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EMPIRICAL RESEARCH

# Parent-Adolescent Relationship Quality as a Moderator for the Influences of Parents' Religiousness on Adolescents' Religiousness and Adjustment

**Jungmeen Kim-Spoon · Gregory S. Longo · Michael E. McCullough**

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**Abstract** Prior investigations have demonstrated that parents' religiousness is related inversely to adolescent maladjustment. However, research remains unclear about whether the link between parents' religiousness and adolescent adjustment outcomes—either directly or indirectly via adolescents' own religiousness—varies depending on relationship context (e.g., parent-adolescent attachment). This study examined the moderating roles of parent-adolescent attachment on the apparent effects of the intergenerational transmission of religiousness on adolescent internalizing and externalizing symptoms using data from 322 adolescents (mean age = 12.63 years, 45 % girls, and 84 % White) and their parents. Structural equation models indicated significant indirect effects suggesting that parents' organizational religiousness was positively to boys' organizational religiousness—the latter of which appeared to mediate the negative association of parents' organizational religiousness with boys' internalizing symptoms. Significant interaction effects suggested also that, for both boys and girls, parents' personal religiousness was associated positively with adolescent internalizing symptoms for parent-adolescent dyads with low attachment, whereas parents' personal religiousness was not associated with adolescent internalizing symptoms for parent-adolescent dyads with high attachment. The findings help to identify the family dynamics by which the interaction of parents' religiousness and adolescents' religiousness might differentially influence adolescent adjustment.

**Keywords** Religiousness · Parent-Adolescent attachment · Intergenerational transmission · Internalizing symptoms · Externalizing symptoms

J. Kim-Spoon (✉) · G. S. Longo
Department of Psychology (MC 0436), Virginia Polytechnic Institute and State University, Blacksburg, VA 24061, USA
e-mail: jungmeen@vt.edu

M. E. McCullough
Department of Psychology, University of Miami, Coral Gables, FL 33124, USA

## Introduction

Religion plays a significant role in the lives of many adolescents in the US. According to a recent national survey, approximately 84 % of adolescents (13–17 years old) believe in God, approximately 82 % state that religion is important in their lives, and roughly 56 % attend religious services at least monthly (Denton et al. 2008). In the past decade, interest in investigating the influences of religiousness on behavioral and emotional outcomes among adolescents has grown steadily. Empirical findings have documented modest influences of adolescent religiousness on negative outcomes such as delinquency and depression, as well as on positive outcomes such as physical and emotional health and academic achievement, even after controlling for relevant demographic variables (Smith and Denton 2005). Although research on religiousness and adolescent health outcomes has increased over the past decade, substantial gaps remain in our understanding of the processes and correlates that account for the observed links between religiousness and adolescent outcomes. In particular, research potentially could advance beyond simply assessing the associations of adolescent religion with other outcomes by examining the social processes contributing to protective pathways against adolescent maladjustment problems. Such work also would be informative for prevention and intervention efforts. In the present study, we

investigated how parents' religiousness interfaces with mediating and moderating processes (such as adolescents' religiousness and parent–child attachment) to influence adolescent adjustment.

## Protective Effects of Adolescents' Religiousness

Across the lifespan, religiousness appears to be an influential factor for development. This may be particularly true of adolescence, when a great deal of religious change is occurring. It has been suggested that adolescence may be a sensitive period for religious and spiritual development due to many of the normative developmental characteristics that are unique to adolescence, including heightened sensitivity to sensation seeking and emotional experiences, and increased stressful life events associated with the entry into adolescence (Good and Willoughby 2008). Furthermore, past research has identified religiousness as having a protective effect against psychological maladjustment among adolescents. In general, adolescents who have higher levels of religiosity fare better than their less religious peers: they show lower levels of internalizing problems (Pearce et al. 2003; Possel et al. 2011; Schapman and Inderbitzen-Nolan 2002) and externalizing problems (Laird et al. 2011; Pearce et al. 2003; Salas-Wright et al. 2012). For example, in a longitudinal study of high-risk urban adolescents, higher levels of private religious practices and self-rated religiousness appeared to protect against an increase in conduct problems over a one-year period for adolescents exposed to violence (Pearce et al. 2003). Taken as a whole, the empirical research on adolescents' religiousness and mental health has found consistent evidence for a positive association between religiousness and mental health despite the diversity of samples, designs, and methodologies (Koenig et al. 2001).

## Intergenerational Transmission of Religiousness

In evaluating the contributions of adolescents' religiousness to their adjustment, it is important to consider parents' religiousness because of its relationship to both adolescents' religiousness and adolescent adjustment. Most of what is known about adolescents' religiousness comes from investigations examining only the direct associations between adolescents' religiousness and adjustment outcomes, but this focus on direct effects ignores a very fundamental fact about adolescents and their religious beliefs: When adolescents make a religious commitment and become more (or less) religious, their religious development often is influenced by their parents' endorsement of cherished beliefs and engagement in personally meaningful practices. Through socialization processes, parents generally take pains to insure that their children adopt their own religious beliefs and practices. Indeed, there exists a notable resemblance between parent and child religiousness (Flor and Knapp 2001; Foshee and Hollinger 1996; Landor et al. 2011). Behavioral genetics studies also indicate that the heritability of adolescents' religiousness due to genetic factors is weak and that variances in religiousness are explained mostly by family environment factors (most often indicated by parenting behaviors; Kendler and Myers 2009; Koenig et al. 2005). Furthermore, even though a decline in religiousness is commonly observed during adolescence, adolescents from religious families are likely to increase in religiousness over time (King et al. 1997; McCullough et al. 2005; Petts 2009). Collectively, research clearly suggests that family resemblance comes from adolescents' adopting their parents' levels of religiousness.

