

**RELIGIOUS DEVELOPMENT FROM ADOLESCENCE TO EARLY
ADULTHOOD: THE EFFECTS OF PARENTAL RELIGIOUSNESS
AND RELATIONSHIP QUALITY**

by

James W. Hull Jr.

A dissertation submitted to the Faculty of the University of Delaware in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Human Development and Family Studies

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ABSTRACT

This study used data from Waves I, III, and IV of the National Study of Adolescent Health (Add Health) to test whether parental religiousness and parental relationship quality (RQ) could predict the religiousness of their child during adolescence, emerging adulthood, and early adulthood. Parental data were obtained from either the participant's mother or father during Wave I only. Wave I adolescent participants were subsequently re-interviewed six years later (Wave III) and thirteen years later (Wave IV). This study also tested whether having a religious or spiritual experience that was life changing could predict religiousness in emerging adulthood and early adulthood. Finally, this study also tested whether previous levels of religiousness were predictive of religiousness in the future. The results demonstrate that parental religiousness and RQ have both a concurrent and longitudinal effect on children's religiousness. Mother's and father's religiousness significantly predicted their child's religiousness in adolescence and early adulthood. Neither parent's religiousness predicted their child's religiousness in emerging adulthood. Additionally, father RQ predicted their child's religiousness in adolescence and early adulthood but not in emerging adulthood. Mother RQ predicted their child's religiousness in adolescence only. Having a life changing religious or spiritual experience predicted religiousness in emerging adulthood but not in early adulthood. Religiousness in adolescence predicted religiousness in early adulthood but not in emerging adulthood. Religiousness in emerging adulthood predicted religiousness in

early adulthood, but not consistently. These findings suggest that parents strongly influence their child's religious trajectories from adolescence into early adulthood. Although results here demonstrate a loss in the parental effect on religiousness in emerging adulthood, religiousness in early adulthood is once again predicted by and correlated with religiousness in adolescence and parental religiousness. The developmental patterns of religiousness from adolescence to early adulthood seen here are discussed in light of normative identity explorations as well as from Fowler's (1981) Faith Development Theory framework. Finally, the case for religious institutions serving as potential outlets to promote positive youth development (PYD) is presented.

Chapter 1

INTRODUCTION

In recent decades, scholars have invested considerable time in establishing an empirically and theoretically grounded argument for the beneficial qualities of religious involvement on development and well-being. This has been particularly true for the period of adolescence. Religious involvement has been shown to be associated with positive developmental outcomes (Donahue & Benson, 1995; Wagener, Furrow, King, Leffert, & Benson, 2003) and is therefore thought to be beneficial to overall well-being (Day, 2010; Kirby, Coleman, & Daley, 2004). In general, religious involvement has been associated with good health and longevity (Hill, 2006), lower risk of mortality (Krause, 2006), positive mental health status (Chen, Cheal, McDonel Herr, Zubritsky, & Levkoff, 2007), and positive family relationships (Mahoney, Pargament, Tarakeshwar, & Swant, 2008). Religious and spiritual people have been found to cope better with stress, anxiety, and depression (Hill, 2006). Those involved in faith communities tend to have relationships that are deeper in quality and transparency and are generally perceived to be more fulfilling than those found in the secular world (Krause, 2006). During adolescence, those who demonstrate having religious values, commitments, and behaviors have higher self-esteem and better emotional health (Regnerus, 2003). Cross-cultural work has also suggested that

adolescents who live in religious families report higher life satisfaction due to its influence on family relationship values and family member interdependence (Sabatier, Mayer, Friedlmeier, Lubiewska, & Trommsdorff, 2011). The growing evidence to support the advantageous qualities of active religious participation suggests that further investigation of possible mechanisms through which religious development occurs is in order, particularly during adolescence.

Religion and Positive Youth Development (PYD)

There has been a movement towards a more positive view of development that is focused on strength-building and healthy promotion as opposed to highlighting developmental deficits, prevention, and correction (Larson, 2000; Theokas & Lerner, 2006). Couched within this movement is the positive youth development (PYD) perspective. PYD is concerned with promoting the five “Cs” in youth: Competence, Connection, Character, Confidence, and Caring (Lerner, Fisher, & Weinberg, 2000). The argument is that PYD is promoted when the strengths of youth and the resources for healthy development, which are present in the youth’s contexts come into alignment (Lerner, Abo-Zena, Bebiroglu, Brittan, Lynch, & Issac, 2009). In other words, when youth are continually exposed to resources and experiences needed for healthy development, they are more likely to develop positively (Theokas & Lerner, 2006). The promotion of the five “Cs” of PYD in turn prepares youth to be active participants in civil society and to eventually raise the next generation of civil servants (Lerner et al., 2000). Additionally, this positive perspective towards youth looks at

“young people as resources to be developed, not problems to be managed” (Roth, Brooks-Gunn, Murray, & Foster, 1998, p. 442).

Religion and religious involvement are potentially ideal contexts for the promotion of PYD. It has been argued that religious involvement provides youth with a sense of meaning and purpose while also instilling a sense of commitment to others and their well-being (Furrow, King, & White, 2004). Religious involvement also provides youth opportunities for the formation of intergenerational bonds, which are important sources of well-being and support across the life course (Bengston, 2001). In comparison to youth without active engagement in faith communities, research has shown that religiously active youth have more significant experiences of intergenerational community and therefore more intergenerational support outside the family (King & Furrow, 2008). Looking at different developmental contexts, Lerner and colleagues (2009) described four ecological assets present in these contexts that facilitated PYD; other individuals, institutions, collective activity, and accessibility. Religious institutions can provide similar ecological assets that can promote PYD. Many faith communities have opportunities for corporate worship and service, transportation to and from these activities, and a multigenerational community. Therefore, because of the meaning and purpose religion provides, in concert with opportunities to engage in corporate acts of worship and service within a multigenerational community, religious institutions and faith-based organizations are positive contexts for promoting PYD as youth prepare to move towards adulthood.

