally, the adolescent's score on the physical environment risk index (M = 1.05, SD = 1.23) was used as a covariate. The environmental risk index assessed the condition of the neighborhood and the house in which the respondent was living. It addressed issues such as crime, the availability of utility resources, and the interviewer's perception of neighborhood caretaking.

Data Analysis

Logistic regression analysis was used to model the dichotomous outcome variables. The logistic regression model predicts the influence of marital quality and the quality of parent/adolescent relationships, and other characteristics (marital, family, adolescent, peer, and environment) on respondent's religious activity. A single model was developed for each outcome measure. The model predicting family religious activity when the adolescent was 16 years old includes 2,783 respondents, 51.39% of whom attended weekly religious activities with their family. The model predicting adolescent's religious activity at age 20 includes 2,711

respondents, 21.98% of whom attended worship services at least twice a month. The third model predicts the adolescent's religiosity scale at age 20.

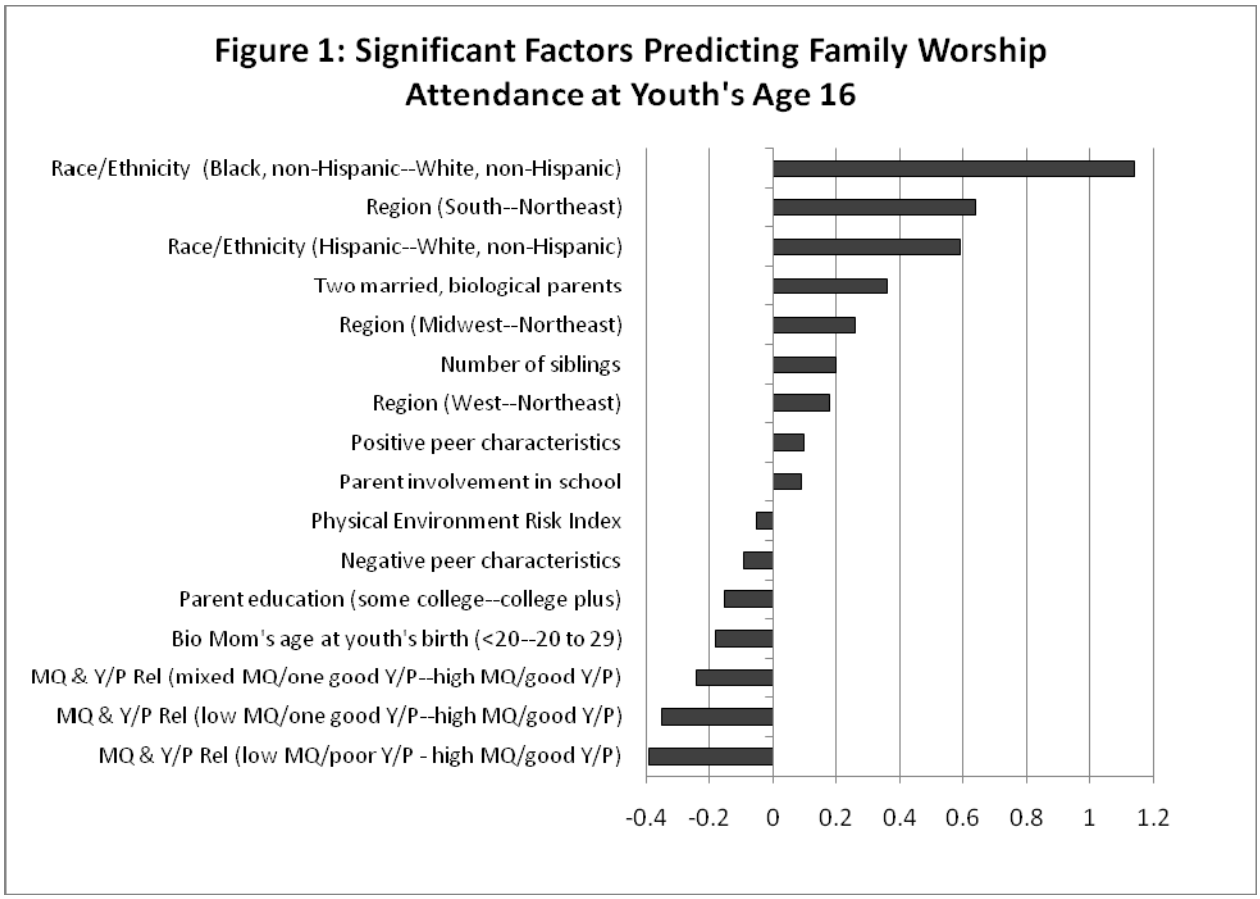
Results

The findings are shown in Figures 1–4 and Tables 1-3. After describing the overall findings at age 16 and 20 years old for the total sample, we briefly discuss gender differences with respect to marital quality and parent/adolescent relationships, marital, family, and peer characteristics. We also highlight some of the differences noted with respect to stepfamilies and families with two, married, biological parents in the home.