Extant literature is greatly limited regarding gender differences in the effects of religiousness because many researchers have controlled for gender (instead of considering gender as a moderating factor) or have solely focused on examining gender differences in levels of religiousness. Prior research indicates that girls show higher levels of church involvement (King et al. 1997; Smith et al. 2002) and personal religiousness (Kerestes et al. 2004), and that boys are more likely to be influenced by parents' religiousness (Flor and Knapp 2001). However, we know of no studies that systematically examined gender differences in the relations of intergenerational transmission of religiousness to adolescent adjustment.

## The Role of Parent-Adolescent Attachment

Interpersonal relationships exert strong influences on individual development throughout the lifespan (Sroufe 1989). The longstanding premise is that early attachment relationships with caregivers influence children's beliefs and expectations about themselves and others, as well as their more general understanding of the world (Bowlby 1969/1982). Empirical work has shown that poor-quality experiences with attachment figures seem to be related to negative behavioral outcomes (Sroufe 1989, 1997). Indeed, the strength of the parent-adolescent bond has a significant influence on adolescent adjustment, including internalizing and externalizing symptoms (Fanti et al. 2008; Sheeber et al. 2007; Wills et al. 2004). In particular, during adolescence, affective/cognitive dimensions of attachment to parental figures—including degree of mutual trust, quality of communication, and extent of alienation—are related to adjustment (Armsden and Greenberg 1987; Allen et al. 2007).

The parent–child relationship appears to be an important factor that influences the intergenerational transmission of religiousness. Prior studies of adults and emerging adults

indicate that the intergenerational transmission of religiousness is more likely to occur in families characterized by high warmth and support (Abar et al. 2009; Hardy et al. 2011). Conversely, maternal depression decreases rates of the intergenerational transmission of religiousness from mother to offspring and further attenuates the beneficial qualities of religiousness in offspring (Gur et al. 2005). To our knowledge, only one study examined the moderating function of parenting characteristics in the transmission process among adolescents. Bao et al. (1999) studied the role of perceived parental acceptance in the intergenerational transmission of religiousness among young adolescents and found that mothers' religiousness (church attendance and religious beliefs) affected their sons' religiousness when their sons perceived high or moderate acceptance from mothers. Therefore, there is evidence that intergenerational similarity in religiousness depends in part upon the quality of the parent–child relationship.

One way that parent-offspring relationships might contribute to adolescent adjustment is as a moderator of how parents' religiousness influences adolescents' adjustment outcomes. Although relatively little is known regarding the role of parents' religiousness in adolescent development, some available studies show that parents' religiousness is related inversely to delinquency and internalizing symptoms among children and adolescents (Bartkowski et al. 2008; Kim et al. 2009). However, we do not have a clear understanding of whether the strength of the association between parents' religiousness and adolescent internalizing and externalizing symptoms, either directly or indirectly through the intergenerational transmission of religiousness, varies as a function of parent-adolescent attachment.

### Organizational Religiousness

Prior research on the link between religiousness and health is limited in several important ways relating to how religiousness has been measured. First, many prior studies used single-item measures. For example, in a review of 43 studies of religiousness and adolescent health outcomes, Rew and Wong (2006) found that attendance in religious services was used to measure religiousness in approximately half of the studies. Such single-item measures are problematic because religiousness is best considered to be multidimensional, including aspects of behaviors, devotion, and beliefs (e.g., King and Hunt 1975). Second, global religious variables that combine multiple dimensions of religiousness into a single summary score may also, ironically, be limited in helping us understand why and how religion affects adolescent adjustment because different dimensions of religious beliefs and behavior may relate differentially to adolescent outcomes.

Therefore, we examined two dimensions of religiousness because they are expected to be related to adolescents' adjustment outcomes for different reasons. The first dimension is organizational religiousness, which represents involvement in formal religious institutions. Social control theory (Hirschi and Stark 1969; Smith 2003) characterizes religious communities as social networks of relationships that facilitate oversight and control of adolescents by adults who care about them, and who model prosocial behavior and reinforce parental values. According to this view, organizational religiousness is expected to be related positively to adolescent adjustment by acting as a form of social control.

### Personal Religiousness

The second dimension is personal religiousness, which represents the importance of religious faith in the individual's life. Divine interaction theory (Ellison 1991) suggests that individuals may construct divine relations much as they build social relationships, engaging a divine other in a quest for solace and guidance. As divine relations are likely to bolster adolescents' sense of meaning, purpose, and identity, personal religiousness is expected to be related positively to adolescent adjustment. Personal religiousness and organizational religiousness might have different effects because these two dimensions can be distinguished in terms of the degree to which adolescents' consensus with their parents reflects autonomous motivation on the part of the adolescents. If religious service attendance among adolescents results largely from parental expectations or control, parent-adolescent similarity in organizational religiousness would be less likely to reflect adolescents' autonomous agreement. In contrast, adolescents' agreement with parental values in faith might be more likely to reflect their autonomous endorsement of values.

