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Adolescents' relationship with God and internalizing adjustment over time: The moderating role of maternal religious coping

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Abstract

A growing literature supports the importance of understanding the link between religiosity and youths' adjustment and development, but in the absence of rigorous, longitudinal designs, questions remain about the direction of effect and the role of family factors. This paper investigates the bi-directional association between adolescents' relationship with God and their internalizing adjustment. Results from two-wave, SEM cross-lag analyses of data from 667 mother/adolescent dyads in Belfast, Northern Ireland (50% male, *M* age = 15.75 years old) supports a risk model suggesting that greater internalizing problems predicts a weaker relationship with God one year later. Significant moderation analyses suggest that a stronger relationship with God predicted fewer depression and anxiety symptoms for youth whose mothers used more religious coping.

Keywords

religiosity; internalizing adjustment; adolescents; religious coping

Given the importance of religion in adolescents' lives, a growing body of research has considered associations between young peoples' religiosity and development (Bartkowki, Xu, & Levin, 2008). The majority of research suggests an inverse relation between religiosity and adjustment problems (Milevsky & Levitt, 2004; Pearce, Little, & Perez, 2003), including for at-risk adolescents (Ahmed, Fowler, & Toro, 2011). However, inconsistencies have emerged with regard to the nature and strength of associations; some studies report increases in maladjustment and others report no association (Houlberg, Henry, Merten, & Robinson, 2011; Sallquist, Eisenberg, French, Purwono, & Suryanti, 2010). Questions remain about the direction of effect, that is, whether religiosity drives adjustment, or if adjustment leads to changes in religiosity, which are best answered using

longitudinal designs. Greater refinement in the conceptualization and measurement of religiosity in research studies may further contribute to clarity. Accordingly, the current study considers youths' relationship with God as the specific component of religiosity measured, allowing a focused examination on this salient aspect of religiosity during adolescence. Moreover, little consideration has been given to moderators relating to the social process of religiosity, such as family or parental factors that may qualify the relation between religiosity and internalizing adjustment in youth. These issues are central to obtaining a fuller understanding of the association between religiosity and internalizing adjustment in adolescents, and the identification of moderators may help delineate the direction of effects for sub-populations of adolescents.

Developmental Issues in Adolescence

Changes in religious development and beliefs may be particularly salient during adolescence. Fowler (1981; Fowler & Dell, 2010) describes adolescence as a stage of "synthetic conventional" faith in which advances in cognitive functioning (Piaget, 1976) and interpersonal perspective taking (Selman, 1974) enable youth to develop more sophisticated understanding of a personal God. Together with the most important people in their lives, including family members (Mahoney, 2010; 2013), youth form strongly felt beliefs and representations of God imbued with personal qualities such as love, acceptance, and support, or in the case of unresolved deficits in early childhood, representations which may include narcissism, betrayal, or shame (Fowler & Dell, 2010). From an attachment theory perspective, these attitudes about God have potential implications for individuals' appraisal of God as a secure base in their search for connectedness and during times of stress (Kirkpatrick, 1992), and may be particularly impactful as adolescents navigate the developmental path toward self-discovery, independence, and adult relationships. Adolescence is a crucial time in neurophysiological development as well. During this period, neural connections are made and lost during the developmental process of pruning and slowing brain metabolism. This process may galvanize the neuropsychological organization of an individual's approach to life, relationships, and spirituality, and be carried throughout the rest of the individual's life (Newberg & Newberg, 2006). Thus, adolescence is an important developmental period to study an individual's perceived connection to a God figure.

Depressive symptoms and related psychopathology are developmentally salient concerns during adolescence as well (Costello, Egger, & Angold, 2005). Teens experience numerous developmental transitions, including cognitive maturation (Nolen-Hoeksema & Girgus, 1994), pubertal related hormonal changes (Ge, Conger, & Elder, 2001), and shifting roles in relationships with peers and parents (Hankin, Mermelstein, & Roesch, 2007). In the context of these concurrent transitions, adolescence is characterized by an increase in clinical diagnoses of depression (Kessler, Avenevoli, & Merikangas, 2001) and depressive symptoms (e.g. Gutman & Eccles, 2007). Some estimates suggest as many as 20% to 50% of teens experience depressive symptoms (Kessler, et al.), which is often a precursor to major depression, anxiety disorders, substance use and suicidal behavior, as well as impaired functioning into adulthood (e.g. Lewinsohn, Hops, Roberts, Seeley, & Andrews, 1993). With such extensive and enduring consequences, identifying culturally relevant predictors,

moderators, and consequences is critical to informing interventions and ameliorating psychological adjustment.