Overall

Compared to adolescents whose parents had a high quality marital relationship and who had good relationships with both parents, all other adolescents were less likely to attend weekly worship services with their families, especially at age 16. The attending predictors and correlates of the third religiosity outcome measure (a scale summing questions on values, religious writings, prayer, and whether the adolescent involved God in his or her life) were not statistically sufficient so they are not discussed in this report. Instead, the rest of the following discussion of results focuses on the key family processes and dynamics that show promise in explaining changes in teen religiosity between ages 16 and 20.

For example, adolescents living with married, biological parents in 1997 were 36% more likely to attend worship services than those living with stepfamilies. Some variables that addressed the teen church attendance and religiosity were probably indirectly related to marital quality and stability: these included the key predictor of family worship attendance when the adolescent was 16 years old, race (Figure 1, Table 2). Adolescents who were Black,



Key: MQ refers to Marital Quality; Y/P Rel refers to Parent-Adolescent Relationship

For a discription of the components of marital quality and the parent adolescent relationship see: Hair, et al., *Marital Quality and Parent-Adolescent Relationships: Components of Relationship Strengths in Married Couple Families* at http://aspe.hhs.gov/hsp/08/RelationshipStrengths/Components

non-Hispanic, were 138% more likely to attend church weekly with their family than White adolescents. Hispanic adolescents were 56% more likely to attend church weekly than White adolescents. If they lived in any region of the country other than the Northeast, they were more likely to attend weekly worship services. Having a larger number of siblings, positive peers who attended services and planned on going to college, and parent involvement in their schools all had positive associations with attendance. On the other hand, adolescents who lived in a more physically risky environment, with negative peers who belonged to gangs, cut classes, or had sex, had a negative association with service attendance.

Table2: Odds Ratios ($\exp(\beta_k)$) of Family Religiosity at Adolescent's Age 16[a]

	Male Sample (n=1736)	Female Sample (n=1580)	Full Sample (N=3316)
Marital Quality & Parent – Adolescent Relationships.			
High Marital Quality & good Parent-Adolescent Relationship (both)	ref	ref	ref
High Marital Quality & good Parent-Child Relationship (one)	0.74***	1.09	0.90
High support/high conflict marital quality & good Parent-Adolescent Rel (one/both)	0.76***	0.76***	0.76***
Low Marital Quality & good Parent-Adolescent Relationship (one/both)	0.72***	0.58***	0.65***
High Marital Quality & bad Parent-Adolescent Relationship (both)	0.90	0.81	0.87
Low Marital Quality & bad Parent Adolescent Relationship (both)	0.64*	0.57***	0.61***
Marital Characteristics			
Two biological married parents	1.17	1.62***	1.36***
Experienced marital disruption	0.97	1.09	1.02
Family Characteristics			
Number of Siblings	1.20***	1.20***	1.20***
Bio Mom's age at Youth's birth[b]	0.84	0.82	0.82**
Parental Employment[c]	0.90	1.12	0.99
Parent Education (ref = coll.grad.+)			
Less than High School	1.03	1.29	1.14
High School Graduate	0.67***	1.15	0.87
Some College	0.73***	1.00	0.85*
Parental involvement in school	1.08**	1.10***	1.09***
Adolescent Characteristics			
Race/Ethnicity (ref=White)			
Black, non-Hispanic	2.38***	1.97***	2.14***
Hispanic	1.56***	1.63***	1.59***
Peer Characteristics			
Positive Peer Behavior Index	1.14***	1.07	1.10***
Negative Peer Behavior Index	0.94	0.87***	0.91***
Environment Characteristics			
Region (ref=Northwest)			
Midwest	1.15	1.38***	1.26***
South	1.46***	1.91***	1.64***
West	1.05	1.36***	1.18*
Lives in Urban Area	0.81**	0.99	0.89
Physical Environment Risk Index	0.94	0.96	0.95*