Religious or Spiritual?

The terms religious and spiritual are often used interchangeably in common vernacular. The scientific investigation of these terms has arguably done little to clarify our (mis)understandings regarding their use and meaning since the concepts of religion and spirituality have been studied and applied rather inconsistently (Day, 2010). In spite of some semantic disputes and conceptual cloudiness, the two constructs do have a few clear distinctions. Religious, or religiousness, can mean several things. “Religiousness” has been described as the overall importance of religion in one’s life characterized by one’s beliefs in God and practices and attendance in corporate worship (Wink & Scott, 2005). King and Benson (2006) suggest that religiousness is the degree to which someone has a “relationship with a particular doctrine about a supernatural power that occurs through affiliation with an organized faith and participation in its prescribed rituals” (p. 385). Newberg and Newberg (2006) state that religiousness encompasses the search for both sacred and non-sacred goals that receives validation and support from within an identifiable group. Others have echoed the sentiment that the term “religious” (or religiousness) has institutional connotations and references a variety of practices, beliefs, and authority structures within recognizable religious traditions (Day, 2010). Religiousness can involve engaging in prayer for yourself or others, attending worship services, or personally applying teachings gathered from sermons or messages (Krause, 2004). Spirituality, on the other hand, is more subjective in nature.

Spirituality has been described as an individual's search for meaning through the understanding of and interaction with sacred or transcendent things whether linked to or unaffiliated with any formal religious institution (Day, 2010). Newberg and Newberg (2006) suggest that spirituality is less institutionally based and used to describe individual experiences. Wink and Dillon (2002) similarly state that spiritual experiences are often personal, intimate, and difficult to articulate. In general then, spirituality appears to be the relationship you establish and experience between yourself and your God(s) as you seek to discover and understand things that are divine in nature. Religious, or religiousness, on the other hand refers to how spirituality manifests itself in belief and behavior, typically in a more formal institutional context. In other words, religiousness may be thought of as practiced-based spirituality in the context and in connection with others because it is the combination of both internal and external factors (Wink & Dillon, 2002). Because of the difficult, personal, and complex nature of the spirituality construct, along with its tangible relationship to religiousness, this study will explore possible mechanisms through which religiousness develops, holding the assumption that there is some sense of underlying spirituality.

Religious Development

Religious development has been described as the “growing relationship between an individual and a particular institutionalized doctrine and tradition related to a divine being, supernatural other, or absolute truth” (King, & Benson, 2004, p.

385). Religious development seems particularly active during periods of transition. Scholars have argued that during periods of transition it is not unusual for people to contemplate the meaning of life events in regard to religious substance (Wink & Dillon, 2002). The transitions from adolescence to emerging adulthood and from emerging adulthood to early adulthood are examples of possible transitional periods that are well-positioned for religious development to occur. Furthermore, spirituality and religiousness take on varying degrees of importance and meaning across different eras of the life course, and adolescence, emerging adulthood and early adulthood are key periods for these transformations to occur (Lerner et al., 2009). Arnett (2011) has advocated for a developmental period that links late adolescence to early adulthood, called *emerging adulthood*, which he describes as the prolonged transition into assuming traditional adult roles. Although the complete range of ages for emerging adulthood spans from 18-29, Arnett has argued that the primary focus is between the ages of 18-25 (Arnett, 2000). He further states that emerging adulthood is a time when young people explore the possibilities relating to the adult self, love, work, and worldviews (Arnett, 2000). This process of exploring possibilities can be confusing, frustrating, or disorienting. Strengthening or promoting religious development could potentially serve as a way to help youth gain a sense of control or understanding beyond their personal capabilities or faculties (Kirby et al., 2004). Relatedly, Fowler argues that religious faith serves as “the coat against nakedness...as to screen off the abyss of mystery that surrounds us” (Fowler, 1981, p. xii). In other words, the process of exploring future possibilities and asking questions of religious or spiritual substance

can leave youth feeling exposed and vulnerable. However, the presence of religious faith can guard against these feelings of “nakedness” and vulnerability by providing a sense of security in an otherwise confusing web of uncertainty. Fowler (1981) goes on to say that in order to fully understand religiousness and religious development you must understand the concept and development of *faith*, specifically religious faith. The intersection between religious faith and religious development therefore is a worthwhile, yet difficult, phenomenon to examine. Fowler (1981, 1991) admits that the relationship between faith and religious development is quite complex, interactive, dynamic, and reciprocal. Therefore, a thorough analysis of Fowler’s articulation of religious faith (and its development) will help our understanding of how religiousness develops.

Development of Religious Faith according to Fowler

James Fowler began his work at Harvard in the late 1960s where he met Lawrence Kohlberg, a leading scholar and researcher of moral development. Through his relationship with Kohlberg and other graduate students at Harvard, Fowler began to conduct interviews and gather the data that would become the building blocks for faith development theory, or FDT (Fowler, 1981, 1991; Fowler & Dell, 2006). Apart from Kohlberg’s influence, faith development theory (FDT) has roots from the works of other classical developmentalists such as Jean Piaget, John Bowlby, and Erik Erikson. Accordingly, FDT encompasses elements of developmental theory, attachment, personality, morality, and cognition. FDT places the concept of faith

within a framework of six stage-like positions couched within a larger developmental process where faith grows from a raw and undifferentiated seed into a disciplined and mature structure that is capable of transcending the rational and tangible. This process, which Fowler calls “patterns of constructive knowing” (Fowler, 1991, p. 34), is how faith becomes more complex and mobilizing to the individual who possesses it.