Teasing apart the Impact of Religiosity in Adolescence

A number of models have been posited to capture the nature of the relation between religiosity and adjustment in adolescence and these models paired with longitudinal data can help tease apart the underlying psychological processes (Pargament, 2011). A *direct effects model* considers the impact of religiosity on mental and physical well-being. That is, religiosity may be a culturally based (Holden & Vittrup, 2010), protective system that fosters positive adaptation and development for adolescents. A perceived close relationship with God may protect youth from psychological problems through mechanisms such as the promotion of coping (Ano & Vasconcelles, 2005), provision of social support and a sense of belonging (Greenfield & Marks, 2007), or a cognitive-behavioral framework for interpreting negative life events (James & Wells, 2003), among others. Conversely, a *religious coping mobilization model* suggests that stressors lead to greater religious coping. For example youth struggling with internalizing problems may seek a deeper relationship with a higher power in an effort to seek comfort or relieve their symptoms (Ferraro & Kelley-Moore, 2000).

However, a *risk model* proposes that in a context of stress, rather than enhancing religiosity for protective purposes, youths' sense of a personal connection with a higher power may be undermined through a number of mechanisms (Crawford, O'Dougherty Wright, & Masten, 2006). If an adolescent maintains a religious belief system in which aspects of the self are sacred (Pargament & Mahoney, 2005), then trauma, or perhaps even psychological struggles with depression or anxiety, may disrupt spiritual development (Hill & Pargament, 2003). For example, youth who are suffering psychologically may experience a spiritual struggle (intrapersonal or divine) leading to doubt, feelings of distance from God, or judgments of God as harsh or punitive (Pargament, Ano, & Wachholtz, 2005), any of which may disrupt a relationship with a loving, supportive supreme being. Religious struggles are associated with internalizing problems in adults such as depression and anxiety (McConnell, Pargament, Ellison, & Flannelly, 2006). Depression symptoms, such as lethargy or depressive cognitions, may prevent individuals from engaging in religious activities, such as prayer, or obtaining pleasure or comfort from religious practices or beliefs that facilitate a felt closeness to God.

Religiosity and Adjustment

The operationalization of religiosity varies widely across studies, which may partially explain discrepant findings in relation to internalizing problems (Hackney & Sanders, 2003). In a meta-analytic review, Smith, McCullough, & Poll (2003) reported that greater intrinsic religious motivation (i.e., motivation to be religious for its own sake) was associated with less depression in adults, but that extrinsic religious motivation (i.e., involvement for self-seeking ends) was associated with more depression. Consistent with the adult literature, the few available studies examining the differential impact of various forms of religiosity in adolescents report that greater intrinsic orientation was related with less depression

(Milevsky & Levitt, 2004; Possel et al., 2011). However, private religious practices were not significantly related to preadolescents' depressive symptoms (Davis & Epkins, 2009). At the same time, significant associations have been found between teens' extrinsic orientation and depression (Possel et al.). This past work underscores the importance of specificity in the operationalization of religiosity to account for relations to depression among youth (Possel et al.). In the current study, we use narrowly focused items to capture felt relationship with God rather than global measures such as affiliation or attendance.

The limited number of longitudinal tests suggest conflicting findings about the nature of the relation between religiosity and depression over time in adolescence. One longitudinal study found a bi-directional effect in which depression predicted less attendance later in adolescence, and attendance marginally predicted less depression in Christian adolescents in the United States (Horowitz & Garber, 2003). In a second study, intrinsic religiosity predicted fewer depressive symptoms four months later, but depressive symptoms did not predict either intrinsic or extrinsic religiosity for US teens (Possel et al., 2011). Finally, in a third study, a combined measure of spirituality and religiosity did not predict internalizing symptoms, but internalizing symptoms marginally predicted higher spirituality/religiosity one year later among Indonesian Muslim teens (Sallquist, Eisenberg, French, Purwono, & Suryanti, 2010). Inconsistencies in results of previous studies may be clarified by studying potential moderators of relations, such as family factors, in addition to focusing on a specific element of religiosity, such as perceived relationship with God.