## The Current Study

To date, no systematic investigation has been conducted investigating how parent-adolescent attachment influences the way in which parents' religiousness is related to adolescent adjustment directly or indirectly through its influences on adolescents' religiousness. The purpose of the current study was to examine whether the intergenerational transmission of religiousness and the influence of parents' religiousness on adolescent adjustment may depend on parent-adolescent attachment. Specifically, we tested the prediction that the associations of parents' religiousness with adolescent internalizing and externalizing symptoms are indirect through adolescents' own religiousness. We also examined whether parent-adolescent attachment statistically moderates this association such that the effects of parents'

religiousness on adolescents' religiousness and adjustment differ across levels of parent-adolescent attachment. Given the differential effects of parents' religiousness on adolescents' religiousness between boys and girls (e.g., Flor and Knapp 2001), we explored whether the way in which parents' religiousness is related to adolescents' religiousness and adjustment differs for boys and girls.

## Method

### Participants

Participants included 322 adolescents (145 girls, 177 boys) and 322 of their primary caregivers (parents hereafter), including 268 (83 %) mothers, 44 (14 %) fathers, and 10 (3 %) grandmothers.[1] We excluded one participant who had been in the care of a foster mother for about 8 months to ensure that adolescent participants and their primary caregivers had been together long enough to influence adolescent development. Adolescents' ages ranged from 10 to 15 years with a mean of 12.63 (SD = 1.52). Of the 322 adolescents, 84 % were White, 11 % were African American, 3 % were Hispanic, and 2 % belonged to other ethnic groups. Parents' ages ranged from 25.88 to 69.60 with a mean of 43.21 (SD = 7.02). The ethnic composition of parents was: 88 % White, 8 % African American, 3 % Hispanic, and 1 % other. The majority (73 %) of parents were married or living with a partner as though married, 18 % were separated or divorced, 8 % were never married, and 1 % widowed. Mean family income was between $35,000–49,999. Hollingshead's (1975) index of socioeconomic status showed a broad range of family backgrounds with a mean of 3.60 (SD = 1.03). In terms of religious affiliation, 65 % of adolescents reported as Protestant, 9 % reported Roman Catholic, 1 % reported Jewish, 1 % reported Muslim, 13 % reported no religious affiliation, and 11 % reported "other." For parents, 68 % reported as Protestant, 8 % reported Roman Catholic, 1 % reported Muslim, 9 % reported no religious affiliation, and 14 % reported "other."

### Procedure

Participants were drawn from Southwestern Virginia by diverse advertisement methods including flyers, recruitment letters, and e-mail distributions. Families who were eligible (i.e., with an adolescent aged between 10 and 15 years) and were interested in the study were asked to call the research office. Research assistants described the nature of the study to the interested individuals over the telephone and invited them to participate. Given this recruitment strategy, it was not possible to know what proportion of people who were exposed to study advertisements responded. There were approximately 47 people who initially contacted our research office but could not be successfully scheduled for interviews. Data collection took place at the university's offices. Upon arrival, the parent and the adolescent were escorted to separate interview rooms. Measures for the study were administered by two trained research assistants, one with each participant. Prior to the commencement of any interview, parent consent and adolescent assent were obtained. The interviewers read the instructions to the participants and were present while the participants filled out the questionnaires. Participants were allowed to complete the measures at their own pace. Participants were encouraged to respond to all items, and interviewers provided individual assistance to participants who required additional help. Parents and adolescents received monetary compensation for participating. All procedures were approved by a university's institutional review board.

### Measures

#### *Religiousness*

Adolescents' and parents' religiousness were assessed using 2 items adapted from the Multidimensional Measure of Religiousness/Spirituality (Fetzer/NIA, 1999), and 4 items from Jessor and Jessor's (1977) Value on Religion Scale. Organizational religiousness was measured with two self-report items that assessed participants' involvement in formal public religious institutions by instructing participants to indicate how often they attended "religious services" and "other religious activities," respectively. Responses ranged from 1 = *never* to 6 = *more than once a week*. Personal religiousness was assessed using four self-report items that instructed participants to indicate the importance of religious faith in their lives (i.e., how important they think it is "to believe in God," "to rely on your religious beliefs as a guide for day-to-day living," "be able to rely on religious teachings," and "to be able to turn to prayer when you're facing a problem"). Responses ranged from 1 = *not at all important* to 5 = *very important*. Based on confirmatory factor analysis results showing that all of the factor loadings were significant and comparable in magnitude (factor loadings ranged from .65 to .82 for organizational religiousness and from .69 to .86 for personal religiousness), we derived two subscale scores by calculating the average of the item scores for organizational and personal religiousness. Internal consistency coefficients (α) were .70 and .86 for adolescents' and parents' organizational religiousness and .89 and .92 for adolescents' and parents' personal religiousness.

[1] For the caregivers who were grandmothers (i.e., non-biological parents), the average time that they had the participating adolescents in their care was 9 years (range = 5–13 years). .

