EXPLORING THE RELATIONSHIPS AMONG AUTHORITATIVE PARENTING, RELIGIOSITY, AND ADOLESCENT INTERNALIZING BEHAVIORS

by

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The public health issue of adolescent depression and anxiety in association with religiosity and family dynamics has not been established. This research explored the associations among authoritative parenting, religiosity (i.e. organizational, personal, and family), parent-child connectedness, and internalizing behaviors among adolescents. Data are from 325 adolescents ages 13 to 18 and caregiver dyads participating in the *Flourishing Families Project*, Wave V. A path model demonstrated that authoritative parenting encouraged connectedness between caregivers and adolescents. Parent-adolescent connectedness was associated with personal and organizational religious incongruencies. Implications for research and practice are discussed.
EXPLORING THE RELATIONSHIPS AMONG AUTHORITATIVE PARENTING, RELIGIOSITY, AND ADOLESCENT INTERNALIZING BEHAVIORS

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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>TITLE PAGE</td>
<td>i</td>
</tr>
<tr>
<td>COPYRIGHT PAGE</td>
<td>ii</td>
</tr>
<tr>
<td>SIGNATURE PAGE</td>
<td>iii</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>iv</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>v</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>vi</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>viii</td>
</tr>
<tr>
<td>CHAPTER 1: INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Research Hypotheses</td>
<td>4</td>
</tr>
<tr>
<td>CHAPTER 2: REVIEW OF THE LITERATURE</td>
<td>5</td>
</tr>
<tr>
<td>Theoretical Frameworks</td>
<td>5</td>
</tr>
<tr>
<td>Adolescent developmental changes</td>
<td>5</td>
</tr>
<tr>
<td>Parenting styles</td>
<td>7</td>
</tr>
<tr>
<td>Religiosity</td>
<td>8</td>
</tr>
<tr>
<td>Parenting Styles and Religiosity</td>
<td>10</td>
</tr>
<tr>
<td>Family connectedness</td>
<td>10</td>
</tr>
<tr>
<td>Establishing rules</td>
<td>11</td>
</tr>
<tr>
<td>Parental monitoring</td>
<td>13</td>
</tr>
<tr>
<td>CHAPTER 3: METHODOLOGY</td>
<td>15</td>
</tr>
<tr>
<td>Participants</td>
<td>15</td>
</tr>
<tr>
<td>Measures</td>
<td>16</td>
</tr>
<tr>
<td>Religiosity</td>
<td>16</td>
</tr>
</tbody>
</table>
LIST OF TABLES

1. Percent of Adolescents by Race/Ethnicity..........................................................21
2. Descriptive Statistics of Participants.......................................................................22
3. Family Religious Practices among Participants ......................................................23
5. Means and Standard Deviations of Parent and Adolescent Organizational and Personal Religiosity......................................................................................................................25
6. Bivariate Correlations of Adolescents’ and Parents’ Religiosity, Authoritative Parenting, Connectedness, and Internalizing Behaviors among Adolescents.........................................28
LIST OF FIGURES

1. Proposed Model ..........................................................21
2. Organizational Religious Incongruence Percentages ..........................22
3. Personal Religious Incongruence Percentages .................................25
4. Percent of Adolescents Internalizing Behaviors by gender ...................26
5. Structural paths of authoritative parenting and dimensions of religiosity on adolescents’ internalizing behaviors .........................................................30
CHAPTER 1: INTRODUCTION

Religion plays significant roles in the psychological health and overall well-being of adolescents and their families (Kim-Spoon, Longo, McCullough, 2012). Recent research indicated a relationship between adolescent religiosity and protection from internalizing behaviors such as depression and anxiety (Barton, Snider, Vazsonyi, & Cox, 2014; Dew, Daniel, Armstrong, Goldston, Triplett, & Koenig, 2008). Similarly, adolescent religiousness was associated with better academic outcomes and lower rates of substance abuse for teens (Dew et al., 2008; Kim & Esquivel, 2011; Kim-Spoon, Farley, Holmes, & Longo, 2014). Prior research has shown that parents and their children attending a religious service together can serve to increase the child’s psychological well-being (Petts, 2014).

In addition, parental religiosity has been associated with positive parenting practices, such as good communication with, and effective monitoring of, their teens’ behavior (Snider, Clements, & Vazsonyi, 2004). Religious parents were also more likely to provide guidance for their adolescents (Smith, 2003b), and to be in contact with their adolescent’s teachers and parents of their adolescent’s friends (Smith, 2003a).

Furthermore, religion provided opportunities for connectedness and acceptance (Smith, 2003a cited in Kim-Spoon et al., 2012). According to Petts (2014), adolescents’ attendance of religious service with a parent typically created/provided a supportive community for the teenager; and a shared religion between parents and adolescents provided the opportunity for improved familial (parent-child) relationships (Petts, 2014; Regnerous & Burdette, 2006) and traditions that may promote closeness (Godina, 2014). However, the relationship between religion and psychological distress in adolescents is still unclear, as researchers have observed
both aggravated and alleviated adolescent internalizing behaviors in correlation with religiousness (Dew et al., 2008).

Internalizing behaviors consist of the internal experiences and behavioral expressions of depression and anxiety (Barber, Stolz, Olsen, & Maughn, 2005). In 2014, an estimated 11.4% of United States adolescents between the ages of 12 and 17 experienced at least one major depressive episode in the past year (National Institute of Mental Health [NIMH], 2015). Among 13 to 18 year olds in the United States, there is a 25.1% lifetime prevalence of anxiety, and a 5.9% lifetime prevalence of a severe anxiety disorder (Merikangas et al., n.d.). Depression and anxiety play a role in adolescent suicide. Adolescents disproportionately take their own lives, with suicide being the third leading cause of death among United States youth ages 10 to 14, and the second leading cause of death among individuals between 15 and 35 years of age (CDC, 2013).

Current national data shows that 17% of students in grades nine through 12 seriously considered attempting suicide within the previous year, 13.6% of high school students made a suicide plan, and 8.0% of high school students actually attempted suicide at least once within the past year (Kann, Kinchen Shanklin, et al., 2013). Internalizing behaviors among adolescents have been linked with differences in perceptions between adolescents and their parents in regards to reports of parenting practices (Guion, Mrug, & Windle, 2009). Differences in perceptions between adolescents and parents are also associated with poor emotional adjustment (Leung & Shek, 2014). Recent research has suggested that a discrepancy between an adolescent’s beliefs and the beliefs of his or her caregiver may increase harmful internalizing and externalizing behaviors (Kim-Spoon et al., 2012).
In addition, Williams et al. (2009) and other researchers (see Akhter, Hanif, Tariq, & Atta, 2011; Piko & Balazs, 2012) have found that internalizing behaviors are differentially influenced by parenting styles. Specifically, authoritative parenting that features both high supportiveness and high expectations for a child (Baumrind, 1967) has been shown to be associated with lower internalizing behavior in children (Akhter et al., 2011) and lower depressive symptoms in adolescents (Piko & Balazs, 2012).

Additionally, adolescent internalizing behaviors have been linked with family connectedness in recent literature (Houltberg et al., 2011; Nunes, Faraco, Vieria, & Rubin, 2013). Houltberg et al. reported that family connectedness plays a role in protecting against teen depression by providing social support and high self-esteem. Parents who scored high in their rejection of their children were found to have adolescents with high levels of internalizing behaviors (Nunes et al., 2013), and adolescents who exhibit high internalization symptomology were likely to have low parental connectedness.