Family Effects and Religious Coping

In many ways religion is a social process. Mahoney has proposed a relational spirituality framework in which the search for the sacred and human relationships are joined in three tiers of spiritual mechanisms (i.e., relationship with God, relationships with family members invested with spiritual properties, and relationship with religious community) across stages of discovery (creating and structuring relationships), maintenance (conserving and protecting relationships), and transformation (reforming or leaving distressed relationships requiring fundamental change) (Mahoney, 2010; 2013). The importance of religion to adolescents and their religious behavior have been shown to resemble parent religiosity (Flor & Knapp, 2001). Furthermore, the religiosity of depressed mothers has been shown to predict children's depressions ten years later; for daughters, maternal personal sense of spirituality was protective against depression, whereas mothers' affiliation with particular religious denominations protected sons from depression (Miller, Warner, Wickramaratne, & Weissman, 1997). Appreciating the importance of family relationships in children's development, this paper investigates the potential protective role of mothers' religious coping in the interplay of adolescents' religiosity and psychological adjustment.

In his model of religious coping, Pargament (1997) describes religious coping as "a search for significance in times of stress in ways related to the sacred." In other words, when experiencing negative life events, individuals in culturally-relevant ways involve concepts of or experiences with God or a supernatural force as they appraise threats and engage in processes aimed at holding onto or transforming matters or objects of great value to them. Religion can be added at any level of the coping process, including function (e.g., meaning-

making, spiritual, transformation), appraisals (e.g., benevolent or punishing God), methods (e.g., gaining control, closeness), and religious and spiritual outcomes, with each having implications for outcomes and psychological well-being (Pargament, 2011; Pargament, Smith, Koenig, & Perez, 1998). Religious coping has been shown to mediate the relationships between general religious variables and outcomes (Roesch & Ano, 2003) and predict greater feelings of closeness to God (Pargament, Koenig, Tarakeshwar, & Hahn, 2004). Benefits seem to be distinct from other aspects of coping (Tix & Frazier, 1998) and most evident when people are dealing with more stressful, uncontrollable life events (see Smith et al., 2003).

In the current study, we consider mothers' religious coping as a potential moderator of the bi-directional association between adolescents' relationship with God and internalizing adjustment. Mothers' coping may be impactful during the maintenance stage of Mahoney's model (2010), particularly if mothers and adolescents are engaging in shared religious activities or discussions about their spiritual journey (Brelsford & Mahoney, 2008), or encouraging the others' use of spiritual or theistic mediation (Brelsford & Mahoney, 2009). It is possible then that for youth with positive relationships with God, mothers' coping will help foster better psychological health through one of these shared processes. However, dissimilarity between parents' and adolescents' religious beliefs (Pearce & Haynie, 2004) or youths' evaluation that highly religious mothers are rigid and close-minded (Dollahite & Thatcher, 2008) may decrease relationship satisfaction, lead to conflict, or alienate teens, which may undermine adolescents' psychological health or religiosity.

Religion in Northern Ireland

It is important to recognize the cultural context of religion (Holden & Vittrup, 2010). The current study is conducted in Northern Ireland, where 90% of the population is regarded as Christian (Northern Ireland Statistics and Research Agency, 2002). Thus, our study concerns youths' perceived relationship with a Christian God figure. Compared with the rest of the UK where only 15% of the population is churchgoing, more than 50% of the population in Northern Ireland report attending services. Maltby and Lewis (1997) reported stronger affiliation, practice, and Christian attitudes in a Northern Irish sample than a similar sample from Great Britain. The close affiliation with organized religion provides opportunities for social activity and support from members of the Church community (Whyte, 1990), in addition to the effects related to Church affiliation and religious practices per se. Moreover, religion has a more pervasive influence in various aspects of civil society in Northern Ireland than in other parts of the UK (Mitchell, 2004). Many neighborhoods and schools in Belfast are segregated by religious affiliation, and as such religion is a boundary marker of ethnicity and also constitutional loyalty in NI (Shirlow & Murtagh, 2006). These issues underscore the value of considering religiosity constructs such as relationship with God rather than variables such as affiliation or attendance which may be more confounded in this cultural context.