Before discussing the six stages of FDT, it is important to acknowledge some concerns that have been raised regarding the theorists that inspired Fowler. Carol Gilligan’s (1977) feminist critique of Kohlberg’s (1968) theory of moral development has highlighted the “sex-related bias” associated with Kohlberg’s assessments of moral judgments. Kohlberg (1968) has argued that the highest form of moral thinking is impersonal, principled and independent. He continues to say that women are often restricted to conventional levels of moral thinking due to their interpersonal biases. In other words, women often consider the interpersonal consequences of their moral decisions underscored by the centrality of responsibility and care for others (Gilligan, 1977). However, according to Kohlberg (1968), interpersonally-based thinking is subordinate to more societal- or universally-based judgments. This depiction of moral thinking compelled Gilligan (1977) to argue that Kohlberg’s (1968) stages of moral development reflect the progression of *men*’s moral thinking only. Her argument is well taken since Kohlberg used the responses of adolescent males as the basis for a universal theory of moral development. Gilligan (1977) continues by stating that developmental theory, specifically Kohlberg’s (1968) theory of moral development, must be expanded to include, rather than exclude, the feminine voice. Given the large

influence Kohlberg had on Fowler and the lack of consideration given to Gilligan's (1977) feminist critique of Kohlberg's (1968) theory, FDT potentially has absorbed the sex-related biases associated with Kohlberg's (1968) theory and therefor may not account for how men and women could differentially progress through the six stages of faith. Also, just as Kohlberg (1968) thought that interpersonally-based thinking is subordinate to more principled-based judgments, Fowler likewise applied a similar argument when making distinctions between *synthetic-conventional* and *individuated-reflective faith*. Had Fowler been more inclusive to the feminine perspective it is possible that his stages of faith would have a different arrangement.

FDT begins with a "pre-stage" known as *infancy and undifferentiated faith*. Fowler places individuals under the age of four in this pre-stage (Fowler & Keen, 1978). While in the pre-stage period an individual's sense of faith is embedded in an environment of trusting relationships (Fowler, 1981, 1991). Fowler evidently drew from concepts of attachment theory (Bowlby, 1969) and personality development (Erikson, 1968) that highlight the essentiality of a trust-bond being forged between the individual and their caregiver(s). This bond of trust is the foundation upon which subsequent faith is built and is shaped by the accumulation of early experiences of "care, interchange, and mutuality" (Fowler, 1991, p.34). This "primal faith" enables the individual to cope with and overcome the anxieties of separation and move towards a healthy, normative conception of self.

Fowler (1981, 1991) describes stage 1 of FDT as an *intuitive-projective faith*. Fowler places individuals between ages of four and eight in stage 1 (Fowler & Keen,

1978). Faith at this level is contingent upon the increasing complexity in the development of language, a primitive sense of morality, and the ability to coalesce our emerging intellectual faculties with our perceptions and feelings. Fowler argues that intuitive-projective faith is developing primarily during the pre-operational period of cognitive development. Again, Fowler here draws on principles of development outlined by cognitive theorist Jean Piaget (1970) as well as moral theorist Lawrence Kohlberg (1968). Preoperational cognitive functioning is limited to thinking and interacting symbolically as well as the inability to reflectively or reversibly think. Therefore, a steady dose of egocentrism permeates a child's logic and reasoning as they attempt to make sense of the world around them. Fowler believed that our initial representations of God form during this stage. These initial representations are heavily sensitive toward and influenced by our experiences with our parents and other attachment figures (Fowler, 1991).

As our thinking becomes more logical and concrete, Fowler sees faith in stage 2 as sharply distinct from that of stage 1. Fowler places individuals between ages of six or seven and eleven or twelve in stage 2 (Fowler & Keen, 1978). In stage 2, called *mythic-literal faith*, individuals invest enormous amounts of energy in separating the real from the imaginary. Guided and fueled by new capacities to think logically and to inductively and deductively reason, children with mythic-literal faith often see inconsistencies between their religious beliefs and the empirical world (Fowler, 1981, 1991). Faith and science appear to be mutually exclusive opponents and reconciling them can be difficult. An important skill we acquire during this stage is the ability to

express and synthesize our experiences through narratives, both self-generated and reiterations of ones heard. Fowler described stage 2 faith as “stories that describe the flow from the midst of the stream. The person - child or adult - does not yet step out on the bank beside the river and reflect on the stories of the flow and their composite meanings” (Fowler, 1981, p.137).

Faith at stage 3, called *synthetic-conventional faith*, is strongly influenced by the developmental milestones of adolescence. Fowler states that the earliest he witnessed someone transition from stage 2 to stage 3 was eleven years old. Furthermore, he witnessed some transition out of stage 3 as early as seventeen or eighteen. However, Fowler further states that a significant number of adults, middle-aged and older, are characterized by having a synthetic-conventional level of faith (Fowler & Keen, 1978). Synthetic-conventional faith is shaped by the ability to discern meaning and patterns of thinking, hypothetically reason to create a wide spectrum of possible answers or explanations to problems, and mesh the stories of the past self into meanings and possibilities for the future self (Fowler, 1981, 1991). Here, Fowler is integrating principles of formal operations (Piaget, 1970) and Erikson’s (1968) quest to construct an adult identity. Equipped with a new hunger for adult truth and understanding, synthetic-conventional faith is driven by our encounters with prospective role models and experiences that we will tap to forge our emerging worldview. Parents, family, friends, teachers, schools, first-loves, news outlets, places of worship, and culture at large all shape faith through the interaction of these external forces and our historical storyline. Fowler claims that faith at this stage is largely

defined by the memberships, roles, and relationships one assumes with and across these various systems.

Stage 4 faith, known as *individuated-reflective faith*. As noted earlier, Fowler states that the earliest he witnessed a transition to this level of faith was seventeen or eighteen and that few had a well-established Stage 4 faith before their mid-twenties (Fowler & Keen, 1978). Individuated-reflective has two essential qualities that distinguishes itself from the previous level. Individuated-reflective faith must first make concrete and explicit assents into the many options and possibilities explored, reflected upon, and analyzed in stage 3 (Fowler, 1981, 1991). In other words, the individual must transition from a state of religious moratorium or foreclosure into a state of achievement or commitment (Marcia, 1966). Fowler calls these transitions “explicit commitments, rather than tacit commitments” (Fowler, 1991, p. 38). Second, Fowler states that faith at the individuated-reflective level divorces itself from the constraints of being defined by the various memberships, roles, and relationships one has and instead seeks to be defined outside of them. Fowler contended that while former and current memberships, roles, and relationships continue to be important, their authority and influence are must ultimately be undermined and final authority must be relocated to within the self (Fowler, 1981, p. 179). Fowler labeled this second quality of individuated-reflective faith as the emergence/existence of an executive ego (Fowler, 1981, 1991).