*p > 0.05, **p > 0.01, ***p > 0.001; Source: National Longitudinal Survey of Youth—1997

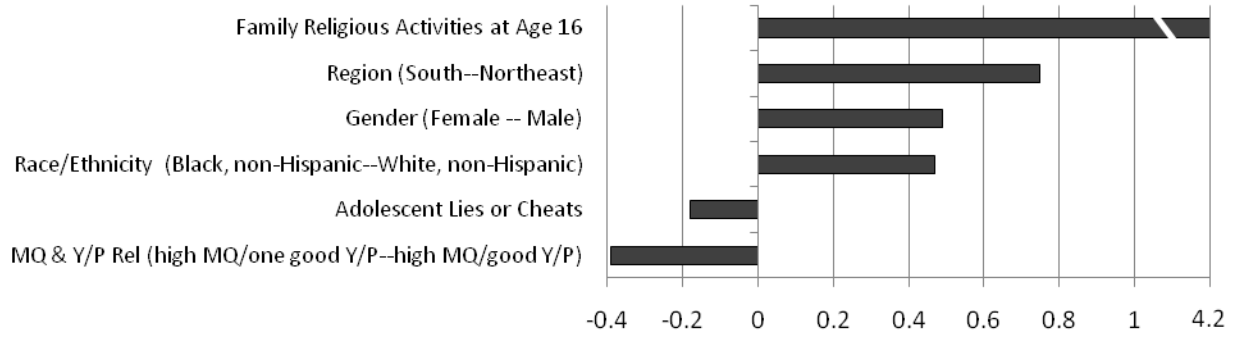
[a]Variables tested that did not contribute to the model: Length of marriage, family income, age, gender, adolescent lies or cheats, adolescent has disability.

[b]Biological mother's age less than 20 years old at youth's birth compared to youths whose biological mother was 20–29 at youth's birth. Other categories were insignificant.

[c]Youths with both parents employed are compared to youths with only one parent employed. Other categories were insignificant.

By the time the respondents were 20 years old, the picture had changed (Figure 2, Table 3). The primary predictor of regular worship service attendance for 20 year olds was regular worship service attendance at 16 years of age. Adolescents who attended weekly religious services as 16 year olds were over 4 times more likely to attend religious services at least twice a month as 20 year olds than those who did not attend weekly religious services as 16 year olds. The secondary factors predicting attendance at least twice a month (Figure 2) were whether the

Figure 2: Significant Factors Predicting Youth Worship Attendance at Age 20



Key: MQ refers to Marital Quality; Y/P Rel refers to Parent-Adolescent Relationship
For a discription of the components of marital quality and the parent adolescent relationship see: Hair, et al., *Marital Quality and Parent-Adolescent Relationships: Components of Relationship Strengths in Married Couple Families* at http://aspe.hhs.gov/hsp/08/RelationshipStrengths/Components

adolescent lived in the South (75% more likely to attend services than those living in the Northeast), was female (49% more likely than males), and Black, non-Hispanic (47% more likely than White, non-Hispanic). Adolescents who reported lying or cheating when younger were 18% less likely to attend worship services. Finally, marital quality and parent/adolescent relationship quality in 1997, when they were 12 to 14 years old, in most cases did not significantly influence religious attendance when the adolescent was 20 years old. The one

Table 3: Odds Ratios ($exp(\beta_k)$) of Youth's Religious Attendance at Age 20[a]