Northern Ireland is a region of long-standing intergroup hostilities. Although the conflict is not religious per se, the extreme segregation and historic civil inequity between Catholics and Protestants in Belfast may provide a contextual influence with deleterious effects on

adolescents' adjustment, particularly for Catholics as the group traditionally considered relatively disadvantaged. In addition, religious attendance and other indices of religiosity tend to be higher among Catholics than Protestants in the region. For these reasons, religious affiliation (i.e., Protestant or Catholic) is included as a control variable in analyses.

Several additional individual characteristics warrant inclusion in the model as control variables, including gender and age. Consistent with previous research, we expect gender differences in religiosity and adjustment, with females reporting higher religiosity (Lippman & Keith, 2006; Spilka, Hood, Hunsberger & Gorsuch, 2003) and higher internalizing symptoms (Angold, Erkanli, Silberg, Eaves, & Costello, 2002) than males. Because of the wide range, age is also included as a control variable in the model, although specific predictions about the nature of relations are not made. Faith development relies on a complex set of individual, relational, and contextual factors that do not necessarily operate in a linear way allowing simple prediction by age. Similarly, although internalizing symptoms increase between childhood and mid-adolescence (Cole et al, 2002), it has been shown to peak between the ages of 15 and 18 years (Hankin, Abramson, Moffitt, Silva, McGee, & Angell, 1998). Given the expected nonlinear trajectory and the age span of our sample, age may not emerge as a significant predictor in our model.

In summary, this paper will examine the bi-directional association between adolescents' relationship with God and their internalizing adjustment in a two-wave, cross-lag model over the period of one year. Given the relative paucity of previous longitudinal research on the topic, no directional hypotheses are proposed. However, if the *direct effects model* is supported, religiosity at Time 1 will predict lower internalizing problems at Time 2. The *religious coping mobilization model* would predict that greater internalizing problems at Time 1 will be significantly related to higher religiosity at Time 2, whereas the *risk model* would suggest a negative link between depressive symptoms and relationship with God over time. Finally, it is anticipated that mothers' religious coping will function as a significant moderator; that is, the strength of the bi-directional relations between youth's perceived relationships with God and internalizing problems among adolescents will vary based on their mothers' use of religious coping strategies, with mothers' religiosity increasing the buffering effects of a closer felt relationship with God.

Method

Participants

The participants included 667 youth (50% boys; mean age = 15.75 years, $SD = 1.97$ years), and their mothers (mean age = 40.7 years, $SD = 6.3$ years) in Belfast, Northern Ireland, who participated in the fifth and sixth annual waves of a longitudinal study examining a social ecological model of children's exposure to political violence. Participants were recruited using stratified random sampling within socially deprived wards in Belfast. The selected areas were chosen by a demographer expert in the region to be comparable socioeconomically and proportionally representative of Protestant and Catholic areas in the city. See (author identifying citation) for a more detailed explanation of the sampling procedure and areas. All participants were White; 43% were Catholic and 57% were Protestant. Adolescents and mothers, respectively, rated the importance of their religion to

them as follows: 12% and 23% a great deal; 22% and 34% some, 14% and 15% a little, and 41% and 22% not at all important to them. Similarly, adolescents and mothers reported the frequency of church attendance as follows: 5% and 13% weekly; 16% and 16% monthly, 7% and 18% yearly, 8% and 6% every few years, and 43% and 29% practically never.

Mothers, rather than fathers, were selected as participants for both conceptual and pragmatic reasons. Previous research suggests that within the family mothers play a significant role in the religious and spiritual development of children in many cultures, including in the UK (Francis & Gibson, 1993). As Boyatzis, Dollahite, and Marks (2006) note, women report being more religious and attending services more often than do men (Spilka, et al., 2003), and children have been shown to talk about religion, emotions, and other personal matters more readily with mothers than with fathers (Benson & Eklin, 1990; Buhrmester & Furman, 1987), although arguably this may not be the case in all families. Though acknowledging the value of considering the role of fathers, the current sample was limited because many families in socially deprived areas in Belfast are headed by single mothers (approximately two-thirds in our sample).