Parent-adolescent connectedness and religious beliefs and practices are also linked. For example, when parent and teen put similar values on the role of religion, they tended to have a high quality relationship. On the other hand, adolescents who placed less value on religion than their own parent were reported to have less affection for their parents compared to their counterparts who placed similar value on religion as their parents (Kim-Spoon et al., 2012). Shared parent-child activities frequently fostered perceptions of closeness and family connectedness (Houltberg et al., 2011). However, adolescent-parent church attendance was not universally linked with better family relations (Regnerus & Burdette, 2006), or with gains in adolescent-parent closeness from the perspective of the adolescent (Pearce & Axinn, 1998).
Thus, the current literature is inconclusive and limited in regards to the way that these concepts impact one another. The purpose of this study was to extend current literature by exploring the relationships among authoritative parenting, dimensions of religiosity (i.e. family religious practices, organizational religiosity, and personal religiosity), family connectedness, and internalizing behaviors among adolescents. Consequently, we hypothesized that:

(a) Higher levels of authoritative parenting would lower parent-adolescent organizational religious incongruence, personal religious incongruence, and internalizing behaviors among adolescents, and increase parent-adolescent connectedness.

(b) Higher levels of organizational religious incongruence would be associated with lower parent-adolescent connectedness, and higher levels of personal religious incongruence would be associated with increased incidence of internalizing behaviors among adolescents.

(c) Higher levels of parent-adolescent connectedness would lower internalizing behaviors among adolescents.

(d) Parent-adolescent connectedness would mediate between organizational religious incongruence and incidence of adolescent internalizing behaviors.

(e) Increased family religious practices would increase parent-adolescent connectedness, and would lower internalizing behaviors among adolescents.
CHAPTER 2: LITERATURE REVIEW

Theoretical Frameworks

Adolescent developmental changes. Adolescence is the time period, according to Piaget (2008), in which people begin to practice formal operational thinking. In other words, beginning around ages 12 to 15 and into adulthood, adolescents develop the ability to reason hypothetically and to make use of prepositional thought (Piaget, 2008). Hypothetical reasoning allows them to think broadly and abstractly about the causes of particular outcomes, while prepositional thought allows them to make connections and draw conclusions from logical if-then statements (Piaget, 2008). Adolescents who begin utilizing preoperational thought will be able to grapple with hypothetical, abstract, and ideological concepts central to religion, and to determine if they themselves arrive at the same conclusion as their families in regards to faith.

Simultaneously, Erikson (1968) identified adolescence (i.e. approximately between the ages of 12 and 18) as a developmental period in which individuals psychosocially grapple with identity vs role confusion. As they establish an identity of their own, adolescents desire to both be independent, and to be accepted and to fit into society (Erikson, 1968). The search for identity involves the quest for finding one’s purpose, be that in a career, a social community, and/or a religious setting (Erikson, 1968). As discussed above, religion provides opportunities for connectedness and acceptance (Smith, 2003a), but it may also be associated with rejection in other situations (Godina, 2014). In this stage, adolescents will want to explore their own personal connection with a higher being, or God. Adolescence is associated with changes in an individual’s perceived relationship or connectedness with God (Houltberg, Henry, Merten, & Robinson, 2011). In their desire to establish their own identity and solidify their beliefs and roles in relation to God and to others, some adolescents decide to accept their family’s faith as their
own, while others fall away from a previously accepted belief (Regnerus & Burdette, 2006). It should be noted that it is typical for adolescents to question and explore personal and parental beliefs in order to establish their own (Houltberg, Henry, Merten, & Robinson, 2011).

Erikson noted that in situations where an adolescent is being pressured to conform to a specific identity, that individual may rebel by establishing a negative identity (marked by delinquent behaviors) and by experiencing feelings of unhappiness and dissatisfaction. Overly-controlling parenting can thus contribute to the onset of depression in adolescence when a teen rejects a heavily enforced parental belief system. Religion may be one avenue by which adolescents will seek to establish personal meaning, as it involves grappling with abstract, hypothetical concepts, and may also involve participating in a group of people.

In a longitudinal study, slightly over 20% of adolescents experienced a decline in the strength of their religious belief over the course of one year, between 15% and 18% of teens experienced a strengthening of their religious beliefs over the course of one year, and less than 66% of adolescents had religious beliefs that remained stable over the course of one year (Regnerus & Burdette, 2006). The cognitive and psychosocial developmental milestones that occur during adolescence encourage them to naturally seek to establish one’s own place in (or apart from) a faith community centered around abstract beliefs.

Researchers acknowledge that the search for meaning and purpose in society is a lifelong quest; however, the new cognitive (Piaget, 2008) and psychosocial (Erikson, 1968) capabilities that develop during adolescence allow it to be a time of unique, often transformative faith development. Thus, much can be gained in the fields of religion, parenting, and connectedness from examining parent-adolescent dyads. The present study will explore the relationships
between authoritative parenting style and internalizing behaviors, within the context of religiosity.

**Parenting styles.** As adolescents are seeking to establish their own individual identity, their relationship with their parents is influential in their development and mental health. Parenting has been shown to differentially influence levels of internalizing behaviors among children (Akhter et al., 2011; Piko & Balazs, 2012). Additionally, levels of parent-adolescent connectedness/rejection are associated with internalizing behavioral outcomes (Nunes et al., 2013). Baumrind introduced three distinct parenting styles, based on differing levels of supportiveness and parental expectations: authoritarian, permissive, and authoritative parenting.

Authoritarian parenting is marked by a unidirectional, power-assertive relationship in which the parent establishes rules and expects them to be followed without explanation (Baumrind, 1967). Authoritarian parenting typically produces adolescents who may be the most driven to rebel during identity formation, because of the pressure to conform to the specific identity that their parents are demanding (Erikson, 1968). Religious, authoritarian parents will likely require their child to attend a religious service with them, and to uphold a lifestyle consistent with their parent’s moral convictions, regardless of whether the adolescent himself or herself identifies personally with that religion. Authoritarian parenting was associated with increases in child internalizing behaviors (Akhter et al., 2011), and decreases in parent-child connectedness because of the lack of parental support.

Permissive parenting is the opposite of authoritarian parenting, because it is low on parental expectations of the adolescent, but high on parental relational warmth towards the adolescent (Baumrind, 1967). A permissive parent will have few (if any) rules or enforcement of rules for the adolescent (Baumrind, 1967). Permissive parents will not enforce requirements of
religious participation on their child. Internalizing behavior problems have been positively associated with both permissive and authoritarian parenting styles in children (Akhter et al., 2011). However, permissive parenting is also likely linked with high parent-child connectedness because of the high levels of parental support involved in this style.

Recommended as the most beneficial style of parenting, authoritative parenting, on the other hand, is high on both support and reasonable expectations for the adolescent. Authoritative parents establish and enforce rules and guidelines. This style of parenting discusses the reasoning behind rules with the adolescent. Communication between the adolescent and parent is bidirectional and open when parents are authoritative (Baumrind, 1967). Authoritative parenting is associated with lower depressive symptomology among adolescents (Piko & Balazs, 2012) and lower internalizing behavior in children (Akhter et al., 2011). In the context of religion, authoritative parents will likely engage in bidirectional conversation with their adolescent about their beliefs, and will establish expectations and rules based on input from their child.

**Religiosity**

Religion typically refers to a traditionally practiced way of worshiping through established rituals, liturgies, or ways of praying that a group of people hold in common and may practice together (Barber, 2012). Within the present study, organizational religiousness provides a measure that is representative of this definition of religion. *Spirituality*, however, is a broader term that encompasses an individual’s search for a transcendent power, or for meaning and purpose in life (Barber, 2012). Within the present study, personal religiousness may provide a snapshot of spirituality. Although individuals under the age of 18 were not surveyed, a 2012 study identified that 18% of the US adult population identified as “spiritual, but not religious” (Pew Research Center, 2012). Keeping this phenomenon in mind, the use of the term *religiosity*
within the present study refers to both personal and corporate beliefs and practices by which people seek to worship; in a sense, it encompasses both definitions of religion and spirituality.