Convert N to n and space on either side of all = signs	Male Sample (n=1736)	Female Sample (n=1580)	Full Sample (N=3316)
Marital Quality & Parent-Adolescent Relationships.			
High Marital Quality & good Parent – Adolescent Relationship (both)	ref	ref	ref
High Marital Quality & good Parent-Adolescent Relationship (one)	0.61***	0.89	0.61***
High support/high conflict Marital Quality & good Parent-Adolescent Rel (one/both)	0.85	0.74***	0.80
Low Marital Quality & good Parent-Adolescent Relationship (one/both)	0.81	0.81	0.91
High Marital Quality & bad Parent-Adolescent Relationship (both)	0.93	0.72	0.76
Low Marital Quality & bad Parent-Adolescent Relationship (both)	0.77	0.70	0.78
Family Characteristics			
Family Income (ref=200-399%)			
Less than 100% of Poverty[b]	1.15	1.36	1.46
100–199% of Poverty	1.25	1.03	1.26
400 plus of Poverty	1.20	1.23	1.44**
Missing income information	1.11	1.01	1.14
Number of Siblings	1.10***	1.06	1.06
Parental Employment (ref = one empl)			
Neither employed	0.95	0.70*	0.68
Both employed	0.92	0.91	0.86
Parent Education (ref = coll.grad.+)			
Less than High School	1.02	0.74*	0.87
High School Graduate	0.97	1.03	1.07
Some College	0.87	0.84	0.80
Family Religious Activities at Age 16	2.38***	2.36***	5.16***
Adolescent Characteristics			
Age	1.08	1.05	1.14*
Gender	N/A	N/A	1.49***
Race/Ethnicity (ref = White)			
Black, non-Hispanic	1.08	1.33**	1.47***
Hispanic	1.00	0.97	1.01
Adolescent lies or cheats	0.95	0.85**	0.82*
Environment Characteristics			
Region (ref = Northwest)			
Midwest	1.04	1.53***	1.31
South	1.39***	2.00***	1.75***
West	0.93	1.51***	1.26
Physical Environment Risk Index	0.90***	1.00	0.92

*p > 0.05, **p > 0.01, ***p > 0.001; Source: National Longitudinal Survey of Youth–1997

[a]Variables tested that did not contribute to the model: Two married biological parents, length of marriage, experienced marital disruption between 1997 and 1999, biological mom's age at youth's birth, parent involvement in school, adolescent has disability, peer characteristics (pos/neg), lives in urban area.

[b]1997 HHS measure of poverty used: 16, 050 average for a family of four.

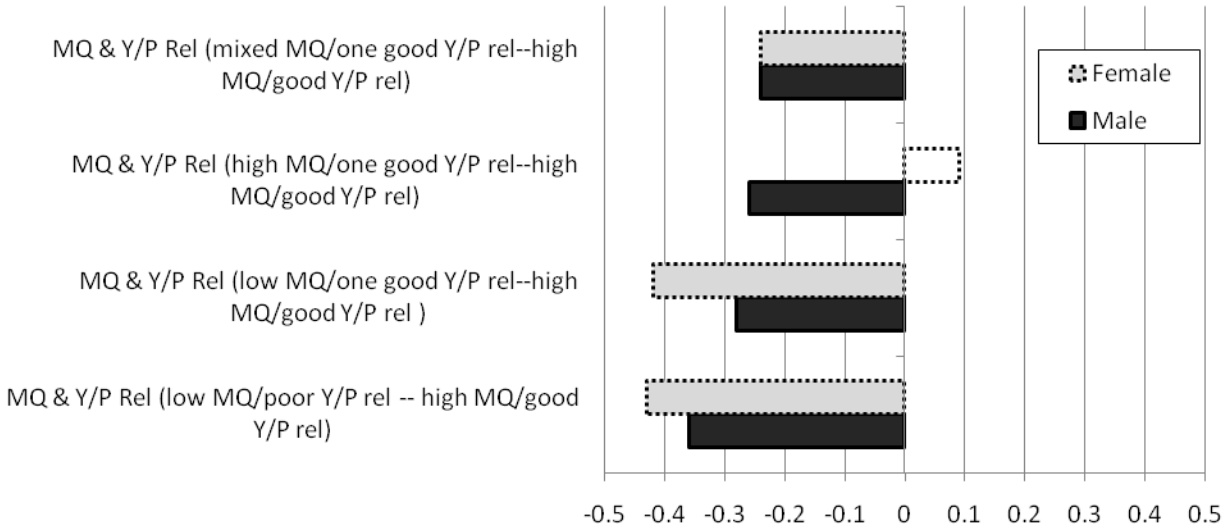
exception was that adolescents who reported high marital quality and a good relationship with just one parent in 1997 were 39% less likely to attend worship services at least two times a month than adolescents whose parents had high marital quality and who had good relationships with both parents.

Gender.

As observed in the full sample, the quality of the marital relationship and the parent/adolescent relationship significantly predicted whether the adolescent's family attended weekly worship services when the adolescent was 16 years old. Compared with adolescents whose parents had a high quality marital relationship and who had good relationships with both parents, male adolescents whose parents had a poor quality marital relationship were less likely to attend weekly worship services (Table 2). Compared to male adolescents whose parents had a high quality marital relationship and who had good relationships with both parents, all other male adolescents with only a good relationship with only one parent (or with neither), regardless of the parents' marital quality, were less likely to attend weekly worship services with their families (Figure 3). Female adolescents showed similar patterns (Figure 3).