Procedures

Youth and mothers were interviewed in the home by an established market research firm employing interviewers native to the region. Questionnaires were administered as interviews lasting approximately 45 minutes and one hour, respectively. The Institutional Review Boards at all participating universities provided approval and both mothers and children provided consent and assent prior to participation. Families received £50 for participation.

Measures

Youth relationship with God—Youths' relationship with a Christian God was assessed using five items from the short form of the Francis Attitudes toward Christianity scale (Francis 1987; 1993). Participants indicated the extent to which they agreed with statements about their relationship with God on a 5-point scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Items included the following: "I know that Jesus helps me," "God helps me lead a better life," "God means a lot to me," "I know that Jesus is very close to me," "Prayer helps me a lot." Two items ("I think that going to church is a waste of time" and "I think the Bible is out of date") were eliminated because these items assess Christian beliefs that are distinct from a more personal relationship with God. Reliability and validity for the short form are well established, including samples in Northern Ireland (Maltby & Lewis, 1997). A confirmatory factor analysis of the five-item construct of religiosity across the two waves had good model fit ($\chi^2(29) = 101.36, p > .05, N = 667; \chi^2/df = 3.49; TLI = .97; CFI = .98; RMSEA = .061 (CI: .048, .074)$), and the scale had strong internal consistency in this sample ($\alpha = .94$ at Time 1, $.99$ at Time 2).

Youth internalizing symptoms—The depression and anxiety scales of the Brief Symptom Inventory-18 (BSI-18; Derogatis & Fitzpatrick, 2004) were used to measure psychological distress and disorder. Youth indicated how often in the last seven days they had experienced various symptoms on a 5-point scale from 1 (*not a lot*) to 5 (*extremely*), including "feeling hopeless about the future" and "nervousness and shakiness inside". For

depression and anxiety scores, respectively, $\alpha = .78$ and $.80$ at Time 1, and $.89$ and $.84$ at Time 2. In addition, the General Health Questionnaire (GHQ-12; Goldberg, et al., 1997) was used to measure youths' internalizing symptoms. The GHQ is a 12-item questionnaire in which respondents indicate their psychological distress in the past few weeks on a 4-point scale. Items include "Have you recently been able to enjoy your normal day-to-day activities" and "have you recently felt you can overcome your difficulties." Internal consistency in the current sample was high at both Time 1 ($\alpha = .90$) and at Time 2 ($.92$).

Maternal religious coping—Mothers' religious coping was assessed at Time 1 using the 4-item subscale from a multidimensional coping inventory (COPE; Carver, Scheier, & Weintraub, 1989). Mothers indicated on a 4-point scale from 1 (*I have not been doing this at all*) to 4 (*I've been doing this a lot*) how often they participated in coping behaviors including "I put my trust in God," "I seek God's help," "I try to find comfort in my religion," and "I pray more than usual." The COPE was administered immediately after completing two instruments assessing mothers' psychological adjustment generally and depression specifically. Women were asked to answer religious coping items, as well as items for two other COPE subscales with regard to stress in their life. Internal consistency of the four religious coping items is high in the current sample ($\alpha = .93$).

Results

Preliminary Analyses

Table 1 includes the means, standard deviations, and bivariate correlations across two time points for all controls, manifest score of youth relationship with God, manifest indicators of youth internalizing problems, and a composite score of maternal religious coping. A structural equation model (SEM) was conducted using AMOS Graphics 18 (Arbuckle, 2009). Maximum likelihood was used to estimate all parameters for the paths of interest under the assumption that data were missing at random. To assess overall model fit, a number of guidelines were consulted, including the χ^2/df index < 3 , the Tucker Lewis Index (TLI) and comparative fit index (CFI) $> .90$, and the root mean square residual (RMSEA) $< .08$ (Hu & Bentler, 1999).