*Parent-Adolescent Attachment*

A short version of the Inventory of Parent and Peer Attachment (IPPA: Armsden and Greenberg 1987; Raja et al. 1992) was used to measure the quality of affectional bonds between the adolescent and his/her parents (or caretakers) and consisted of three subscales assessing the quality of communication, the degree of trust, and alienation in the parent-adolescent relationship (e.g., "I tell my parents about my problems and troubles"). Responses were rated on a 5-point Likert scale, ranging from 1 = *almost never/never true* to 5 = *almost always/always true*. To determine the factor structure and dimensionality of the IPPA, we performed Velicer's minimum average partial (MAP) test according to the procedure proposed by O'Connor (2000). The MAP test determines the number of factors by extracting successive components and finding which number of components minimizes the correlation between items. In our sample, the MAP test determined that the IPPA was unidimensional. We then ran an exploratory factor analysis with one factor in order to examine the factor loadings. All factors loaded greater than .35 (ranging from .43 to .79), further supporting the unidimensionality of the IPPA-Parent's 12 items. Thus we calculated the composite by averaging the three subscale scores (the alienation subscale was reverse-coded), with higher scores for the composite indicating better parent-adolescent attachment quality. The internal consistency was $\alpha = .85$.

*Adolescent Internalizing and Externalizing Symptoms*

The Youth Self-Report (YSR: Achenbach and Rescorla 2001) is a self-report questionnaire consisting of 112 items covering symptoms and problematic behaviors displayed during the previous 6 months. The current study used two broad-band symptomatology scores: internalizing problems (withdrawal, somatic complaints, and anxiety-depression) and externalizing problems (aggressive behaviors, delinquent behaviors). The internal consistencies ($\alpha$) were .84 for internalizing symptomatology and .77 for externalizing symptomatology.

Analytic Strategy

Two-group Structural Equation Modeling (SEM) was conducted (based on two gender groups) to test the intergenerational transmission models specified above. To do so, we used the AMOS program with a maximum likelihood estimation method. In all the path models, predictors were allowed to covary and measurement errors of internalizing and externalizing symptoms were allowed to covary. In a series of hierarchical (nested) models, we imposed cross-group equality constraints to evaluate several questions about gender equivalence. First, we examined whether males and females had equivalent general patterns of structural relationships among the variables in the model. We addressed this question with a Configural Invariance model (baseline model) in which all parameters were freely estimated across the two groups. Next, we tested whether the two gender groups were equivalent in the direct effects of predictors on adolescent internalizing and externalizing symptoms with an Equal Direct Effect model. Finally, we tested whether the extent to which the predictors' indirect associations with adolescent internalizing and externalizing symptoms, through the mediators, were equivalent for boys and girls. We did so by testing an Equal Indirect Effect model. When the direct effects could be equalized between the two groups, the final model included equality constraints on both direct and indirect effects (which we called the Equal Direct and Indirect Effect model). For the comparisons of the three nested models, the difference in fit was simply indexed by the difference in Chi-square values. When the best-fitting model suggested significant indirect effects, the significance levels of the indirect effects were tested using Sobel's approximate significance tests (MacKinnon et al. 2002). For significant interaction effects, we tested simple effects based on the conditional values of plus or minus one standard deviation around the mean of the moderator (Aiken and West 1991).

## Results

Preliminary Analyses

Descriptive statistics (Means and SDs) and zero-order correlations among all study variables appear in Table 1. We performed multivariate general linear modeling (GLM) analyses to examine the possible effects of demographic characteristics on religiousness, parent-adolescent attachment, and adolescent internalizing and externalizing symptoms. There were no significant main effects of adolescent gender ($p = .980$), adolescent ethnicity ($p = .624$), adolescent age ($p = .821$), family socioeconomic status ($p = .350$), parent marital status ($p = .739$), or parent gender ($p = .917$).

Intergenerational Transmission of Religiousness, Parent-Adolescent Attachment, and Adolescent Adjustment

The intergenerational transmission model tested whether parents' religiousness and parent-adolescent attachment had main and interaction effects on adolescent adjustment indirectly through adolescents' own religiousness, and whether these effects differed between boys and girls. In examining the intergenerational transmission of

**Table 1** Descriptive statistics and bivariate correlations of parents' and adolescents' religiousness, parent-adolescent attachment, and adolescent adjustment

| | Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Boys *M* (SD) | Girls *M* (SD) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1. | Adolescents' organizational religiousness | | .47* | .60* | .41* | −.04 | −.05 | −.01 | 3.67 (1.32) | 4.01 (1.34) |
| 2. | Adolescents' personal religiousness | .60* | | .44* | .49* | .17* | −.11 | −.08 | 3.12 (.75) | 3.25 (.74) |
| 3. | Parents' organizational religiousness | .63* | .34* | | .60* | −.03 | −.11 | −.08 | 3.56 (1.53) | 3.60 (1.47) |
| 4. | Parents' personal religiousness | .49* | .42* | .65* | | .05 | −.08 | −.02 | 3.38 (.82) | 3.45 (.76) |
| 5. | Parent-adolescent attachment | .23* | .31* | .01 | .05 | | −.59* | −.52* | 4.19 (.55) | 4.24 (.60) |
| 6. | Adolescent internalizing symptoms | −.15$^{(*)}$ | −.13 | .05 | .07 | −.36* | | .65* | 51.79 (10.21) | 50.10 (10.35) |
| 7. | Adolescent externalizing symptoms | −.15* | −.19* | −.12 | −.08 | −.47* | .55* | | 49.44 (9.08) | 47.66 (9.85) |

Boys' values (N = 177) are below the diagonal and girls' values (N = 145) are above the diagonal

* $p < .05$; $^{(*)}$ $p = .05$

religiousness and the moderating effects of parent-adolescent attachment, the main effects of parents' religiousness and parent-adolescent attachment were centered to prevent possible multicollinearity problems between predictors and their interaction terms (Aiken and West 1991). The interaction term was computed by multiplying parents' religiousness by parent-adolescent attachment (both scores were mean-centered).