The fifth stage of faith development is called *conjunctive faith*. Fowler argues that transitions to a conjunctive level of faith rarely occur before age thirty (Fowler &

Keen, 1978). Conjunctive faith is described as being able to comfortably live in a reality of opposites and contradictions (Fowler, 1981, 1991). Faith no longer struggles with the battle of potentially mutually exclusive possibilities but rather integrates the reality of simultaneously existing polarities. Fowler further explains conjunctive faith as existing in a state of “dialogical knowing” (Fowler, 1981, p. 185). Fowler coins this term to describe the nature of conversation that exists between the “knower” and the “known” in pursuit of a deeper understanding and comprehension between the conscious and the unconscious self (Fowler, 1991). Individuals with stage 5 faith possess a comfortable confidence in their own understanding of reality and belief system. They welcome opposing or challenging worldviews towards their own because they treat them not a threat but jewels of potential truth meant to heighten, solidify, or replace their current ideological perspective.

The final stage of faith development is known as *universalizing faith*. This level of faith draws parallels to Kohlberg's (1968) principles of post-conventional reasoning. Here, individuals are governed by and committed to a sense of selfless devotion. Faith at the universalizing level compels the individual to adhere to and strive towards “universal” principles of reality such as justice, love, and community even at the expense of themselves (Fowler, 1981, 1991). Fowler does not clearly label an age for universalizing faith, perhaps because it is exceedingly rare (Fowler, 1981). Fowler described people with universalizing faith as living as “though a commonwealth of love and justice were already reality among us” (Fowler, 1991, p. 41). A clear distinction that Fowler makes between conjunctive faith (stage 5) and

universalizing faith (stage 6) is that at the conjunctive level, ones “perceptions of justice outreach its readiness to sacrifice the self and to risk the partial justice of the present order for the sake of a more inclusive justice and the realization of love” (Fowler, 1981, p. 200). In other words, faith at the conjunctive level sees certain injustices and social problems as too costly and therefore chooses to be satisfied with the status quo. Universalizing faith compels individuals to act in spite of the status quo and to invest themselves wholeheartedly towards the removal of such injustices, no matter the cost. Fowler himself conceded that universalizing faith is extremely rare and few enter into such a sacrificial form of existence.

According to Fowler, religious faith is strongly influenced by the people closest to us (Fowler, 1981, 1991; Fowler & Keen, 1978). Early interactions with caregivers, personal family histories, and experiences within various social institutions are instrumental in shaping our beliefs about God and the faith developmental process. The evident influence of these events, experiences and relationships on religious faith has implications for religious development in general. Therefore, examining multigenerational interactions, particularly in the context of the family and parent-child relationships, is fundamental towards understanding how and why religious faith develops and ultimately how religious development occurs.

Family Dynamics, Parent-Child Interactions, and Religious Development

As highlighted in Fowler’s faith development theory, family interactions and parent-child relationships are some of the earliest and most influential mechanisms

through which a sense of spirituality or religiousness develops. Empirical investigations targeting family dynamics and religiousness have contributed evidence that suggest parent-child interactions and parental religiosity predict offspring religiosity (Bader & Desmond, 2006; Bao, Whitbeck, Hoyt, & Conger, 1999; French, Eisenberg, Sallquist, Purwono, Lu, & Christ, 2013; Granqvist, 2002; Kim-Spoon, Longo, & McCullough, 2012; Leonard, Cook, Boyatzis, Kimball, & Flanagan, 2013). The predictability of offspring religiousness, as Fowler (1981, 1991) has noted, is quite complex and couched within a dynamic, contextually sensitive web of family relationships and life histories. The depth and degree of success in transmitting and developing a sense of spirituality and religiousness is partially dependent upon the positive environment and familial contexts in which religious modeling and indoctrination occur.

Several studies document the influences of family dynamics and parental religiousness on offspring developing their own sense of religious commitment. Brelsford (2013) conducted a study analyzing spiritual disclosure, relationship quality, and sanctification. Brelsford's findings demonstrated that different qualities of the parent-child relationship have implications for spiritual disclosure and discussion within the family. Specifically, Brelsford (2013) examined the role of two dimensions of sanctification; theistic sanctification and non-theistic sanctification. Theistic sanctification focuses on the belief that the parent-child relationship is a representative manifestation of God whereas non-theistic sanctification is the belief that the parent-child relationship has intrinsic sacred qualities. Intrinsic sacred qualities are not tied to

any specific deity but rather center on the parent-child relationship being “holy, mysterious, spiritual, and eternal” (Brelsford, 2013, p. 639). Brelsford’s results found that when children perceive the parent-child relationship to have sacred qualities (i.e. non-theistic sanctification) they were more willing to have open discussions pertaining to religion and spirituality. Parents, on the other hand, were more likely to engage in religious or spiritual dialogue with their children when they perceived God as having an active role within the parent-child relationship (i.e. theistic sanctification). These results indicate that when parents and children are having religious or spiritual discussions with each other, they are doing so for different reasons; children for purpose of non-theistic sanctification and parents for purpose of theistic sanctification. Therefore, the different meanings children and parents attach to their relationship (theistic versus non-theistic) in turn influences the frequency of religious dialogue between parents and children and consequently impact children’s religious development.