Two latent variables were created for the primary variables of interest: youth relationship with God and internalizing adjustment. For adolescents' relationship with God, the five items served as manifest indicators for this latent construct (correlations among items at Time 1 ranged from $r = .66$ to $.76$, all $p < .001$). This measurement model was tested using confirmatory factor analysis; items were forced to load on their given factors and the two latent variables were allowed to correlate yielding a model with acceptable fit ($\chi^2(29) = 101.36$, $p < .05$, $N = 667$; $\chi^2/df = 3.50$; TLI = .97; CFI = .98; RMSEA = .06 (CI : .05, .07)). Significant correlations among the different domains of youth internalizing adjustment supported the creation of a latent variable (Time 1: $r = .39$ to $.66$, all $p < .001$; a confirmatory factor analysis in which indicators were forced to load on the latent construct within time point, and in which the latent variables were allowed to correlate over time, revealed acceptable fit ($\chi^2(22) = 4.09$, $p < .05$, $N = 667$; $\chi^2/df = 2.82$; TLI = .97; CFI = .99; RMSEA = .05 (CI : .02, .09)). Because of the high correlation among all four items of

mothers' religious coping ($r = .71$ to $.85$, all $p < .001$), a parameter for measurement error would not significantly improve the estimate (Perera & Maxwell, 2010); therefore, a composite sum was included as a manifest variable.

Primary Analyses

The structural model was constructed to control for youth gender, religious affiliation, and age at Time 1, as well as earlier levels of the outcomes of interest with auto-regressive controls for internalizing problems and relationship with God. To examine the moderation effect of mothers' religious coping, the manifest variable was added to the model as an exogenous predictor, and interaction indicators were calculated with the centered values of the composite coping scale and of each manifest indicator of adolescent relationship with God. These five product terms were used as the indicators for the latent interaction term that was added to the model. This approach of forming a latent interaction term between one latent variable and a second observed variable provides an effective test of the interaction parameters. Finally, all control variables and predictors were allowed to correlate; error terms for the endogenous outcomes of interest were also allowed to correlate.

The proposed model (Figure 1), including both direct and moderation effects, was tested and the fit for the overall model was adequate ($\chi^2(115) = 1103.90$, $p < .05$, $N = 667$; $\chi^2/df = 4.70$; TLI = .88; CFI = .91; RMSEA = .07 (CI: .07, .08)). Age at Time 1 did not predict later relationship with God or internalizing problems for youth. The control variable of adolescent gender was significant; compared to males, females reported stronger relationships with God ($\beta = .17$, $p < .001$) and fewer internalizing symptoms ($\beta = -.10$, $p = .01$). Compared to Protestants, Catholic youth were more likely to report stronger relationships with God ($\beta = .16$, $p < .001$) and more internalizing problems ($\beta = .09$, $p = .03$). The direct effect of mothers' religious coping was related to higher child internalizing problems ($\beta = .09$, $p = .04$), but was not directly relate to youths' relationship with God one year later ($\beta = -.02$, $p = .98$). Suggesting some stability, the autoregressive paths were also significant for relationship with God ($\beta = .38$, $p < .001$) and internalizing symptoms ($\beta = .35$, $p < .001$).

The cross-lagged effects of youth relationship with God and adjustment were then examined. A stronger relationship with God at Time 1 was not significantly related to fewer internalizing symptoms at Time 2 ($\beta = -.08$, $p = .13$); however, earlier internalizing problems did predict weaker religiosity a year later ($\beta = -.14$, $p = .01$). However, the impact of mothers' religious coping changes the interpretation of these direct effects. Mothers' use of religious coping enhances the negative link between adolescent religiosity and adjustment ($\beta = -.29$, $p < .001$); that is, youth who have a relationship with God are less likely to have internalizing symptoms one year later if their mothers use more forms of faith-based coping. Yet, mothers' religious coping did not moderate the path from earlier youth adjustment to later relationship with God ($\beta < -.01$, $p = .98$). In other words, when adolescents suffer from depression, anxiety and decreased well-being, mothers' use of faith-based coping does not improve their children's relationship with God. Overall, these findings suggest that when combined with a parental figure who uses faith-based coping, youth who also have a stronger relationship with God will experience fewer internalizing problems over time, but,

mothers' religious coping does not influence their children's felt closeness to God one year later, either as a main effect or a moderator.