Model comparisons for organizational religiousness indicated significant gender differences in both direct and indirect effects of parents' organizational religiousness and parent-adolescent attachment (see Table 2). In Fig. 1, a close examination of the parameter estimates in the Configural Invariance Model (the best-fitting model) suggested that higher parents' organizational religiousness was related to higher organizational religiousness for both boys and girls. For boys, parent-adolescent attachment also was related positively to adolescents' organizational religiousness, which in turn was related negatively to internalizing symptoms. Sobel tests revealed significant indirect effects of parents' organizational religiousness on boys' internalizing symptoms through boys' own organizational religiousness ($Z = 1.97$, $p = .049$) and somewhat weaker indirect effects of parent-adolescent attachment ($Z = 1.78$, $p = .074$). In addition, significant direct effects of parent-adolescent attachment indicated that higher parent-adolescent attachment was related to lower internalizing and externalizing symptoms for both boys and girls even when controlling for the effects of organizational religiousness.

For personal religiousness, the best-fitting model was the Equal Direct and Indirect Effect model indicating no significant gender differences regarding direct and indirect effects (see Table 2). As shown in Fig. 2, regardless of adolescent gender, both parents' personal religiousness and parent-adolescent attachment were associated positively with adolescents' personal religiousness. Adolescents' personal religiousness was not significantly predictive of adolescent internalizing and externalizing symptoms, whereas parent-adolescent attachment had significant direct effects on adolescent internalizing and externalizing symptoms. Furthermore, the interaction between parents' personal religiousness and parent-adolescent attachment

**Table 2** Comparisons of two-group structural equation models for intergenerational transmission of religiousness, parent-adolescent attachment, and adolescent adjustment

| Model label | $\chi^2$ | *df* | CFI | RMSEA | Comparison | $\Delta\chi^2$ | $\Delta df$ | *p*(d) |
|---|---|---|---|---|---|---|---|---|
| Organizational religiousness | | | | | | | | |
| **Configural invariance** | **0** | **0** | | | | | | |
| Equal direct effects | 12.48 | 6 | .99 | .06 | a vs. b | 12.48 | 6 | .05 |
| Equal indirect effects | 11.29 | 5 | .99 | .06 | a vs. c | 11.29 | 5 | .05 |
| Personal religiousness | | | | | | | | |
| Configural invariance | 0 | 0 | | | | | | |
| Equal direct effects | 7.38 | 6 | 1.00 | .03 | a vs. b | 7.38 | 6 | .29 |
| **Equal direct and indirect effects** | **12.59** | **11** | **1.00** | **.02** | **b vs. c** | **5.22** | **5** | **.39** |

Sample size is 177 for boys and 145 for girls

Best-fitting models are in bold face

*CFI* comparative-fit index; *RMSEA* root mean square error of approximation; $\Delta\chi^2$ = difference in likelihood ratio tests; $\Delta df$ = difference in *df*; *p*(d) = probability of the difference tests