Recent research shows interaction independent of parenting styles between adolescent and parental religiosity. For example, the differences in values that parents and adolescents hold when they have different religious beliefs lowers the perceived closeness and perceived relationship quality for both mothers and adolescents (Pearce & Axinn, 1998). Conversely, familial relationships show improvement when adolescents convert to their family’s religion (Regnerous & Burdette, 2006). This positive relationship was found, even when researchers controlled for declines in excessive drinking and drug abuse, which can be expected after conversion (Regnerus & Burdette, 2006).

Both adolescent religiosity and parental religiosity are each negatively correlated with adolescent depression levels (Barton, Snider, Vazsonyi, & Cox, 2014). Adolescent religiosity buffered multiple risk factors for substance abuse (Kim-Spoon et al., 2014), and adolescents’ personal religiosity, as defined by their own sense of connectedness with God, provided a source of support when their own family connectedness was perceived to be low (Houltberg et al., 2011). Additionally, adolescent religiosity was found to mediate the positive relationship between parental religiosity and positive adolescent outcomes (including decreased likelihood of depression) (Barton et al., 2014). When adolescents perceived their parents to be more religious, their parents were also rated as more likely to be supportive, to monitor their adolescent’s whereabouts, to accept their adolescent’s friends, and to communicate with their adolescent (Snider et al., 2004). When the adolescents noted that their parents prayed, the parent was rated with the most consistent positive parenting (Snider, Clements, & Vazsonyi, 2004).
Parenting Styles and Religiosity

Some of the ways that parental religiosity and adolescent religiosity can be seen interacting differently among the three parenting styles are through family connectedness, the establishment of household rules, and parental monitoring of the adolescent.

Family connectedness. Family connectedness may be associated with feelings of closeness among family members, and may be produced as family members participate in activities together (Houltberg et al., 2011). Researchers acknowledge that family connectedness is not exclusively linked with religion within the family; for example, secular venues through which family members engage in leisure with one another also contributed to family connectedness (Hardway & Fuligni, 2006). Nonetheless, research supported the examination of religiosity as a factor in family connectedness (Regnerous & Burdette, 2006). Family connectedness is important to examine when exploring the relationship between religiosity, parenting styles, and psychological outcomes, because family connectedness played a role in protecting against teen depression (Houltberg et al., 2011). Houltberg et. al. explained that positive family interactions led to stronger self-esteem and support in times of stress, which then led to lower likelihood of depression.

Retrospective interviews of individuals who had been raised within the strong religious context of a Seventh Day Adventist community revealed that these individuals fondly recalled their family’s celebrations of holidays and religious traditions (Godina, 2014). Additionally, Petts (2014) found that when individuals in late childhood attended a religious service (i.e. an expression of organizational religiosity) with their parents, they were more likely to have higher levels of psychological well-being throughout their adolescent years. Petts explained that much
of this relationship may be explained by the intact family structures of the individuals in the sample, which contribute to family closeness.

However, the link between shared activities, organizational religiosity, and family closeness was not always significant. It should be noted that adolescents and parents attending church together did not necessarily predict better family relations (Regnerus & Burdette, 2006). Additionally, adolescents did not report a significant impact on their perception of their parent-child relationship quality when they regularly attended a religious service with their mothers, although mothers did experience improved perceptions in the quality of their relationship with their child that lasted up to five years (Pearce & Axinn, 1998). Authoritarian parenting that requires religious participation without regarding the adolescent’s own self-esteem, control, and religious identity may offset the potential gains from the parent-child shared experience.

**Establishing rules.** Religiosity is often accompanied by specific sexual or behavioral morals (Kim & Wilcox, 2014) which contribute to the reasoning behind particular rules that parents establish for their adolescents. Kim and Wilcox found that among parents who self-identified as orthodox Protestant or Catholic, the frequency with which parents attended religious services (i.e. the strength of their organizational religiosity) was associated with increases in the amount of rules that parents set for teens. For example, parents who attended a religious service weekly were more likely than parents who did not attend a religious service regularly to establish rules with regards to which television shows their child was permitted to watch, and to set a bedtime for their adolescent (Kim & Wilcox, 2014). Adolescents in Seventh Day Adventist homes were required to be home by sundown on Friday nights to begin observing Sabbath (Godina, 2014). Furthermore, increases in parental religiosity were also associated with increases in the parent’s moral expectations for their adolescent (Smith, 2003b). Parents high in organizational religiosity
who attended a worship service weekly were more likely than other parents to have the expectation that their child would not skip school, and to impose higher expectations on sexual morals (Kim & Wilcox, 2014).

While religious parents may universally have moral expectations for their children, different parenting styles influenced the ways that those expectations may be communicated and enforced in each household (Baumrind, 1967). A permissive parent may desire for her child to live in accordance with religious morals, but she may not communicate or enforce that desire. In relation to church attendance, it was found that children whose whereabouts were not strictly monitored but who also went to church during childhood were the most likely to continue to participate in religion as adults (Vermeer, Janssen, & Scheepers, 2012). The comparatively decreased parental monitoring that these children experienced may be indicative of permissive parenting. However, high levels of religious autonomy in children (which may be associated with permissive parenting) was also found to be linked with a low number of child church attendance (Vermeer et al., 2012)

Conversely, authoritarian parents who value compliance are likely to establish non-negotiable religious boundaries as house rules (Godina, 2014). Individuals who described their adolescence in a religious home with a commitment to obedience described their environment as sometimes “strict, tense, and firm” (Godina, 2014). A home environment characterized by demanded obedience to rules that the adolescent may not agree with or understand will likely produce less of a sense of control for the adolescent, and thus possibly lead to more depressive and anxious symptoms (Piko & Balazs, 2012).

Authoritative parents are willing to discuss the reasoning behind rules for their adolescents, but these parents do still have control over which particular rules are established and enforced
within the home (Baurmind, 1967). When the adolescent and parent agree on religiousness, authoritative parenting is able to be used to easily communicate and decide upon rules and expectations (Bartkowski & Ellison, 1995). However, disagreements in regards to the interpretation and relative importance of religion lead to adolescent-parental disagreements about where certain boundaries should be drawn and rules should be set (Bartkowski & Ellison, 1995). These disagreements may be left unspoken in an authoritarian home, and would not arise in a permissive home; so, although living in a religious household may be accompanied by some similar parental desires for their adolescents, parenting style may lead to different mental health outcomes for teens in each household.

**Parental monitoring.** Similar to the establishment of household rules and expectations, parental religiosity is also associated with the extent to which a parent monitors the whereabouts and activities of their child (Kim & Wilcox, 2014). Parents who regularly participate in religious services also supervise their adolescent children more (Smith, 2003b). When both the adolescent and parent attend religious services together, the parent is more likely to know the names of their child’s friends, friends’ parents, and teachers, as compared with parent-adolescent dyads who do not attend services together (Smith, 2003a). The parents in parent-adolescent dyads who attend religious services together are also more likely to have met and spoken with the parents of their child’s friends, and with their child’s teachers (Smith, 2003a). These increased connections allow for the parent to monitor their adolescent through multiple sources (Smith, 2003b).

While parent-adolescent dyads that attend religious services together may not necessarily be associated with one parenting style in particular, parents or adolescents who attend religious services alone may be involved in a permissive relationship (where rules may be non-
existent/unenforced) or authoritative parenting relationship (where rules may be up for negotiation) (Baumrind, 1967).