Discussion

This study extended previous work by testing the direction of effect in the relations between youths' relationship with God and their internalizing adjustment over a one year period in adolescence, and the moderating role of mothers' religious coping. Results suggest that youth who had stronger relationships with God were less likely to suffer from internalizing adjustment problems one year later, but only if their mothers used more religious coping. On the other hand, teens' greater internalizing problems predicted a weaker relationship with God one year later; Mothers' religious coping did not predict youths' relationship with God directly or indirectly.

The direct effect model, suggesting that adolescents' relationship with God predicts fewer adjustment problems, was supported in the context of mothers' religious coping. That is, although the direct association between adolescents' relationship with God and later internalizing problems was not significant, when mothers utilized more faith-based coping youths' feelings of closeness with God was linked to lower internalizing problems one year later. Pargament and colleagues (1998) propose that religious coping involves reappraising or reinterpreting a stressor in religious terms and utilizing various coping processes, with implications for psychological distress. Our results suggest that individual differences in youths' closeness to God in combination with the influence of mothers' religious coping, may help explain the impact on adolescents' psychological functioning. Mothers' religious coping may help an adolescent who feels a warm relationship with a loving, loyal God and/or Jesus make benevolent reappraisal of life events (e.g., God is providing an opportunity for growth or the event is part of God's plan). Furthermore, it may help them to rely on strategies such as collaborative religious coping or active religious surrender as a means of control, seeking spiritual comfort, or transformative religious coping, leading to less depression and anxiety symptoms. Extending Flor and Knapp's (2001) notions, it may be that mothers communicate their religious coping strategies to their adolescents through observation or through discussions of faith, and that youth with stronger relationships with God are more likely to internalize and use those strategies themselves, with positive implications for their own mental health. For example, mothers who use religious coping may aid more highly religious adolescents in recognizing the sacred in their daily life and making sanctifying appraisals during times of stress, either of which may minimize distress.

Adolescents with greater internalizing problems were less likely to have strong relationship with God one year later, supporting a risk model. Teens' depression, anxiety, and general distress may contribute to emotional distance from a higher power. Perhaps accompanying feelings of abandonment or insecurity contribute to an evaluation that their God is not dependable and will not provide aid in times of need (Pargament et al., 2005). These processes may be magnified for teens in comparison to adults considering that adolescence is a time in which many youth are actively forming more complex, personal representations of God (Fowler & Dell, 2010), coupled with normative developmental transitions in attachment and self-concept. Unlike religious adults who are more likely to have weathered

more storms with God's help, youth with less established relationships with God may experience greater spiritual disruption in the face of stress. In addition, depressive symptoms may inhibit participation in religious activities, which may influence beliefs and feelings toward God. Additional research is needed to explore the mechanisms through which adjustment problems or other stressors undermine adolescents' relationships with God.

Teens did not seem to benefit spiritually from the experience of risk, in this case psychological distress. However, there was support for mothers' mobilization of religious coping, as maternal coping was related to adolescents' psychological distress at both time points. Our findings are inconsistent with one of the few other studies to examine this question in young people (Sallquist et al., 2010). Notably, Sallquist et al.'s study showing that poorer adjustment marginally predicted higher religiosity/spirituality one year later was conducted with Muslim teens in Indonesia where, in a 2000 survey, young adults unanimously reported that religion was very important in their daily lives (Lippman & Keith, 2006). Notably, in our sample only 12% of adolescents reported their religion was very important to them and the majority reported they did not attend services regularly. Inconsistencies in these two sets of findings may be due to variations in religious practices and culture of Muslim youth in Indonesia and Christian youth in Belfast, with religion playing a more beneficial role when it is an integrated part of daily life either culturally, institutionally, and personally. Additional cross-cultural research is needed to fully explore this and other context-dependent hypotheses (Holden & Vittrup, 2010).

Notably, although mothers' religious coping did impact youths' later adjustment, mothers' coping did not influence youths' relationship with God directly or in interaction with youths' internalizing symptoms. Perhaps teens already suffering from depression or anxiety symptoms are unable to meaningfully incorporate mothers' religious coping methods (e.g., engaging in religious activities or seeking spiritual support or connection) in an effort to preserve their relationship with their higher power. However, in the absence of a measure of adolescents' coping, it is unclear whether youth are engaging in positive or negative coping strategies themselves (or both which may obscure results), or no strategies at all.