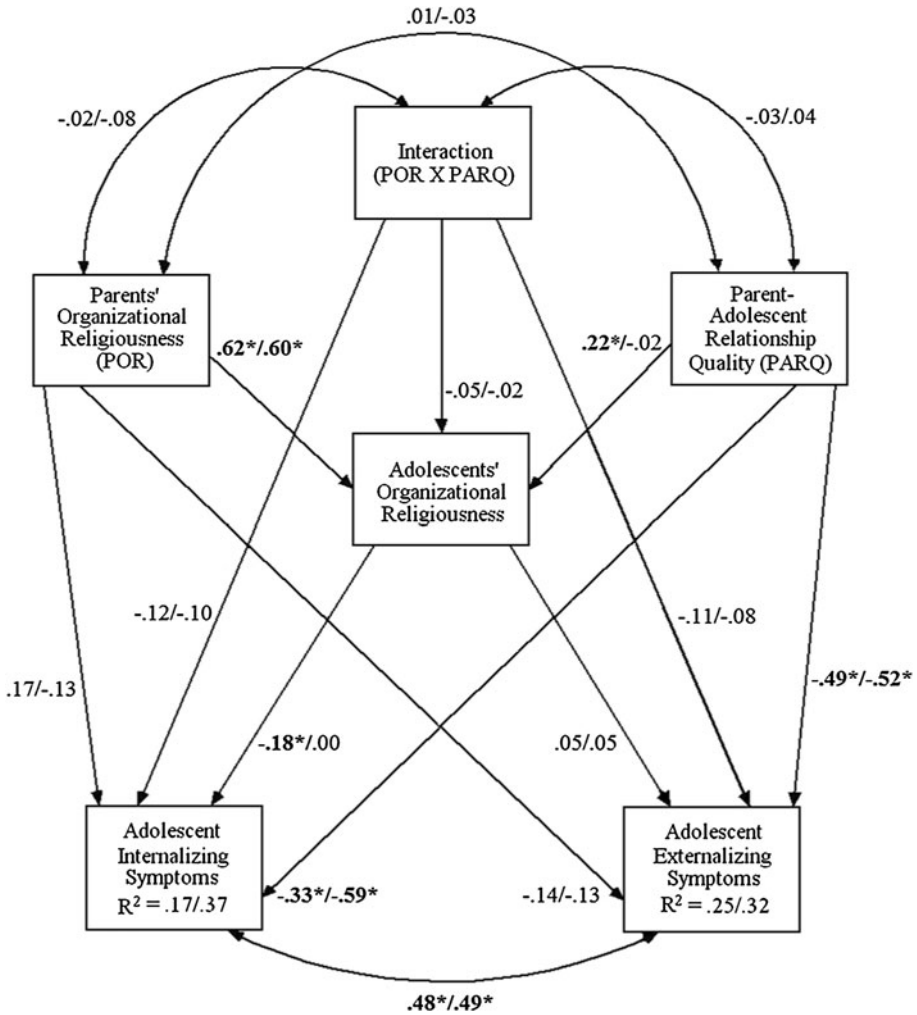


**Fig. 1** Summarized model fitting results of the intergenerational transmission model of relations among parents' and adolescents' organizational religiousness, parent-adolescent attachment, and adolescent internalizing and externalizing symptoms. For each path, standardized coefficients are listed for boys/girls. Significant parameters are in *bold face*. *$p < .05$

was significant for adolescent internalizing symptoms. As shown in Fig. 3, simple effect tests revealed that higher levels of parents' personal religiousness were related significantly to higher levels of adolescent internalizing symptoms among parent-adolescent dyads with low parent-adolescent attachment (B = 2.03, SE = 1.01, $\beta = .16$, $p = .046$). In comparison, parents' personal religiousness was not related to adolescent internalizing symptoms among parent-adolescent dyads with high parent-adolescent attachment (B = −1.09, SE = .95, $\beta = -.08$, $p = .255$).

## Discussion

Previous research has indicated that religiousness is related negatively to adolescent maladjustment (e.g., Pearce et al. 2003; Salas-Wright et al. 2012). However, an overwhelming majority of studies in this area have focused on examining only the direct associations of religiousness with adjustment outcomes. In the current study, we focused on the interplay of adolescents' religiousness, parents' religiousness, and parent-adolescent attachment, all of which previous work has linked individually to behavioral and psychological adjustment among adolescents (e.g., Pearce and Haynie 2004; Regnerus 2003). In particular, we aimed to test whether parent-adolescent attachment moderates the strength of the associations between parents' religiousness and adolescents' religiousness and adjustment.

Our data revealed considerable evidence for the intergenerational transmission of religiousness, indicated by significant positive associations between parents' and adolescents' religiousness for both boys and girls. We found a stronger intergenerational transmission for organizational religiousness than for personal religiousness. In line with the perspective suggesting that ritualized behaviors are essential for the transmission of social norms (Rossano 2012), family participation in religious behaviors is thought to play an important role in intergenerational transmission for religiousness. Furthermore, the intergenerational transmission of organizational religiousness (but not personal religiousness) was linked to better