When the respondents were 20 years old, their parents' marital relationship and their relationships with their parents when they were 12–14 did not significantly influence the adolescent's later reported worship service attendance for either gender (Table 3). There were two exceptions. First, male adolescents whose parents had a good marital relationship and who had a good relationship with only one parent were 39% less likely to attend worship services at least twice a month when they were 20 years old than male adolescents whose parents had a good marital relationship and who had a good relationship with both parents when they were 12–14 years old (Table 3). Second, female adolescents whose parents had a mixed marital

Figure 3: Odds Ratios of Marital Quality and Parent/Youth Relationship on Family Worship Attendance at Youth's Age 16 (unfilled bars not statistically significant)



Key: MQ refers to Marital Quality; Y/P Rel refers to Parent-Adolescent Relationship
For a discription of the components of marital quality and the parent adolescent relationship see: Hair, et.al, *Marital Quality and Parent-Adolescent Relationships: Components of Relationship Strengths in Married Couple Families* at http://aspe.hhs.gov/hsp/08/RelationshipStrengths/Components

14 years old (Table 3). Second, female adolescents whose parents had a mixed marital relationship (high support/high conflict) and who had a good relationship with at least one parent were 26% less likely to attend worship services at least twice a month when they were 20 years old than female adolescents whose parents had a good marital relationship and who had a good relationship with both parents when they were 12–14 years old (Table 3).

Marital characteristics.

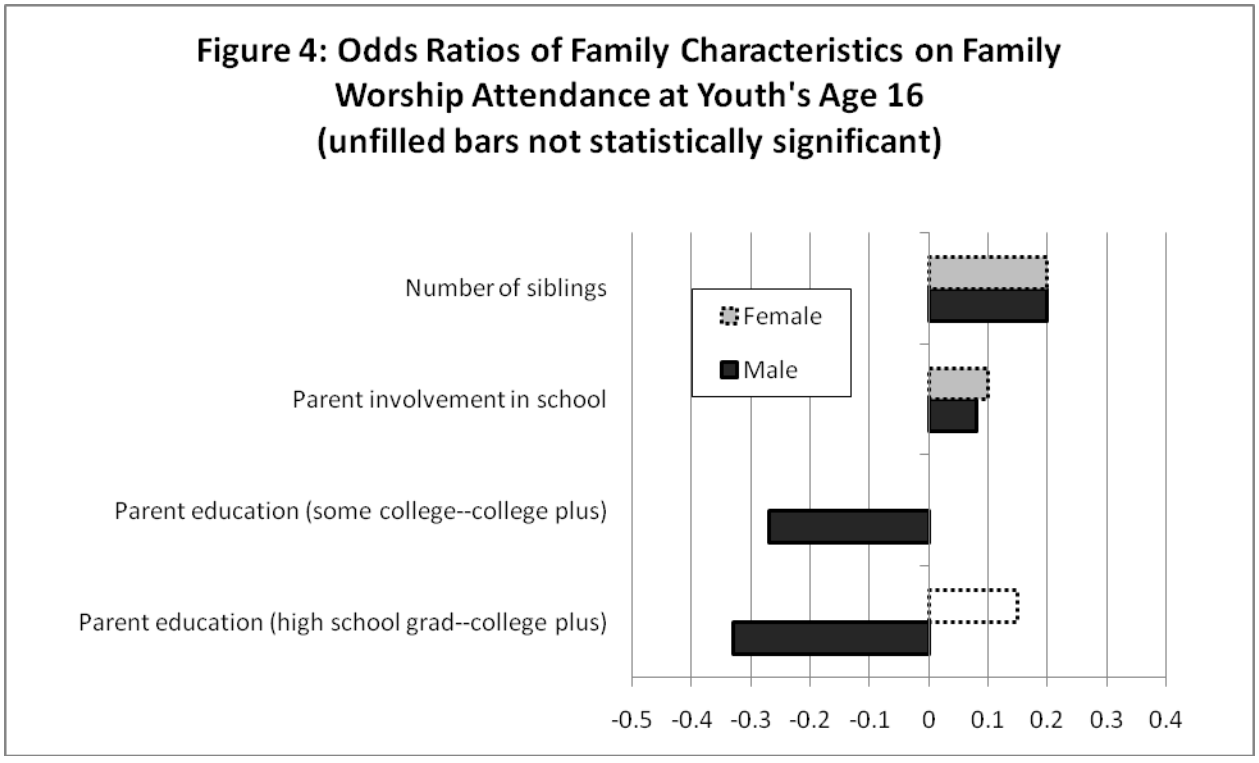
While marital interaction and quality were not helpful predictors of future religiosity in teens, certain general marital strengths were. For example, living with two married, biological parents was a significant protective factor for adolescent girls but not for adolescent boys at age 16 (Table 2). Therefore, an adolescent girl living with two biological married parents was 62%