These results have the potential to contribute to the growing interest in integrating religiosity, religious struggles, and religious coping in treatment programs (Pargament, 2007). Although this is a fairly new area of research, a number of studies suggest benefits of spiritually integrated treatments for the relief of physical or mental symptoms (Wachholtz & Pargament, 2008; Richards, Berrett, Hardman, & Eggert, 2006) and for dealing with spiritual struggles (Murray-Swank, & Pargament, 2005; Tarakeshwar, Pearce, & Sikkema, 2005). Although more research is needed to understand the precise mechanisms, our results suggest that a family systems or relational spirituality (Mahoney, 2010) approach involving intervention with mothers of religious youth to promote intergenerational transmission of religious coping may be a promising direction for reducing youths' internalizing problems. Furthermore, it may be important to recognize that adolescents experiencing depression or anxiety symptoms may be experiencing religious struggles.

The study is not without limitations. The assessment of mothers' religious coping is limited and the nuances of the specific strategies she is using are not known. Furthermore, the

mechanism by which mothers' religious coping interacts with youths' relationship with God for the protection of their internalizing adjustment cannot be determined in the current design. For example, youth may be internalizing and using religious coping strategies themselves, or perhaps when both the mother and adolescent evidence high religiosity, mother-adolescent relations are warmer and less conflictive, with implications for positive mental health. Inclusion of additional maternal variables in the model, such as maternal openness to communication, warmth, or monitoring, would strengthen the support for the unique role of maternal religious coping in these links. In addition, the role of fathers' religiosity was not considered. Although the study represents an advance over previous cross-sectional and short-term longitudinal studies by considering the cross-lag relations over one year, an even longer term longitudinal study would allow for better test of the trajectories of transmission and the bi-directional relation between religiosity and mental health during the developmental period of adolescence.

Notwithstanding the limitations, the current study provides a significant advance over research to date by providing a one-year longitudinal cross-lag test of the bidirectional relationships between teens' relationship with God and mental health, and family factors (i.e., mothers' religious coping) as a moderator. Such specificity is necessary to more fully understand the developmental processes at work and contribute to understanding the role of parents' religiosity in both youths' religious development and adjustment, with implications for promoting youths' mental health and well-being.

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Figure 1.

Test of the structural equation model of associations between youth religiosity and internalizing adjustment over two time points, with mother religious coping as a moderator, (N = 667). All variables are child report, unless denoted with^m for mother report. Standardized path coefficients are reported. Solid lines denote significant paths; dashed lines indicate non-significant paths. Exogenous variables and endogenous outcomes were correlated, respectively; error variances were omitted from the model for readability. * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 1
Bivariate Correlations and Descriptive Statistics for All Study Variables (N = 667)

Variables	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. Youth gender	-											
2. Youth rel affiliation	.03	-										
3. Youth age T1	-.01	.00	-									
4. Relationship w God T1	.16***	.17***	.00	-								
5. Religiosity T2	.24***	.24***	-.05	.55***	-							
6. Distress T1	-.02	.07	-.14**	-.19***	-.15**	-						
7. Distress T2	-.11*	.13**	-.09*	-.14**	-.09	.23***	-					
8. Anxiety T1	.06	.00	-.02	-.15***	-.13*	.40***	.13**	-				
9. Anxiety T2	-.09*	.04	-.04	-.16***	-.12*	.18***	.55***	.30***	-			
10. Depression T1	.04	-.03	-.00	-.12**	-.05	.39***	.13**	.76***	.30***	-		
11. Depression T2	-.06	.05	.02	-.15**	-.05	.21***	.58***	.33***	.75***	.36***	-	
12. Coping ^m T1	.02	.19***	-.10*	.03	.02	.25**	.15**	.10*	.13**	.07	.12**	-
<i>M</i>	.51	.39	15.75	16.31	17.22	6.36	6.54	.21	.18	.28	.30	2.11
<i>SD</i>	.50	.49	1.97	3.30	4.03	3.74	3.78	1.17	1.02	1.18	1.26	3.27

Note:

Correlation significant at * $p < .05$, ** $p < .01$, and *** $p < .001$.

All variables are child report, unless denoted with ^m for mother report.