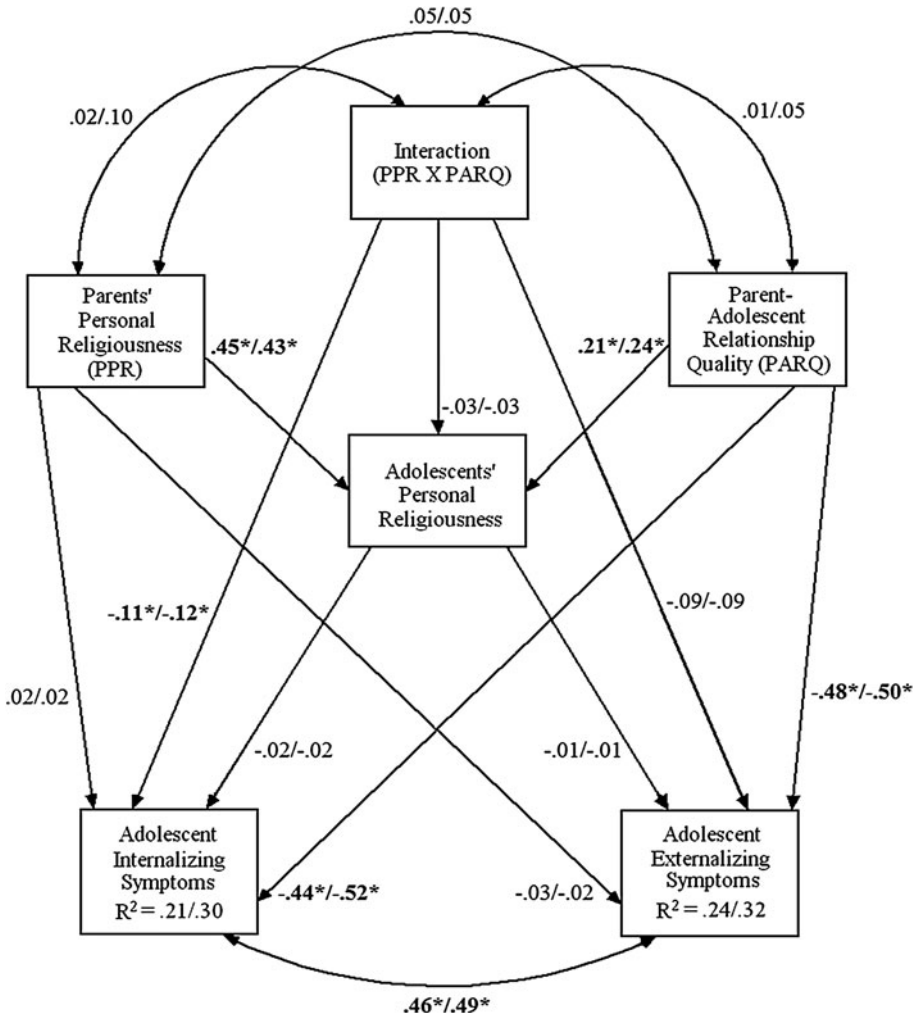


**Fig. 2** Summarized model fitting results of the intergenerational transmission model of relations among parents' and adolescents' personal religiousness, parent-adolescent attachment, and adolescent internalizing and externalizing symptoms. For each path, standardized coefficients are listed for boys/girls. Significant parameters are in *bold face*. *$p < .05$

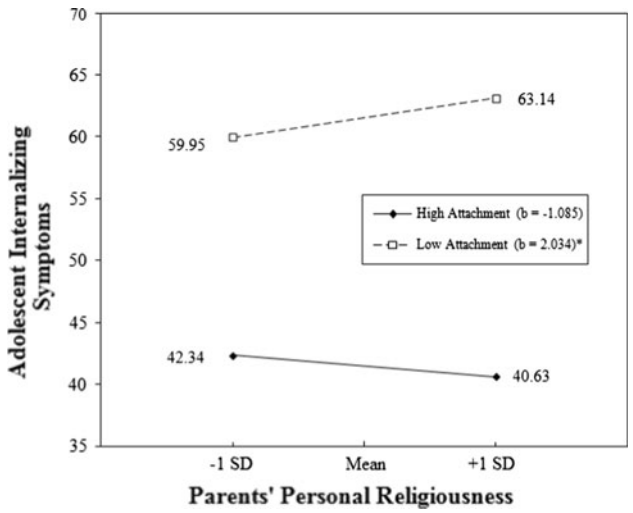


**Fig. 3** Regression lines for relations between parents' personal religiousness and internalizing symptoms among adolescent boys and girls as moderated by adolescents' religiousness. B = unstandardized regression coefficient (*simple slope*). SD = standard deviation. *$p < .05$

psychological functioning for boys. Specifically, significant indirect effects indicated that higher parents' organizational religiousness was related to higher boys' organizational religiousness, which in turn was related to lower internalizing symptoms. Some previous studies demonstrated that the effects of parents' religiousness on adolescents' delinquent behaviors were mediated by adolescents' religiousness (Laird et al. 2011; Simons et al. 2004). Our results extend prior findings by showing that the apparent effects of parents' organizational religiousness on adolescent adjustment were indirect through adolescents' organizational religiousness, thereby protecting boys from internalizing symptoms.

Our results also highlight the direct unique contribution of parent-adolescent attachment to both adolescents' religiousness and adjustment, above and beyond the level of parents' religiousness. Specifically, boys with higher parent-adolescent attachment reported higher organizational religiousness, and boys and girls with higher parent-adolescent attachment reported higher personal religiousness. Such positive associations between parent-adolescent attachment

and adolescents' religiousness suggest that religious adolescents have more mutual, interactive, and caring relationships with parents (King and Furrow 2004). Furthermore, for both boys and girls the direct associations of parent-adolescent attachment with adolescent internalizing and externalizing symptoms were noticeably stronger than were the associations of parents' and adolescents' religiousness with adolescents' symptoms. These findings underscore the important role of parent-adolescent attachment for adolescent adjustment, implying that parent-adolescent attachment might be a more proximal and more prominent predictor of adolescent internalizing and externalizing symptoms compared to parents' and adolescents' religiousness.

It is interesting, however, that we did not find evidence that parent-adolescent attachment was a significant moderator for the intergenerational transmission of organizational or personal religiousness. That is, it was not necessarily the case that adolescents' religiousness was more similar to their parents' religiousness in families with higher parent-adolescent attachment compared to families with lower parent-adolescent attachment. In a previous study of intergenerational transmission of religiousness among young adolescents (12–13 years), Bao et al. (1999) reported some evidence of the moderating effect of perceived parental acceptance. Specifically, mothers' religiousness (church attendance and importance) had stronger positive effects on (1) adolescent church attendance among adolescents with moderate maternal acceptance compared to those with low maternal acceptance (but no significant differences between high vs. low maternal acceptance) for both boys and girls, and (2) adolescent religious importance among adolescents with high or moderate maternal acceptance compared to those with low maternal acceptance only for boys. In that study, the main effects of parental acceptance were largely nonsignificant. The discrepancy found in moderation effects of parenting behaviors may be partly due to the fact that our data involved youths of a broader age range (10–15 years) and a more general measure of parent-adolescent attachment rather than focusing on parental acceptance.