more likely to attend weekly worship services than an adolescent girl living in a stepfamily. The marital circumstances of their environment did not significantly predict whether 16-year-old male adolescents attended weekly worship services with their families.

Neither living with two biological married parents in 1997 nor having their parents split up between 1997 and 1999 (marital disruption) significantly influenced bimonthly worship service attendance for either males or females when they were 20 years old.

Family characteristics.

A larger number of siblings and parent involvement in their schools both positively influenced family worship attendance for both male and female adolescents at age 16 (Figure 4, Table 2). Additional siblings increased the likelihood of weekly



religious attendance by 20% for both male and female 16 year olds. Parent involvement in schools increased the likelihood of weekly religious attendance by 10% for girls and 8% for boys. On the other hand, while parent education level did not significantly influence worship

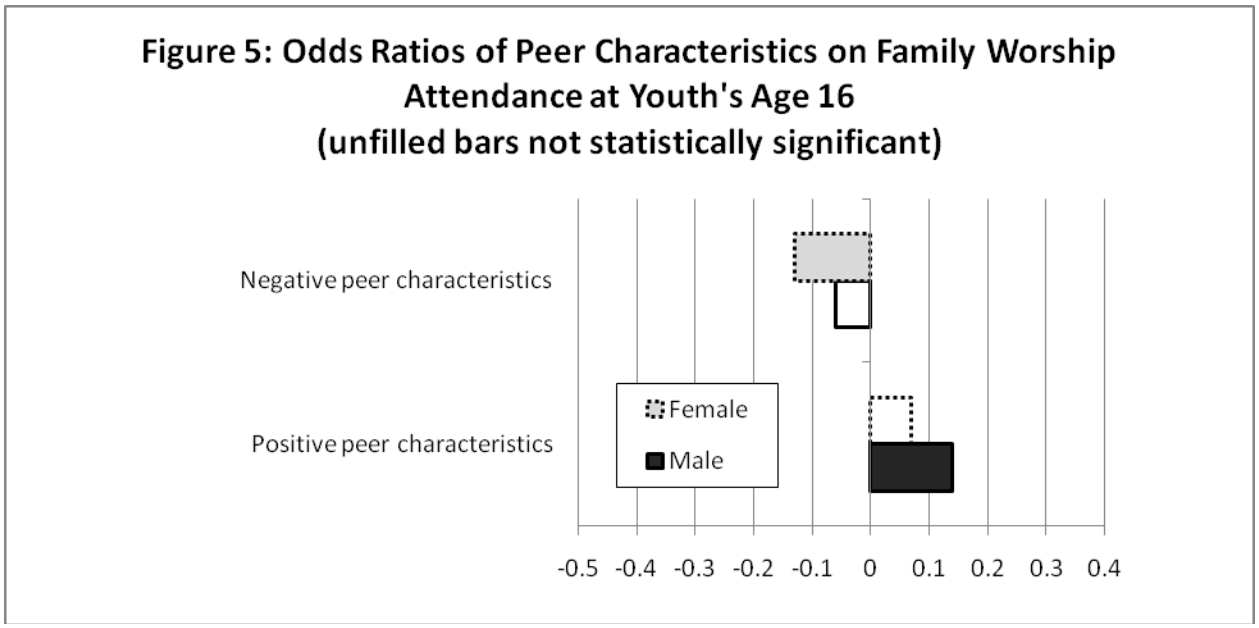
service for 16-year -old girls, it did for 16-year-old boys. Boys with a parent who had graduated from high school or attended some college were 27%–33% less likely to attend weekly worship services than 16-year-old boys who had at least one parent graduate from college (Figure 4).