Kim-Spoon, Longo, and McCullough (2012) conducted a study examining the influence of parental religiousness on adolescent religious development and adjustment outcomes. The authors researched two aspects of religiousness, organizational and personal. Organizational religiousness was operationalized by how often participants attended “religious services” and “other religious activities.” Personal religiousness was operationalized by a collection of participant responses to questions regarding the degree to which religious faith was important in their lives. Their analysis provided evidence for the intergenerational transmission of both

organizational religiousness and personal religiousness, but the relationship was stronger for organizational religiousness. Additionally, results indicated that the transmission of religiousness was more successful in parent-child relationships that were characterized by secure attachments. These results suggest that secure attachments are an important element of religious development. According to attachment theory (Bowlby, 1969), secure attachments come about through positive, mutually satisfying interactions with attachment figures. Over time, individuals build an internal working model according to how attachment figures behave towards them across a wide spectrum of social situations. The internal working model then serves as blueprint upon which we develop expectations about social interactions and relationships. Additionally, the secure base for exploration is described as a safe haven and a place of retreat or comfort during times of distress (Bowlby, 1969). Taken together, the internal working model and the secure base serve as the groundwork towards building a secure attachment. Much like Erikson's (1968) articulation of the pivotal role a trust-bond serves between the individual and their caregiver(s), having a secure attachment is foundational towards subsequent development. Granqvist's (2002) study of attachment and religiosity further support this notion and argues that a secure attachment is critical to religious development. Granqvist (2002) argues that attachment security is the foundation upon which religiousness is built and that attachment to parents serves as a frame of reference towards developing your own sense of religiousness. Granqvist's (2002) results also suggest that variations in attachment facilitate different motivations for religious development. Specifically,

attachment insecurity was related to an emotionally-based and unstable form of religiousness while attachment security was related to a socialized, more stable form of religiousness.

Parental modeling and support are also influential components in developing religiousness. Leonard, Cook, Boyatzis, Kimball, and Flanagan (2013) found in their study of emerging adults that offspring carried a lofty view of their parent's religiousness and this perception was influential in their own development of religiousness. Their results indicated that participants saw their own beliefs and their parent's beliefs to be noticeably similar. Additionally, the respondents were clearly convinced that their parents supported them and their development of religious faith. The authors concluded that two complementary processes were at work in the family that facilitated the development of offspring religiousness: 1) parental support for religious development and 2) parents serving as religious models for their children. These findings suggest that religious development is most successful when parents model their beliefs while maintaining a supportive atmosphere. Bao, Whitbeck, Hoyt, and Conger (1999) likewise found that parental religious modeling and acceptance are influential in the transmission of religious values and behaviors. The researchers found that adolescents mainly acquired their religious beliefs and practices through modeling and imitating the beliefs and practices of their parents. The researchers also found a significant interaction between parents' religious beliefs/practices and how much adolescents perceived their parents to be supportive and accepting. Their results indicate that when adolescents perceived their parents to be supportive and accepting,

parents' religious beliefs and behaviors were better able to predict their adolescents' religious beliefs and practices. These two studies highlight the need for religious practices and beliefs to be lived in the context of a supportive and nurturing environment in order to sway the impact of these behaviors in the positive direction towards successful transmission of religiousness from one generation to the next. Parents who wish to see their religious values passed down to their children should be mindful of not only the substance of their messages but their delivery method as well.

Research Plan

Using the theoretical framework outlined by Fowler and applying the underlying assumptions regarding the development of religious faith according to FDT, this study will investigate the impact of parental religiousness and relationship quality on religious development during adolescence through early adulthood. Using data from the National Longitudinal Study of Adolescent Health or Add Health (Harris, Halpern, Whitsel, Hussey, Tabor, Entzel, & Udry, 2009), the current analysis will assess longitudinal patterns of religiousness in adolescence through early adulthood in relationship to parental religiousness and relationship quality. Although the data used for this study cannot fully capture the full breadth and depth of FDT, data are available to examine religious development that does occur during stage 3 (synthetic-conventional faith) and stage 4 (individuative-reflective faith) of FDT in the context of parental religiousness and relationship quality. Add Health data were gathered across a 15-year period and took place during four primary collection points,

called “waves.” Wave I took place during 1995, and will be referred to as the “baseline” collection interval. Wave II occurred during 1996, Wave III occurred during 2001-2002, and Wave IV occurred during 2008-2009. This study utilized data associated with Waves I, III, and IV only. Wave II data were excluded from this analysis because of the short time period between Wave I and Wave II. Furthermore, since Wave I, III, and IV fit well within the developmental periods of adolescence, emerging adulthood, and early adulthood (Arnett, 2000; Arnett, Kloep, Hendry, & Tanner, 2011; Berger, 2014), interpretation of results can be contextualized within an already existing developmental framework. Finally parental data were obtained during Wave I only through the administration of a self-report in-home interview questionnaire. No parental data were obtained during Wave II, III, or IV.

Research Questions

1. Does the religiousness of parents (mother and father) at baseline (Wave I) predict the religiousness of children during adolescence (Wave I), emerging adulthood (Wave III), and early adulthood (Wave IV)?
2. Is relationship quality with parents (mother and father) at baseline (Wave I) able to predict children’s religiousness during adolescence (Wave I), emerging adulthood (Wave III), and early adulthood (Wave IV)?
3. How important is having a life changing religious or spiritual experience (Wave III) towards predicting religiousness in emerging adulthood (Wave III) and early adulthood (Wave IV)?

4. How well can prior levels of religiousness predict future religiousness?
5. Can the religiousness of parents (mother and father) at baseline (Wave I) predict the religiousness of children during adolescence (Wave I), emerging adulthood (Wave III), and early adulthood (Wave IV) after accounting for prior religiousness and having had a life changing religious or spiritual experience?
6. Is relationship quality with parents (mother and father) at baseline (Wave I) able to predict children's religiousness during adolescence (Wave I), emerging adulthood (Wave III), and early adulthood (Wave IV) after accounting for prior religiousness and having had a life changing religious or spiritual experience?