Within the empirical literature on religion, studies have focused heavily on positive effects of religiousness in adolescence (e.g., Cotton et al. 2006 for a review). Interestingly, our examination of the interaction effects between parents' religiousness and parent-adolescent attachment revealed that higher parents' personal religiousness was related to higher levels of adolescent internalizing symptoms among adolescents who perceived poor parent-adolescent attachment (controlling for adolescents' own personal religiousness), but not among adolescents who perceived high parent-adolescent attachment. Instead of apparently exerting beneficial effects, parents' personal religiousness was related positively to higher levels of adolescents' internalizing symptoms when parent-adolescent attachment is poor. While our findings warrant for further replications, they seem to underscore the importance of the relational context for more deeply understanding the potentially negative effects of family religiousness. Parents who highly value the importance of religion in their lives may be more likely to make efforts to instill and transmit their beliefs and values to their children. When such efforts are made in an environment lacking emotional support and effective communication styles, adolescents are less likely to feel emotionally bonded with parents and are consequently more likely to develop internalizing problems. The detrimental combination of parents' religiousness and unsupportive parenting behaviors might arise when parents' sanctification of parental roles (i.e., perceiving parental roles as having divine character and significance) makes parents deny parenting problems or becomes a source of discord in parent–child relationships (Mahoney 2005). For instance, greater sanctification of parenting is related negatively to parental investment and efficacy when parents rely upon negative religious coping (Dumas and Nissley-Tsiopinis 2006).

We found evidence for substantial gender differences in the associations between family religiousness and adolescent adjustment. The direct effects of parent-adolescent attachment on internalizing symptoms were higher for girls than boys as shown in Fig. 1. However, for boys but not for girls, the intergenerational transmission of organizational religiousness was related to internalizing symptoms. This finding extends previous research demonstrating a greater influence of parents' religiousness on adolescents' religiousness among boys than girls (Bao et al. 1999; Flor and Knapp 2001) by further elucidating that parents' organizational religiousness may be a more salient protective factor for emotional problems among boys compared to girls and that the effects of parents' organizational religiousness were in part operated through enhancing adolescents' own religiousness. Consistent with social control theory (Hirschi and Stark 1969; Smith 2003), our data indicated that attending religious services and other religious activities might increase adolescents' opportunities to receive emotional support from the religious communities and thus contribute to protecting adolescents from developing internalizing symptoms. A logical next step is to clarify why family organizational religiousness and parent-adolescent attachment have greater influences on adolescent boys than adolescent girls. Our results clearly demonstrate the importance of future research into gender differences in the effects of religiousness beyond the descriptive across-gender comparisons (i.e., mean level differences), if we are to understand better the religiousness–well-being association.

The limitations of this study suggest directions for future research. First, our participants were predominantly from Christian backgrounds. Future studies will benefit from

examining the processes by which family religiousness may influence adolescent adjustment across diverse religious groups. In addition, our findings were obtained in a largely rural area with Caucasian youth, and replication of the findings with samples with greater geographical and ethnic diversity is needed to evaluate the generalizability of the findings. Second, our data were cross-sectional and non-experimental, and therefore the directions of influences cannot be verified. Given that both religiousness and adjustment are dynamic processes that change over time and circumstance (Kim et al. 2009), it is critical to examine developmental changes within the individual to illuminate the directionality of the associations of religiousness with well-being. Finally, in the current study the relationships between parent-adolescent attachment and adolescent adjustment were estimated based solely upon adolescents' self-reports. Consequently, they might have been inflated artificially by method variance. Using data from multiple informants (e.g., parents, teachers, and clinicians) and multiple methods (e.g., observation, clinical interview, and formal diagnostic criteria) might be worthwhile for future research.

In conclusion, this study's findings contribute to the expanding literature on family religiousness and adolescent development by clarifying when and how parents' religiousness influences adolescent adjustment. In particular, the current results have potentially important implications for parents in their understanding of how their religious behaviors and beliefs and parent-adolescent attachment may influence their children's religious development as well as adjustment. In addition to illustrating the role of parent-adolescent attachment in promoting adolescents' religiousness and their psychological adjustment, the present findings indicate that parents' organizational religiousness may positively influence their adolescent boys' involvement in religious institutions, which in turn is partially responsible for their better emotional adjustment. Furthermore, the influence of parents' personal religiousness on adolescent adjustment is dependent on relationship context. That is, the possible beneficial contributions of parents' religiousness to adolescents' psychological symptoms are no longer in effect—and can even reverse in sign—when parent-adolescent attachment is poor. The results suggest that clinicians should be sensitive to family religious dynamics and how these factors interact with the parent–child relationship. Religiousness has been seen to exert a protective effect for adolescent maladjustment, but clinicians should be aware of the potential that religiousness might have as a stressor among families with poor parent-adolescent attachment.

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## Author Biographies

**Jungmeen Kim-Spoon** is an Associate Professor of Psychology at Virginia Polytechnic Institute and State University. She received her doctorate in Developmental Psychology from University of Virginia. Her research interests include risk and protective factors in the development of psychopathology during adolescence.

**Gregory S. Longo** is a fourth year graduate student in psychology at Virginia Polytechnic Institute and State University where he also received his masters degree in Developmental Psychology. His interests include the measurement and development of religious experience.

**Michael E. McCullough** is a Professor of Psychology at the University of Miami. He received his doctorate in Psychology from Virginia Commonwealth University. He is interested in the proximate and ultimate causes of religion and human social virtues.