Parents tended to know and speak with their adolescent’s friends’ parents, if the adolescent regularly attended a religious service, even if the parents themselves did not (Smith, 2003a). Additionally, parents who regularly attended a religious service tended to know the names of their adolescent’s teachers, even if the adolescent did not attend the religious service with his or her parent (Smith, 2003a). When either member of the dyad did not participate in religious services, parents were unlikely to have made the connections to know the names of their child’s friends or to have spoken with their adolescent’s teachers (Smith, 2003a). The amount of shared connections that a parent and child have may influence the adolescent’s feelings of being understood more holistically, or may even undermine feelings of independence that an adolescent is seeking to establish (Erikson, 1968), and thus the differences in shared social connections may influence depression and anxiety levels.
CHAPTER 3: METHODOLOGY

Participants

Fifth-wave data from the *Flourishing Families Project* (FFP)—a longitudinal representative sample of a large northwestern city—was used in this study. The FFP is a nationally representative survey of children ages 10 through 14 (mean age of child = 11.29, $SD = 1.01$), and their parents. The baseline study was conducted during the first eight months of 2007; January to August. Families were recruited using a national telephone survey database (Polk Directories/InfoUSA) referrals, and fliers to increase the socioeconomic and ethnic diversity of the sample. After families were recruited, researchers went to the homes of participants, videotaped interviews, and administered a questionnaire, which interviewers reviewed for missing data.

The fifth-wave data used in this study was collected in 2011 with (92.6% retention of) original Wave I respondents, with families with a child between the ages of 13 and 18. Both the adolescent and a parent completed the survey. There were a total of 681 participants in the study; however, only ($n = 325$) participants with complete data/no missing data were used for analysis.

For the present study, the responses of Parent 1 (the primary caregiver) were analyzed. In order to control for differences in family structure, only two-parent, married families were included in the study. Selection of participants was limited to dyads of adolescents (between the ages of 13 and 18), and their caregiver. The mean age of adolescents was 15.28 ($SD = 1.01$)

Permission to conduct this research was granted by the Institutional Review Board (IRB) at East Carolina University.
Measures

Measures in this study were selected from the Flourishing Families Project dataset to provide information on (a) religiousness, (b) family-level religious practices, (c) parenting style, (d) connectedness, and (e) adolescent internalizing behaviors. Among items original to the Flourishing Families Project dataset, measures that were used to assess the aforementioned components include items from the Santa Clara Strength of Religious Faith Questionnaire, FAITHS survey, Parenting Styles and Dimensions Questionnaire, Handbook of Family Measurement Techniques, and Social Connectedness Scale-Revised. During analysis, SES and race were measured as demographic variables.

Religiosity. Adolescents and Caregivers both completed three religiosity items.

(a) Organizational religiosity was defined by a single item that asked how often the child and/or parent(s) had attended a religious service in the past 12 months. Responses ranged from 1 [never] to 4 [more than once a week]. Higher scores indicated more frequent organizational religious participation.

(b) Personal religiosity was assessed using two items from the Santa Clara Strength of Religious Faith Questionnaire (Lewis, Shevlin, McGucklin, & Navrtil, 2001). Adolescents and a parent indicated on a four-point Likert-type scale how much they agreed with the following statements: “I look to my faith as providing meaning and purpose in my life” and “My faith is an important part of who I am as a person.” Responses range from 1 [strongly disagree] to 4 [strongly agree]. Higher scores indicate higher levels of personal religiousness. Based on the present sample of 325, the Alpha reliability for the personal religiosity scale for parents is .97 and .96 for adolescents.
(c) Religious incongruence was measured as two distinct subscales, organizational religiousness and personal religiousness, by subtracting the parent’s average score from their child’s score for both subscales. Positive religious incongruence scores indicate that adolescent religiosity is stronger than parental religiosity, and negative religious incongruence scores indicate that the parent’s religiosity is stronger than the adolescent’s.

**Family religious practices.** Adolescents completed seven-items of the FAITHS survey (Lambert & Dollahite, 2010), which measured the frequency of which the family practices prayer, scripture study, and religious conversations together.

(a) The frequency of family religious practices was measured using seven items along a seven-point Likert-type scale, ranging from 0 [never or not applicable] to 7 [more than once a day]. Samples items include family prayer (other than at meals), family reading of scripture or other religious texts, and family singing or playing religious instruments. Based on the present sample of 325, the Alpha reliability the family religious practices scale is .93.

**Authoritative parenting.** Adolescents completed a survey comprised of 15 items from the *Parenting Styles and Dimensions Questionnaire* (PSQD) (Robinson, Mandleco, Olsen, & Hart, 2001) and items from the *Handbook of family measurement techniques* (Holden, 2001) that asked adolescents to rate the frequency with which their parent does a particular behavior on a five-point Likert-type scale ranging from 1 [never] to 5 [always]. Parenting style measured levels of authoritative parenting (15 items). Higher scores indicate a more pronounced use of that given parenting style. Sample items measuring authoritative parenting include, “My parent is
responsive to my feelings and needs,” and “My parent helps me to understand the impact of behavior by encouraging me to talk about the consequences of my actions.” Based on the present sample of 325, the Alpha reliability for the authoritative scale has been found to be .90.

**Connectedness.** Adolescents completed four items from the Social Connectedness Scale-Revised (Lee, Draper & Lee, 2001). The original measure consists of 18 items. The measure of connectedness for the present study was limited to four items that are the most relevant to perceptions of connectedness in the midst of potential conflict. The other two items in Lee et al.’s Social Connectedness Scale-Revised measure the presence of differences between the child and his/her parent. Because we focused specifically on differences in organizational and personal religiosity, which were measured elsewhere in the present study, these two items seemed redundant.

Adolescents were asked to rate their agreement with statements along a Likert-type scale from 1 [strongly disagree] to 5 [strongly agree]. Items include, “I feel so comfortable with my parent that I can tell him/her anything,” “Even though I am very close to my parent, I feel I can be myself,” “I am comfortable with some degree of conflict with my parent,” and “While I like to get along with my parent, if I disagree with something he/she is doing, I usually feel free to say so.” Higher scores are indicative of a greater degree of parent-child social connectedness, from the adolescent’s perspective. Based on the present sample of 325, the Alpha reliability for the Connectedness scale is .68.

**Adolescent internalizing behaviors.** Adolescents completed a 13-item measure of their anxiety and depression-related symptomology (Barber et. al., 2005; Ross, 1990). Adolescents were asked to indicate along a three-point Likert-type scale how true each statement is for them from 1 [not true] to 3 [often true]. Sample items include: “I am unhappy, sad or depressed” and
“I feel worthless or inferior.” Higher scores indicate higher levels of adolescent internalizing behaviors. Based on the present sample of 325, the Alpha reliability for the adolescent internalizing behaviors scale is .87.

**Demographic characteristics.** Parents indicated their adolescent’s race as either White, Multi-Ethnic, African American, Asian American, Hispanic, or Other. Additionally, parents reported their annual household income in dollars.

**Analytical Approach**

The proposed model (see Figure 1) examined the associations between authoritative parenting and religiosity (i.e. family, organizational, and personal), connectedness, and internalizing behaviors during adolescence. First, descriptive statistics were computed using SPSS 22.0. Second, a structural equation model (i.e. a path analysis) was estimated with AMOS 22.0 using the maximum likelihood procedure with observed variables.

The following indexes suggested by Hu and Bentler (1995, 1999) and Jöreskog and Sörbom (1989) were used to assess goodness-of-fit: (i) Chi-square with $p$-value .05; (ii) root mean square error of approximation (RMSEA) less than .05; (iii) comparative fit index (CFI), (iv) relative fit index (RFI) greater than .95.
Figure 1  Proposed model
CHAPTER 4: RESULTS

Descriptive Statistics

Wave V (2011) Flourishing Families data were analyzed for 325 adolescent-caregiver dyads. The age of caregivers is unavailable and adolescents in the present sample were between 13 and 18 years of age with a mean age of 15.28 (SD = 1.01) (Family Flourishing Project, 2015). The sample was primarily White (82.5%) (see Table 1). Authoritative parenting, parent-adolescent connectedness, and internalizing behaviors of adolescents are presented in Table 2. On average, adolescents indicated that their caregivers had moderately high authoritative parenting practices ($M = 51.40$, $SD = 10.18$) and connectedness ($M = 14.90$, $SD = 2.67$), and rated themselves as having few internalizing behaviors ($M = 5.58$, $SD = 4.90$).