Hypotheses

1. Parental (mother and father) religiousness at baseline (Wave I) will provide a statistically significant prediction of children's religiousness during adolescence (Wave I), emerging adulthood (Wave III), and early adulthood (Wave IV) after accounting for prior religiousness and having had a life changing religious or spiritual experience.
2. Relationship quality with parents (mother and father) at baseline (Wave I) will provide a statistically significant prediction of children's religiousness during adolescence (Wave I), emerging adulthood (Wave III), and early adulthood

(Wave IV) after accounting for prior religiousness and having had a life changing religious or spiritual experience.

3. Having had a life-changing religious or spiritual experience will be a statistically significant predictor of religiousness in emerging adulthood (Wave III) and early adulthood (Wave IV).
4. Prior religiousness levels will provide a statistically significant prediction of future religiousness.

Chapter 2

METHODS

Sample and Data Information

This study is a secondary analysis of data collected as a part of the National Longitudinal Study of Adolescent Health (Add Health). Add Health is a study of adolescents in the U.S. spanning the years of 1995-2009 and data were collected during 4 time intervals or waves. The purpose of Add Health was to study how behaviors and environmental influences in adolescence affect a variety of health and achievement outcomes in early adulthood (Harris, Halpern, Whitsel, Hussey, Tabor, Entzel, & Udry, 2009). Adolescents were recruited from 80 high schools and 52 middle schools across the United States to participate in the longitudinal study. Participants in the Add Health study are representative of the adolescent population in the United States in grades 7-12 at the time Wave I data were collected (Harris et al., 2009).

Add Health has two versions of the data, a public version and a “restricted” version. The public version is a sample of the restricted version and therefore has fewer cases ($N = 6,504$). The public version of Add Health is available without restrictions. The restricted version requires special permission from Add Health but gives researchers full access to the entire Add Health sample ($N = 20,745$). This project used the public version Add Health. Additionally, this project utilized data collected during Wave I in-home interviews (adolescent’s and either their mother or

father) and subsequent in-home interviews (Wave III and IV) of the original Wave I adolescent participants. In-home interviews with the original adolescent participants occurred across all waves of data collection and interviews consisted of a variety of questions about family dynamics, religious beliefs and behaviors, peer networks, general health, career goals and aspirations, criminal behaviors, and decision-making processes. Parents were asked to answer similar albeit fewer questions about family dynamics, neighborhood characteristics, employment, religion, and general health. This analysis used data from responses to questions addressing adolescent and parental religious beliefs and behaviors from Waves I, III, and IV with parental data only available from Wave I.

Key Independent Variables

Father/mother religiousness was operationalized by responses to four direct questions asked to either the adolescent's mother or father about their religious behaviors and beliefs during the Wave I in-home parental interview. Only one parent responded per adolescent participant, so data from both parents are unavailable. The four questions used to operationalize father/mother religiousness are "how often have you gone to religious services in the past year?," "how important is religion to you?," "how often do you pray?," and "do you agree or disagree that the sacred scriptures of your religion are the work of God and are completely without mistakes?" Religious service attendance was coded on a 4-point Likert scale ranging from (0) "never" to (3) "once a week or more." Importance of religion was coded on a 4-point Likert scale

ranging from (0) “not important at all” to (3) “very important.” Frequency of prayer was coded on a 5-point Likert scale ranging from (0) “never” to (4) “at least once a day.” Responses to the statement of sacred scriptures being the work of God and without mistakes were recoded into a binary variable with values of (1) “agree” and (0) “disagree,” and (0) “religion has no sacred scriptures.” Because of discrepancies in response ranges across the four questions, items were first transformed into z-scores and then added together to form a composite score measuring father/mother religiousness. These measures have a Cronbach’s alpha of 0.84 for fathers and 0.82 for mothers measuring their internal consistency.

Relationship quality with father/mother was operationalized by responses to five direct questions asked to the adolescent about each parent during the Wave I in-home interview that address the adolescent’s attitude, feelings toward, or perception of their relationship with each parent. The five questions used to operationalize relationship quality with father/mother were “how close do you feel to your father/mother?,” “how much do you think your father/mother cares about you?,” “most of the time, your father/mother is warm and loving towards you,” “you are satisfied with the way you and your father/mother communicate with each other,” and “overall, you are satisfied with your relationship with your father/mother.” Responses to the first two questions were coded on a 5-point Likert scale ranging from (0) “not at all” to (4) “very much.” Responses to the final three questions were coded on a 5-point Likert scale ranging from (0) “strongly disagree” to (4) “strongly agree.” The relationship quality with father/mother measures was calculated as the sum of

responses from five questions about each parent with possible scores ranging from 0-20 for both fathers and mothers. These measures have a Cronbach's alpha of 0.86 for fathers and 0.83 for mothers measuring their internal consistency.

Adolescent life changing experience Wave III was a single item measure asking the original Wave I adolescent respondents to answer the question “did you ever have a religious or spiritual experience that changed your life?” during the Wave III data collection interval. Possible responses to this question were (0) “no” and (1) “yes.”

Additional Independent Variables

General Health was assessed using a single-item measure across Waves I, III, and IV, asking participants to indicate their general health status. Responses to this question ranged from (0) “poor” to (4) “excellent.” General Health was included in this analysis since previous research has found a relationship between religious involvement and health (George, Ellison, & Larson, 2002). However, this relationship mainly focused on religious involvement having positive effects on health and healthy lifestyle habits (Dabnam, Holt, Clark, Roth, & Southward, 2012). This study will conversely use general health as a predictor of religiousness rather than an outcome of religiousness to determine whether general health can predict religiousness across time.

Having children was assessed using the household roster across Waves I, III, and IV. Participants were asked to identify members of their household and their relationship to them. Participants that indicated that they had a son or daughter in the

household, whether biological or otherwise, were coded as having children. This measure was included in this analysis since previous research has identified that individuals may begin or increase their religious participation during the transition to parenthood (Palkovitz, 2002; Petts, 2007; Petts, 2012). Research has also suggested that parents may see religious participation as a source of social capital for their children (Petts, 2012).