Interestingly, parent education levels did not significantly influence bimonthly worship service attendance for either male or female 20-year-old adolescents (Table 3). The one exception was that girls whose highest level of parental education was less than a high school graduate were 26% less likely to attend worship services at least two times each month than those who had at least one parent graduate from college. Additional siblings still positively influenced worship service attendance for males, but not for females, when they were 20 years old. Parent involvement in school when they were adolescents did not significantly influence bi-monthly worship service attendance for either male or female adolescents when they were 20 years old. Finally, as mentioned above, the primary predictor of whether a 20-year-old male or female adolescent will attend worship services at least two times each month is whether or not they attended weekly worship services with their families when they were 16 years old (Figure 2).

Peer characteristics.

Peer characteristics seem to influence male and female adolescents differently (Figure 5, Table 2). For example, girls who reported peers with more negative characteristics—gang involvement, cutting class, having sex—were 13% less likely to attend weekly worship services with their families when they were 16 years old than those with fewer peers with negative characteristics (Figure 5). On the other hand, boys who reported peers with more positive characteristics—sports participation, college plans, and volunteer work—were 14% more likely to attend weekly worship services than those with fewer peers with positive characteristics

(Figure 5). Neither positive nor negative peer characteristics when the respondents



were 12–14 years old significantly influenced worship service attendance when the respondents were 20 years old (Table 3).

Discussion

Taken together, these data help us understand how family influence maps onto adolescent religiosity and church attendance in earlier adolescence compared to such influences on the emerging young adult. The purpose of this project was to identify how marital quality and strength-building family processes contributed to the transition from adolescents to young adulthood; for the specific area of interest of this report, religiosity in teens, we found indirect evidence for that connection. Family strength seems to permeate a number of indirect measures. For example, adolescents living in the South and who come from African-American families (and Hispanic families) reported far more religiosity and attendance than did White adolescents and especially White adolescents from other regions of the United States. In his book *Soul Searching*, Smith indicates that, "three-quarters of Mormon and Black and conservative Protestant adolescents believe in a personal God whom they know (p.42)." One of Smith's key

points is that adolescent religiosity and believing practices (such as religious attendance) dramatically vary by region of the country, race, and even by cultural religious predominance. In any discussion of adolescents and religion, one must locate the adolescent within that cultural milieu as specifically as possible, or control for such factors. That idea, of course, begs the caution not to overgeneralize when speaking about adolescent religious practice or belief.

Second, this study found that adolescents raised in homes within which religion was practiced were much more likely to become practicing religious young adults. One could argue that practicing religion could be an indirect measure of one kind marital quality. As marriage quality deteriorates it is most likely that a family's ability to organize around routines and rituals of any kind would diminish and fade. This idea, that the likelihood of the intergenerational transmission of religious belief and practice could be influenced by parenting and family processes, was substantiated in our finding. Specifically, adolescents raised in families within which the parents had remained married and were the biological parents (as opposed to stepfamily situations) were much more likely to attend worship services. Without going beyond the scope of the data, it is important to consider the idea that when parents stay together and when they value religious experience, they are more likely to pass along a variety of ideological orientations to their children. Parents who stay together (in the larger aggregate) may have higher interpersonal skills, better problem-solving ability, and decision-making skills overall. Where there is more interpersonal stability, there is a greater likelihood that desired goals, aspirations, dreams, and personal beliefs will be easier to transfer.

On the other hand, adolescents who are raised in less stable environments within which there are physical and emotional risks are not as likely to have a positive connection with parents, or the problematic and unsettled nature of that situation may undermine belief

transmission. Again, this can be seen as an indirect assessment of deterioration in marital quality. This is not to say that if a family does not attend church or hold firm religious beliefs that they are not strong. However, for a family to organize around an activity such as religion and achieve regular faithful attendance probably requires a high level of purpose, integration, and most likely higher marital quality. Note, however, that African-American adolescents were much more likely to be religious, although as a group, there is more frequent family and environmental instability. Certainly, the interaction of religious belief and family stability is an area of study to be pursued in the future.