Table 1

Percent of Adolescents by Race/Ethnicity

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Total (n = 325)</th>
<th>Male Adolescent (n = 169)</th>
<th>Female Adolescent (n = 156)</th>
</tr>
</thead>
<tbody>
<tr>
<td>European American</td>
<td>82.5%</td>
<td>82.8%</td>
<td>82.1%</td>
</tr>
<tr>
<td>African American</td>
<td>3.7%</td>
<td>1.8%</td>
<td>5.8%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1.2%</td>
<td>1.2%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Asian American</td>
<td>3.7%</td>
<td>3.6%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Other</td>
<td>0.9%</td>
<td>1.8%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Multi-Ethnic</td>
<td>8.0%</td>
<td>8.9%</td>
<td>7.1%</td>
</tr>
</tbody>
</table>

*Note. (N = 325)*
Table 2

Descriptive Statistics of Participants

<table>
<thead>
<tr>
<th>Measure</th>
<th>Total (n = 325)</th>
<th>Male Adolescent (n = 169)</th>
<th>Female Adolescent (n = 156)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authoritative Parenting</td>
<td>51.40 (10.18)</td>
<td>50.80 (10.27)</td>
<td>52.05 (10.07)</td>
</tr>
<tr>
<td>(15 = never authoritative, 75 = always</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>authoritative)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parent-Adolescent Connectedness</td>
<td>14.90 (2.67)</td>
<td>14.84 (2.36)</td>
<td>14.97 (2.98)</td>
</tr>
<tr>
<td>(4 = low connectedness, 20 = high</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>connectedness)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adolescent Internalizing Behaviors</td>
<td>5.58 (4.90)</td>
<td>4.47 (4.55)</td>
<td>6.79 (4.99)</td>
</tr>
<tr>
<td>(0 = not internalizing, 26 = often</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>internalizing)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents Combined Annual Income (in Dollars)</td>
<td>123,628.24 (178,450.20)</td>
<td>131,629.59 (232,982.04)</td>
<td>114,960.12 (87,101.06)</td>
</tr>
</tbody>
</table>

Note. (N = 325).

a Mean

b Standard deviation.

Family religious practices for participants in this study (see Table 3) ranged from \((M = 2.70, SD = 2.42)\) to \((M = 1.09, SD = 1.57)\) on a scale of 0 (never) to 6 (more than once a day).

Praying at family meal time \((M = 2.70, SD = 2.42)\) is the most frequent family religious practice, whereas family use of religious media (e.g. videos, radios, TV) \((M = 1.09, SD = 1.57)\) and family singing or playing religious music/instruments (musical worship) \((M = 1.11, SD = 1.49)\) were the least frequently reported family religious practices.

For Organizational Religious Incongruence, 28.3% of parents attended religious services more often than their adolescent, whereas 23.7% of adolescents attended religious services more often than their parents. There was more of a difference for personal religiosity, though, where 47% of parents were more religious than their adolescent, and only 12.6% of adolescents had higher personal religiosity scores than their parent.
Table 3

**Family Religious Practices among Participants**

<table>
<thead>
<tr>
<th>Type of Family Religious Practice</th>
<th>Total (n = 325)</th>
<th>Male Adolescent (n = 169)</th>
<th>Female Adolescent (n = 156)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prayer (other than meals)</td>
<td>2.14a (2.24)b</td>
<td>2.33 (2.26)</td>
<td>1.94 (2.21)</td>
</tr>
<tr>
<td>(0 = never, 6 = more than once a day)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading religious texts</td>
<td>1.38 (1.83)</td>
<td>1.55 (1.86)</td>
<td>1.19 (1.78)</td>
</tr>
<tr>
<td>(0 = never, 6 = more than once a day)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Musical worship</td>
<td>1.11 (1.49)</td>
<td>1.17 (1.48)</td>
<td>1.05 (1.50)</td>
</tr>
<tr>
<td>(0 = never, 6 = more than once a day)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious gatherings/celebrations</td>
<td>1.48 (1.50)</td>
<td>1.67 (1.51)</td>
<td>1.28 (1.48)</td>
</tr>
<tr>
<td>(0 = never, 6 = more than once a day)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious media (e.g. videos, radios, TV)</td>
<td>1.09 (1.57)</td>
<td>1.12 (1.57)</td>
<td>1.05 (1.57)</td>
</tr>
<tr>
<td>(0 = never, 6 = more than once a day)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious conversations</td>
<td>1.75 (1.74)</td>
<td>1.83 (1.74)</td>
<td>1.66 (1.74)</td>
</tr>
<tr>
<td>(0 = never, 6 = more than once a day)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prayer at family meals</td>
<td>2.70 (2.42)</td>
<td>2.97 (2.34)</td>
<td>2.40 (2.41)</td>
</tr>
<tr>
<td>(0 = never, 6 = more than once a day)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. (N = 325).

a Mean.

b Standard deviation.

Table 4

**Percent of Organizational Religious Incongruence and Personal Religious Incongruence of Dyads of Parents and their Adolescents**

<table>
<thead>
<tr>
<th>Religiosity</th>
<th>Total (n = 325)</th>
<th>Male Adolescent (n = 169)</th>
<th>Female Adolescent (n = 156)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent more organizationally religious than adolescent</td>
<td>28.31</td>
<td>30.77</td>
<td>25.64</td>
</tr>
<tr>
<td>Same level of organizational religiosity</td>
<td>48.00</td>
<td>45.56</td>
<td>50.64</td>
</tr>
<tr>
<td>Adolescent more organizationally religious than parent</td>
<td>23.69</td>
<td>23.67</td>
<td>23.72</td>
</tr>
<tr>
<td>Parent more personally religious than adolescent</td>
<td>46.56</td>
<td>49.70</td>
<td>43.59</td>
</tr>
<tr>
<td>Same level of personal religiosity</td>
<td>40.62</td>
<td>39.64</td>
<td>41.67</td>
</tr>
<tr>
<td>Adolescent more personally religious than parent</td>
<td>12.62</td>
<td>10.65</td>
<td>14.74</td>
</tr>
</tbody>
</table>

Note. (N = 325).
Overall, the variance for both organizational and personal religious incongruence was relatively low. Among the 23.69% of adolescents who reported higher organizational religiosity than their parents, only 16.8% had a difference in their organizational religiosity score of more than one point. Similarly, of the 38.31% of adolescents who were less organizationally religious than their parents, only 34.6% had a difference in their organizational religiosity score of more than one point.

Among the 12.62% of adolescents who reported higher personal religiosity than their parents, only 20.0% had a difference in their personal religiosity score of more than two points. Similarly, of the 46.56% of adolescents who were less personally religious than their parents, only 31.3% had a difference in their personal religiosity score of more than two points.
Figure 3  Percentages of Parent-Adolescent Dyads within Each Degree of Personal Religious Incongruence

Table 5
Means and Standard Deviations of Parent and Adolescent Organizational and Personal Religiosity

<table>
<thead>
<tr>
<th>Religiosity</th>
<th>Total (n = 325)</th>
<th>Male Adolescent (n = 169)</th>
<th>Female Adolescent (n = 156)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescent Organizational Religiosity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0 = never, 6 = more than one a week)</td>
<td>3.20 (2.37)</td>
<td>3.36 (2.27)</td>
<td>3.02 (2.46)</td>
</tr>
<tr>
<td>Parent Organizational Religiosity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0 = never, 6 = more than one a week)</td>
<td>3.38 (2.29)</td>
<td>3.62 (2.22)</td>
<td>3.12 (2.33)</td>
</tr>
<tr>
<td>Adolescent Personal Religiosity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2 = low personal religiosity, 8 = high personal religiosity)</td>
<td>5.20 (2.29)</td>
<td>5.26 (2.23)</td>
<td>5.13 (2.37)</td>
</tr>
<tr>
<td>Parent Personal Religiosity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2 = low personal religiosity, 8 = high personal religiosity)</td>
<td>6.08 (2.21)</td>
<td>6.21 (2.16)</td>
<td>5.95 (2.25)</td>
</tr>
</tbody>
</table>