Went to College was another independent variable included in this analysis. Previous research has demonstrated graduating college can modestly increase preferences for institutionalized religion (Hill, 2011) and that attending college does not necessarily increase the likelihood of adopting a more liberal belief system (Mayrl, & Uecker, 2011). College attendance was operationalized by a single-item measure across Waves III and IV. Participants were asked to indicate their highest grade or year of school they've completed. Participant answers ranged from (6) "sixth grade" to (22) "5 or more years of graduate school." Responses were recoded into a binary variable with answers of 6-12 being recoded as (0) to reflect never attending any college and responses of 13-22 were recoded as (1) to reflect having attended college to some degree.

Professions of being "born again" were included as an independent variable during Wave I and Wave III analyses. "Born again" professions were included in this analysis to determine whether these professions are associated with measureable religiousness. During Wave I, participants were asked whether they think of themselves as a Born-Again Christian. During Wave III, participants were asked

whether they would say they have been “born again” or have had a “born again” experience – that is, a turning point in their life when they committed themselves to Jesus Christ. “Born again” professions were not available during Wave IV. Responses to both Wave I and Wave III questions regarding “born again” status were coded as (0) “no” and (1) “yes.”

Dependent Variables

Religiousness in adolescence (Wave I) was operationalized by responses to five direct questions asked to adolescent participants about their religious beliefs and behaviors during the Wave I in-home adolescent interview. The five questions used to operationalize adolescent religiousness at Wave I were “do you agree or disagree that the sacred scriptures of your religion are the word of God and are completely without any mistakes?,” “in the past 12 months, how often did you attend religious services?,” “how important is religion to you?,” “how often do you pray?,” and “many churches, synagogues, and other places of worship have special activities for teenagers - such as youth groups, bible classes, or choir. In the past 12 months, how often did you attend such youth activities?” Responses to the statement of sacred scriptures being the word of God and without mistakes were recoded into a binary variable with values of (1) “agree,” (0) “disagree” and (0) “religion has no sacred scriptures.” Religious service attendance was coded on a 4-point Likert scale ranging from (0) “never” to (3) “once a week or more.” Importance of religion was coded on a 4-point Likert scale ranging from (0) “not important at all” to (3) “very important.” Frequency of prayer was coded

on a 5-point Likert scale ranging from (0) “never” to (4) “at least once a day.” Youth service attendance was coded on a 4-point Likert scale ranging from (0) “never” to (3) “once a week or more.” Because of discrepancy in ranges of responses across the five questions, items were first transformed into z-scores and then added together to form a composite score of adolescent religiousness at Wave I. This measure has a Cronbach's alpha of 0.87 measuring its internal consistency.

Religiousness in emerging adulthood (Wave III) was operationalized by responses to four direct questions asked to the original Wave I adolescent participants during a follow-up in-home interview approximately six years after Wave I data were obtained. The four questions used to operationalize religiousness in emerging adulthood were “ how often have you attended religious services in the past 12 months?,” “Many churches, synagogues, and other places of worship have special activities for young adults - such as bible classes, retreats, youth groups, or choir. In the past 12 months, how often did you attend such activities?,” “how important is your religious faith to you?,” and “ how often do you pray privately, that is, when you’re alone, in places other than a church/synagogue/temple/mosque/religious assembly?” Religious service attendance was coded on a 6-point Likert scale ranging from (0) “never” to (5) “more than once a week.” Special activity attendance was coded on a 6-point Likert scale ranging from (0) “never” to (5) “more than once a week.” Importance of religious faith was coded on a 4-point Likert scale ranging from (0) “not important” to (3) “more important than anything else.” Frequency of prayer was coded on an 8-point Likert scale ranging from (0) “never” to (7) “more than once a

day.” Because of discrepancy in ranges of responses across the four questions, items were first transformed into z-scores and then added together to form a composite score of adolescent religiousness at Wave III. This measure has a Cronbach's alpha of 0.87 measuring its internal consistency.

Religiousness in early adulthood (Wave IV) was operationalized by responses to five direct questions asked to the original Wave I adolescent participants during a follow-up in-home interview approximately thirteen years after Wave I data were obtained. The five questions used to operationalize religiousness in early adulthood were “how often have you attended church, synagogue, temple, mosque, or religious services in the past 12 months?,” “many churches, synagogues, and other places of worship have special activities outside regular worship services - such as classes, retreats, small groups, or choir. In the past 12 months, how often did you attend such activities?,” “how important (if at all) is your religious faith to you?,” “how often do you pray privately, that is, when you’re alone, in places other than a church/synagogue/ temple/ mosque/ religious assembly?,” and “how often do you turn to your religious or spiritual beliefs for help when you have personal problems, or problems at school or work?” Religious service attendance was coded on a 6-point Likert scale ranging from (0) “never” to (5) “more than once a week.” Special activity attendance was coded on a 6-point Likert scale ranging from (0) “never” to (5) “more than once a week.” Importance of religious faith was coded on a 4-point Likert scale ranging from (0) “not important” to (3) “more important than anything else.” Frequency of prayer was coded on an 8-point Likert scale ranging from (0) “never” to (7) “more than once

a day.” Frequency of using religious or spiritual beliefs for help during problems was coded on a 5-point Likert scale ranging from (0) “never” to (4) “very often.” Because of discrepancy in ranges of responses across the five questions, items were first transformed into z-scores and then added together to form a composite score of religiousness in early adulthood. This measure has a Cronbach's alpha of 0.87 measuring its internal consistency.

Control Variables

Gender and *Race* of the participants were included as demographic control variables. Previous research has identified that religiousness may vary depending on gender (Sullins, 2006) and race (Taylor, Chatters, & Jackson, 2007). Gender categories were “male” and “female.” Racial categories were “White,” “African American,” “Asian,” “Hispanic,” and “Other.” Dummy codes were created for each gender and ethnicity with reference categories being “male” and “White.”