These data also clarify that gender matters. Adolescent girls were somewhat more affected by their parents' marital relationships and the relationship they had with their parents when they were 12–14 than were adolescent boys. If an adolescent girl had parents with a stronger marital relationship and a positive and strong relationship existed between the adolescent and her parents, she was more likely to attend services and to retain religious beliefs into young adulthood. In like manner, if a girl was raised in a home with married biological parents, she was 62% more likely to attend weekly worship services at age 16 than the same girl without married biological parents (Table 2). Of course, the causal and spurious linkages to these findings must be considered and great caution used in extrapolation. But, at least, it is worth noting that family stability, family practices, and the ability to transmit this type of ideological orientation all seem to bundle together. Clearly, future research is needed to parse out the nature of these potential causal linkages. Many parents genuinely care about how to pass along their deeply held beliefs, whether those beliefs are about religion, financial problem solving, political orientation, moral choices in life, or ethical decisions. Apparently, parents who are involved in the lives of their children through school activities have greater marriage and partner

commitment, and parents who value education were more likely to have influence in the religious lives of their children.

In sum, we find that family life matters in these important processes of life. While this study relies on data from a large-scale national survey within which the daily mechanisms of married family processes were measured only briefly, the findings provide a tantalizing glimpse of how families can and do transmit deeply held beliefs and values onto the next generation. Clearly, more work on these processes is needed.

References

Bahr, S. J., Hawks, R. D., & Wang, G. (1993). Family and religious influences on adolescent substance abuse. *Youth and Society*, *24*, 443–465.

Clark, C. A., & Worthington, E. L. (1990). Family variables affecting the transmission of religious values from parents to adolescents: A review. In B. K. Barber & B. C. Rollins (Eds.), *Parent-adolescent relationships* (pp.154–184). Lanham, MD: University Press of America.

Cotton, S., Zebracki, K., Rosenthal, S. L., Tsevat, J. & Drotar, D. (2006). Religiosity/spirituality and adolescent health outcomes: A review. *Journal of Adolescent Health, 38,* 472–480.

Day, R. D., Gavazzi, S., & Acock, A. (2001). Compelling family processes. In A. Thornton (Ed.), *The well-being of children and families* (pp. 103–216). Ann Arbor: University of Michigan Press.

Day, R. D., Gavazzi, S. M., Miller, R., & van Langeveldt, A. (In press). Compelling Family Processes. *Marriage and Family Review, 45.*

Ebstyne-King, P., & Furrow, J. L. (2004). Religion as a resource for positive youth development: Religion, social capital and moral outcomes. *Developmental Psychology, 40,* 708–713.

Giesbrecht, N. (1995). Parenting style and adolescent religious commitment. *Journal of Psychology and Christianity*, *14*, 228–238.

Granqvist, P. (2002). Attachment and religiosity in adolescence: Cross-sectional and longitudinal evaluations. *Personality and Social Psychology Bulletin*, *28*, 260–270.

Hair, E., Moore, K. Kaye, K., Day, R., Orthner, D., and Hadley, A. (2008). Marital quality and parent-adolescent relationships: Components of relationship strengths in married parent families. ASPE Research Brief. Washington, D.C.: U.S. Department of Health and Human Services.

Hubbard-McCree, D., Wingood, G. M., DiClemente, R., Davies, S., & Harrington, K. (2003). Religiosity and risky sexual behavior in African-American adolescent females. *Journal of Adolescent Health, 33,* 2–8.

Lammers, C., Ireland, M., Resnick, M., & Blum, R. (2000). Influences on adolescents' decision to postpone onset of sexual intercourse: A survival analysis of virginity among youths aged 13 to 18 years. *Journal of Adolescent Health, 26,* 42–48.

Luft, G. (1987). Parenting style and parent-adolescent religious value consensus. *Journal of*

Adolescent Research, *2*, 53–68.

Miller, L., & Gur, M. (2002). Religiousness and sexual responsibility in adolescent girls. *Journal of Adolescent Health*, *31*, 401–406.

Pearce, M. J., Jones, S. M., Schwab-Stone, M. E., & Ruchkin, V. (2003). The protective effects of religiousness and parent involvement on the development of conduct problems among youth exposed to violence. *Child Development*, *74*, 1682–1696.

Rew, L., & Wong, Y. J. (2006). A systemic review of associations among religiosity/spirituality and adolescent health attitudes and behaviors. *Journal of Adolescent Health, 38,* 443–442.

Smith, C. (2005). *Soul Searching*. New York: Oxford University Press.

Van Den Bree, M. B. M., Whitmer, M. D., & Pickworth, W. B. (2004). Predictors of smoking development in a population based sample of adolescents: A prospective study. *Journal of Adolescent Health, 35,* 172–181.