Note. (N = 325).

a Mean.
b Standard deviation.
Overall, adolescents reported low levels of internalizing behaviors ($M = 5.58$, $SD = 4.90$), with most reporting no internalizing behaviors, on a combined scale 13 items ranging from 1 (not true) to 3 (often true). The percentages of adolescents who reported that it was either “somewhat true” or “often true” that they experienced particular internalizing behaviors are displayed in Figure 4. Over half of female adolescents indicated that they “cry a lot” (54.5%), and 67.9% of females and 44.4% of males felt as if they “have to be perfect.” Among those indicating that they are “nervous or tense” were 59.6% of female adolescents, and 43.2% of male adolescents. The most frequently reported internalizing behavior for both males (52.6%) and females (69.8%) was “I am self-conscious or easily embarrassed.” Male and female adolescents indicated similar prevalence of being “afraid that I might think or do something bad” (female = 39.1%; male = 38.5%) and feeling “suspicious” (female = 37.8%; male = 40.2%).

**Figure 4** Percent of Adolescents Internalizing Behaviors (“somewhat true” or “often true”) by Gender
Bivariate correlation among study variables (Table 6) showed that parent personal religiosity and adolescent organizational religiosity held a strong positive association ($r = .705, p < .01$). Personal religious incongruence in the parent-adolescent dyad was negatively associated with parent personal religiosity ($r = -.379, p < .01$). Organizational religious incongruence was positively correlated with personal religious incongruence ($r = .375, p < .01$), and parent-adolescent connectedness ($r = .161, p < .01$). Personal religious incongruence was positively associated with parent-adolescent connectedness ($r = .174, p < .01$). Higher levels of authoritative parenting had a strong positive association with parent-adolescent connectedness ($r = .477, p < .01$). Although not statistically significant, there was a negative association between adolescent internalizing behaviors and parent-adolescent connectedness ($r = -.088$).
### Table 6: Bivariate Correlations of Adolescents' and Parents' Religiosity, Authoritative Parenting, Connectedness, and Internalizing Behaviors among Adolescents

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Adolescents' Internalizing Behaviors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td>2. Parent-Adolescent Connectedness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.08 **</td>
</tr>
<tr>
<td>3. Authoritative Parenting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>0.027 **</td>
</tr>
<tr>
<td>4. Adolescent Religiousness</td>
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<td></td>
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<td></td>
<td></td>
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<td></td>
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<td>0.077 **</td>
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<tr>
<td>5. Parent Religiousness</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>0.068 **</td>
</tr>
<tr>
<td>6. Parent's Religious Participation</td>
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<td></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td>0.055 **</td>
</tr>
<tr>
<td>7. Adolescent Religious Participation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.022 **</td>
</tr>
<tr>
<td>8. Parent's Religious Worldview</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.015</td>
</tr>
</tbody>
</table>

Note. *p < .05, **p < .01, ***p < .001.
Structural Paths

An estimation of the model provided a structural path that fit the model, $\chi^2 (4, N = 325) = 14.655$, $p > .005$, CFI $> 0.927$, RMSEA $< 0.091$, AGFI $= 0.923$ (Byrne, 2001). The path coefficients from the model are presented in Figure 5. The path from authoritative parenting to parent-adolescent connectedness, as hypothesized, was statistically significant ($\beta = .12$, $p < .001$). Additionally, a significant pathway was found from organizational religious incongruence to parent-adolescent connectedness ($\beta = .25$, $p < .01$). There was a statistically significant effect ($p < .001$) between organizational religious incongruence and personal religious incongruence ($\beta = .91$).

No significant pathways existed from authoritative parenting to organizational religious incongruence ($\beta = .01$, $p > .05$) or from authoritative parenting to adolescents’ internalizing behaviors ($\beta = .00$, $p > .05$). Additionally, a significant pathway was not found from authoritative parenting to personal religious incongruence ($\beta = .01$, $p > .05$). The pathway from parent-adolescent connectedness to adolescent internalizing behaviors was found to be negative, although not statistically significant ($\beta = -.15$, $p > .05$).
Figure 5 Structural paths of authoritative parenting and dimensions of religiosity on adolescents’ internalizing behaviors

Note. * $p < .05$; ** $p < .01$; *** $p < .001$
CHAPTER 5: DISCUSSION

The purpose of the present study was to explore the relationships among the authoritative parenting style, adolescent-parent connectedness, and religiosity (organizational, personal, and family) in relation to internalizing behaviors among adolescents.

Authoritative Parenting

The first hypothesis stated that high levels of authoritative parenting would lower parent-adolescent organizational and personal religious incongruence, and adolescents’ internalizing behaviors. The bivariate correlation and path analysis did not support these hypotheses. This indicates that authoritative parenting does not decrease discrepancies in adolescent-parent church attendance and personal religiosity. In other words, authoritative parenting practices did not lead parents and adolescents to hold the same religious beliefs and practices. While these findings are contrary to the proposed hypothesis, they make sense in light of Baumrind’s (1967) theory of parenting styles. Specifically, in an authoritative parenting relationship, the establishment of rules and expectations (i.e. in regards to frequency of adolescent’s church attendance) involves input from the adolescent and the parent. Additionally, since open discussion that involves input from both the adolescent and the parent is central to the dynamics of authoritative parenting, religious incongruences may be accepted in these dyads.

Regarding authoritative parenting and adolescent internalizing behaviors, the current study showed, albeit without statistical significance, that authoritative parenting is negatively associated with internalizing behaviors among teens ($r = -.04$, $p > .05$). In other words, adolescents whose parents practice more authoritative parenting practices are less likely to report anxious and depressive symptoms. This trend supports Piko and Balazs’ (2012) findings that authoritative parenting was associated with fewer depressive symptoms in an adolescent.
Additionally, the present research supports Akhter et al.’s (2011) findings that authoritative parenting is associated with fewer internalizing behaviors among children. Authors deduce that the low levels of reported internalizing behaviors in the present sample might have contributed to insignificant associations between these variables.

The prediction that high levels of authoritative parenting would be associated with stronger parent-adolescent connectedness was supported by the study. The structural path ($\beta = .124, p < .001$) and bivariate correlation ($r = .434, p < .01$) demonstrated that parents and/or caregivers who practice the authoritative style of parenting were more likely to be connected with their teens. The support of this hypothesis is in line with Baumrind’s (1967) definition of authoritative parenting, which is marked by parent supportiveness and bidirectional communication and exchange of ideas in the parent-child relationship. Thus, adolescent parenting is important for increasing parent-adolescent connectedness.

**Religiosity**

We hypothesized that organizational religious incongruence would be associated with lower incidence of adolescent internalizing behaviors. This hypothesis was not supported by the present study. This finding is contrary to Petts’ (2014) finding that the children of parent-child dyads that attend a religious service together had higher psychological well-being in adolescence than children who did not attend religious services with their caregiver(s). Examining these results in light of Piaget’s (2008) cognitive development theory reveals that adolescents may be using their developing ability to think abstractly to decide to pursue organized religion differently than their parent, but that it may not necessarily be linked with the incidence of internalizing behaviors, because it is a typical sign of development.
The prediction that organizational religious incongruence would be negatively associated with parent-adolescent connectedness was not supported by the structural paths. However, the path analysis indicated that greater organizational religious incongruence was likely to predict higher levels of parent-adolescent connectedness ($\beta = .25, p < .01$). Furthermore, Pearson correlation coefficients revealed that, contrary to the hypothesis, organizational religious incongruence significantly increased connectedness ($r = .161, p < .01$). That is, when parents and adolescents did not attend religious services together frequently, they actually reported stronger connectedness.

This relationship seems contrary to Smith’s (2003a) findings that shared organizational religiosity allowed for the parents to have greater familiarity with their child’s friends, friends’ parents, and teachers, as compared with parent-adolescent dyads who did not attend religious services together. These common social contacts would likely allow the dyad to experience greater connectedness. Additionally, the positive association between connectedness and differences in the frequency of religious service attendance seems to contradict Petts’ (2014) assertion that shared religious service participation provides the opportunity for improved familial (i.e. parent-child) relationships.

It may also be that parents and adolescents that were strongly connected and feel relational security differ in terms of religious service attendance, or that the conversations that resulted from differing organizational religious practices served to increase perceptions of connectedness. Adolescents who are comfortable with their parent were found to be exploring abstract concepts (Piaget, 2008) associated with religious belief and their identity (Erikson, 1968) in relation to God and the religious community, which is typical of adolescent development.
In the present study, connectedness was reported from the perspective of the adolescent. This is important to note because in Pearce and Axinn’s (1998) study, mothers, but not their children, reported increases in relationship quality when they regularly attended religious services with their children. Organizational religious incongruence in the present sample was more likely to be due to the parent attending more services than the teen (28.3%), than the adolescent attending more services than the parent (23.7%). In other words, when adolescents and parents had different habits in regard to religious service attendance, it was more common for parents to attend religious services more than their teen, than for the adolescent to attend religious services more frequently than their parent.

The hypothesis that personal religious incongruence would be positively associated with adolescent internalizing behaviors was not supported by the present study. The lack of support for this hypothesis comes as a surprise in light of recent research by Kim-Spoon et al. (2012), who found that discrepancies between an adolescent’s religious beliefs and the religious beliefs of his or her caregiver was associated with an increase in both adolescent internalizing and externalizing behaviors. Future studies should seek to further examine the interactions between these variables.

**Internalizing Behaviors**

The present study hypothesized that connectedness would negatively predict levels of adolescent internalizing behaviors. Although statistical significance was not achieved (p > .05), this hypothesis was nonetheless supported by the analyses (β = -.15). This finding is in agreement with almost unanimous literature showing that parent-child connectedness protects against anxiety and depression in the adolescent (Houltberg et al., 2011; Nunes et al., 2013). Connectedness within the family should provide social support and increase adolescent self-
esteem, and thus protect against adolescent internalizing behaviors (Houltberg et al., 2011). Piko, Kovacs, and Fitzpatrick (2009) found that social support specifically from the same-sex parent was protective against adolescent depression. Because information on the gender of the parent was not considered in the present article, researchers recommend that parental gender be controlled in subsequent studies. Additionally, the low levels of adolescent internalizing behaviors may have prevented a significant relationship among these variables from being detected.

The present authors further hypothesized that parent-adolescent connectedness would mediate the relationship between organizational religious incongruence and adolescent internalizing behaviors. This hypothesis was proposed based on Petts’ (2014) discussion, but it was not supported by the present data. Therefore, additional research exploring the relationships between organizational religious incongruence and adolescent internalizing behaviors and parent-child connectedness should be explored.

Shared religious family activities and shared traditions have typically been associated with the opportunity to have interactions that may contribute to feelings of closeness and connectedness among family members (Godina, 2014; Petts, 2014; Regnerous & Burdette, 2006). Thus, a hypothesis of the present study is that family religious practices will increase parent-adolescent connectedness. However, this hypothesis was not supported. It is possible that connectedness is more strongly associated with secular shared activities (Hardway & Fuligni, 2006) for this sample, so that family religious practices were not significantly associated.

The prediction that family religious practices would be negatively associated with adolescent internalizing behaviors was not supported by this study. This is incongruent with previous research that religious parents were more likely to provide positive parenting practices (Snider et
al., 2014), to provide guidance for their adolescents (Smith, 2003b), and to expose their adolescent to a supportive religious community (Petts, 2014), all of which would protect against internalizing behaviors. Again, perhaps the relatively low levels of internalizing behaviors made finding significant relationships with this concept more difficult.

**Implications for Research**

While the results of the present study do contribute to the literature on adolescent religiosity, authoritative parenting, religiosity, and internalizing behaviors among adolescents, many more questions are raised by the present findings.

Female adolescents reported more internalizing behaviors than male adolescents in the present sample. Previous researchers examining distress tolerance, or the ability to persevere in a task in spite of emotional distress, have noted gender differences in the ways that distress is processed in male and female adolescents (Daughters et al., 2009). Female adolescents with a low ability to persist in the midst of emotional distress were more likely to cope using internalizing behaviors, while the prevalence of internalizing behaviors in males was not impacted by distress tolerance in males (Daughters et al., 2009). Although gender differences were not examined within the model in the present study, descriptive statistics did reveal differences in adolescent religiosity and internalizing behaviors. Future research should examine gender differences in relation to the model explored in the present study.

Another finding is that parents reported higher personal and organizational religiosity than adolescents, overall, and that personal religious incongruence and organizational religious incongruence were correlated within parent-adolescent dyads. Similarly, Kim-Spoon et al. (2012) found that adolescents had higher levels of organizational religiosity than their parents, and that there was a significant correlation between personal religious discrepancy and
organizational religious discrepancy in adolescent-parent dyads. However, Kim-Spoon et al. (2012) found that adolescents had lower levels of personal religiosity, in comparison with their parents. Future research is suggested to explain the factors that may contribute to the present findings, in light of Kim-Spoon’s et al. (2012) research.

While differences in personal and organizational religiosity were detected, most of the religious incongruence was relatively low, with only a one or two point difference between adolescent and parental religiosity. It may be that the prevalence of low incongruence scores prevented significant correlations from being established in the present sample. Future research should explore the potential differences between strongly incongruent religiosity and only slight religious incongruencies.

The low prevalence of internalizing behaviors among adolescents in the present sample may be due, in part, to the high levels of authoritative parenting in this sample. Higher levels of authoritative parenting were significantly linked with higher connectedness scores ($\beta = .124, p < .001; r = .434, p < .01$). Although not statistically significant, there was an inverse relationship between internalizing behaviors among adolescents and connectedness ($r = -.088, p > .05$) and between internalizing behaviors and authoritative parenting ($r = -.049, r > .05$). Although the scope of the present study prevents researchers from reporting on levels of internalizing behaviors among different parenting styles, further investigation is recommended to explore these relationships.

Additionally, the importance of connectedness should be further explored by researchers, and families should be made aware of the significant interactions between connectedness and other concepts. Qualitative studies in the future may serve to explore the experiences of parents and adolescents as the bidirectional relationship between personal and organizational religious
incongruence plays out. The present authors recommend that this study be replicated among families from different socioeconomic backgrounds, and with different family structures.

**Implications for Practice**

The present research indicates that seeking to directly eliminate either personal or organizational religious differences may not be an effective strategy to tackle adolescent anxiety and depression in affluent, dual-parent families. However, connectedness has emerged as a factor that significantly interacts with many of the concepts explored in the present study. Parents should be aware that during adolescence, (a period when exploration of ideas and identity is part of development) discrepancies between their own religious practices or beliefs are likely to arise. There is a strong correlation between personal and organizational religious incongruence in the present sample ($r = .375$, $p < .01$). Parents and caregivers should be aware of this bidirectional association in order to anticipate changes in personal religiosity when religious service attendance habits change, or vice versa.

Bivariate correlations and path analysis indicate that incongruences between adolescent and parental religiosity are more likely to occur in families in which the adolescent feels connected and secure with their parent. Thus, parents should not be alarmed, but instead, encouraged that their adolescent feels secure enough in their relationship with their caregiver to begin exploring their own religious beliefs and their own expression of those religious beliefs. As connectedness is a byproduct of authoritative parenting, the present study thus serves to reinforce the value of authoritative parenting in creating an environment where adolescents are able to thrive (Piko & Balazs, 2012). As adolescents explore their own religious beliefs and habits, researchers recommend that caregivers provide the warmth and support, reasoning and induction, and democratic participation (Robinson et al., 2001) that are central to authoritative parenting.
Authors recommend youth pastors or those working with adolescents be made aware of these findings in order to be better equipped to communicate with parents who may be concerned about their adolescent’s changing religious beliefs or religious service attendance practices. Additionally, researchers recommend that parents and religious leaders strive to be available to answer questions that their teen may have in relation to religion or the beliefs of their parents as the adolescent seeks to understand and weigh these concepts for themselves. The practice of being open to disagreement and conversation is a hallmark of authoritative parenting that this study has found to be linked with parent-adolescent connectedness. Parents may find the differences in beliefs and attendance habits alarming, so it is also suggested that churches or other local religious organizations help to facilitate discussions or connections among parents.

**Limitations**

A number of limitations exist in the present study that should be considered when interpreting and applying the results. The data examined was collected at a single time, thus limiting the ability to establish causality among variables. The use of self-report measures can always be considered a limitation, because of the risk for manufacturing socially-desirable responses. Questionnaire responses were done in the home, in the presence of a researcher. It is possible that the presence of the researcher and any family members may have influenced the responses that the adolescent and parent indicated on each of their questionnaires.

The demographic makeup of the present sample may also serve as a limitation. The sample in the present study was comprised of affluent, dual-parent families, thus the present findings among concepts are not necessarily applicable to the broader population. For example, being in a single-parent family and having a lower income that is associated with a single-earner household, are both stress factors that contribute to depression in adolescents (Siddiqui & Sultana, 2011).
The privileged demographics of the present study may have, therefore, been a factor in the relatively low levels of internalization among participants. The low range of internalizing behaviors in the present sample may have made finding statistical associations less likely with other variables.

**Conclusion**

The present research expanded our knowledge on authoritative parenting, dimensions of religiosity (organizational, personal, and family), and connectedness by clarifying how caregivers and adolescent religiosity and connectedness contribute to internalizing behaviors during adolescence. Specifically, the current study revealed that adolescents whose parents practiced more authoritative parenting were likely to feel more connected with their parent. Also, connectedness from the perspective of the adolescent is significantly related to authoritative parenting and organizational and personal religious incongruence. Research and practical implications are included, and authoritative parenting is reaffirmed as the parenting style that facilitates healthy adolescent development.
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APPENDIX A: IRB APPROVAL LETTER

EAST CAROLINA UNIVERSITY
University & Medical Center Institutional Review Board Office
4N-70 Brody Medical Sciences Building· Mail Stop 682
600 Moye Boulevard · Greenville, NC 27834
Office 252-744-2914 · Fax 252-744-2284 · www.ecu.edu/irb

Notification of Exempt Certification

From: Social/Behavioral IRB
To: Diane Foster
CC: Bernice Dodor
Date: 2/1/2016
Re: UMCIRB 15-002336
Re: The Influence of Religious Incongruence and Parenting Styles on Adolescent Internalizing Behaviors

I am pleased to inform you that your research submission has been certified as exempt on 2/1/2016. This study is eligible for Exempt Certification under category #4.

It is your responsibility to ensure that this research is conducted in the manner reported in your application and/or protocol, as well as being consistent with the ethical principles of the Belmont Report and your profession.

This research study does not require any additional interaction with the UMCIRB unless there are proposed changes to this study. Any change, prior to implementing that change, must be submitted to the UMCIRB for review and approval. The UMCIRB will determine if the change impacts the eligibility of the research for exempt status. If more substantive review is required, you will be notified within five business days.

The UMCIRB office will hold your exemption application for a period of five years from the date of this letter. If you wish to continue this protocol beyond this period, you will need to submit an Exemption Certification request at least 30 days before the end of the five year period.

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

IRB00000705 East Carolina U IRB #1 (Biomedical) IORG0000418
IRB00003781 East Carolina U IRB #2 (Behavioral/SS) IORG0000418
APPENDIX B: SCALES

Religiosity

**Organizational Religiosity**: Adolescent and Parent 1

How often have you attended religious/spiritual services in the past 12 months?

0 = Never  
1 = A few times  
2 = Several times  
3 = Once a month  
4 = Two or three times a month  
5 = Once a week  
6 = More than once a week

**Personal Religiosity**: Adolescent and Parent 1

How much do you agree with the following? I look to my faith as providing meaning and purpose in my life.

1 = strongly disagree  
2 = disagree  
3 = agree  
4 = strongly agree

How much do you agree with the following? My faith is an important part of who I am as a person.

1 = strongly disagree  
2 = disagree  
3 = agree  
4 = strongly agree
Family Religious Practices: Adolescent

Please indicate the frequency your family is involved in these activities:

0 = Never or Not Applicable
1 = Yearly/A Few Times a Year
2 = Monthly/A Few Times a Month
3 = About Weekly
4 = More than Once a Week
5 = About Daily
6 = More than Once a Day

- Family prayer (family together other than at meals)
- Family reading of scripture or other religious texts
- Family singing or playing religious music/instruments
- Family religious gatherings/activities/celebrations
- Family use of religious media (e.g., videos, radio, TV)
- Family religious conversations at home
- Parents praying with child or listening to his/her prayers

Authoritative Parenting: Adolescent

How often does your parent do the following?

1 = Never
2 = once in a while
3 = about half the time
4 = very often
5 = always

- My parent is responsive to my feelings and needs
- My parent takes my desires into account before asking me to do something
- My parent explains to me how they feel about my good and bad behavior
- My parent encourages me to talk about my troubles
- My parent encourages me to freely express myself even when I disagree with them
- My parent emphasizes the reasons for rules
- My parent gives comfort and understanding when I am upset
- My parent gives praise when I am good
- My parent takes into account my preferences in making plans for the family
- My parent shows respect for my opinions by encouraging me to express them
- My parent allows me to give input into family rules
- My parent gives me reasons why rules should be obeyed
- My parent has warm and loving times together with me
- My parent helps me to understand the impact of behavior by encouraging me to talk about the consequences of my actions
- My parent explains the consequences of my behavior to me
**Connectedness: Adolescent**

How much do you agree with the following statement?

1 = strongly disagree  
2 = disagree  
3 = neither disagree nor agree  
4 = agree  
5 = strongly agree

- Even though I am very close to my parent, I feel I can be myself  
- I feel so comfortable with my parent that I can tell him/her anything  
- I am comfortable with some degree of conflict with my parent  
- While I like to get along with my parent, if I disagree with something he/she is doing, I usually feel free to say so.

**Adolescent Internalizing Behaviors: Adolescent**

How true is this statement about you?

1 = Not True  
2 = Somewhat True  
3 = Often True

- I cry a lot.  
- I feel lonely.  
- I am afraid I might think or do something bad.  
- I feel that I have to be perfect.  
- I feel that no one loves me.  
- I feel that others are out to get me.  
- I feel worthless or bad about myself.  
- I am nervous or tense.  
- I am fearful or anxious.  
- I feel guilty.  
- I am self-conscious or easily embarrassed.  
- I am suspicious or skeptical.  
- I am unhappy, sad, or depressed.
**Demographic Characteristics:** Adolescent

Gender (circle one): male or female

**Demographic Characteristics:** Parent 1

Your child’s ethnicity?

1 = European American  
2 = African American  
3 = Hispanic  
4 = Asian American  
5 = Other  
6 = Multi-Ethnic

What is your COMBINED (with your PARTNER) annual income?

- Open-ended, fill-in-the-blank responses