Religious Affiliation

Religious affiliation was not included as a variable in the statistical analyses of this study but was instead presented to offer descriptive information about the analytic sample. Religious affiliation was determined by responses to the question “What is your present religion?” across Waves I, III, and IV. Original adolescent participants responded to the question across all three waves of this analysis while parental religious affiliation was only available during Wave I. Because of the disparity in

available responses across the three waves, responses were recoded so that parent religious affiliation at Wave I and adolescent religious affiliation across all three waves would be uniform. Responses were recoded to reflect the following categories: (0) “None/Atheist/Agnostic,” (1) “Protestant,” (2) “Catholic,” (3) “Jewish,” (4) “Buddhist,” (5) “Hindu,” (6) “Muslim,” (7) “Other,” and (8) “Other-Christian.”

Analytic Strategy

In order to test whether a mother’s/father’s religiousness and relationship quality with mother/father will be provide a statistically significant prediction of their children’s religiousness during adolescence, emerging adulthood, and early adulthood, a series of hierarchical regression models were conducted using each parent’s religiousness and relationship quality score at Wave I as a predictors. The first two models tested whether father’s/mother’s religiousness and father/mother relationship quality could concurrently predict their child’s religiousness in adolescence (Wave I). In separate models for mothers and fathers, demographic control variables of adolescent gender and adolescent ethnicity were entered into step 1 of the models as predictors. At step 2, father/mother relationship quality and father/mother religiousness were entered into the models as the final predictors. The dependent variable in the first two models was *religiousness in adolescence* (Wave I). The resulting output reflected the direct effects of father/mother religiousness and father/mother relationship quality predicting adolescent religiousness (Wave I).

The next two models tested whether father's/mother's religiousness and father/mother relationship quality could predict their child's religiousness in emerging adulthood above and beyond a) religiousness in adolescence (Wave I) and b) having a life changing religious or spiritual experience. Again, in separate models for mothers and fathers, demographic control variables of adolescent gender and adolescent ethnicity were entered into step 1 of the models as predictors. At step 2, religiousness in adolescence (Wave I) and the life changing religious or spiritual experience variable were entered into the models as predictors. Lastly, at step 3 of these models, father/mother relationship quality and father/mother religiousness were entered as the final predictors. The dependent variable in these two models was original adolescent participant's *religiousness in emerging adulthood* (Wave III). The resulting output reflected the direct effects of father/mother religiousness and father/mother relationship quality predicting the original adolescent participant's religiousness in emerging adulthood above and beyond their religiousness in adolescence (Wave I) and whether or not they had a life changing religious or spiritual experience.

The final two models tested whether father's/mother's religiousness and father/mother relationship quality could predict their child's religiousness in early adulthood above and beyond a) religiousness in adolescence (Wave I), b) religiousness in emerging adulthood (Wave III) and c) having a life changing religious or spiritual experience. Once again, in separate models for mothers and fathers, demographic control variables of adolescent gender and adolescent ethnicity were entered at step 1 of the models as predictors. At step 2, religiousness in adolescence (Wave I),

religiousness in emerging adulthood (Wave III), and the life changing religious or spiritual variable were entered into the models as predictors. Lastly, at step 3 of these models, father/mother relationship quality and father/mother religiousness were entered as the final predictors. The dependent variable in these two models was original adolescent participant's *religiousness in early adulthood* (Wave IV). The resulting output reflects the direct effects of father/mother religiousness and father/mother relationship quality predicting the original adolescent participant's religiousness in early adulthood above and beyond their religiousness in adolescence, religiousness in emerging adulthood and whether or not they had a life changing religious or spiritual experience.

Chapter 3

RESULTS

Table 1 presents descriptive statistics for key variables used in this analysis. The total sample was approximately half female, half male. The average age of the adolescent participants during Wave I was roughly 16 years old. At Wave III, the average age was almost 22 years old and at Wave IV the average age was 29 years old. The sample was mostly White (about 60%) with African American being the second most common racial category (about 25%). General health declined slowly between Waves I and IV, falling from 2.9 to 2.1 out of a possible 4 points. Participants with children increased over time from those having children at Wave I representing 1.4% of the sample to 36.4% of participants at Wave IV having children. College attendance increased between Waves III and IV, rising from about 40% at Wave III to just over 50% by Wave IV. The percentage of participants professing to be born again Christians dropped between Waves I and IV with approximately one quarter of the sample professing to be born again at Wave I and dropping to less than 10% by Wave III. Wave IV data was not available on professions of being born again. Wave III participants were asked whether they had had a religious or spiritual experience that changed their life. 28.7% of participants responded “yes” and were approximately 16-years old when it happened. Adolescent’s perception of relationship quality with mom and dad was relatively high (17.1 and 16.2, respectively out of a total possible score of 20) with adolescents perceiving to have a slightly better relationship with their mother.

Table 1
*Descriptive Statistics of
Key Variables*

	Min/Max	Mean/Percent	SD
Females		51.6%	
African American		24.6%	
Asian		03.6%	
Hispanic		11.4%	
Adolescent Age W-I	12-21	16.03	
Adolescent Age W-III	18-28	21.82	
Adolescent Age W-IV	25-34	29.00	
General Health W-I	0-4	2.9	.9
General Health W-III	0-4	2.3	1.5
General Health W-IV	0-4	2.1	1.4
Children W-I		1.4%	
Children W-III		16.2%	
Children W-IV		36.4%	
College W-III		41.7%	
College W-IV		51.8%	
Born Again W-I		27.4%	
Born Again W-III		9.8%	
Religious/Spiritual Exp.		28.7%	
Age Experience Occurred	0-25	15.53	4.6
Mother RQ W-I	0-20	17.1	3.2
Father RQ W-I	0-20	16.2	3.8
Mother RL W-I	(-8.23*)-(3.02*)	.96**	3.2
Father RL W-I	(-6.11*)-(4.12*)	.49**	3.3
Adolescent RL W-I	(-7.18*)-(5.17*)	.82**	4.0
Adolescent RL W-III	(-4.71*)-(8.66*)	-.10**	3.2
Adolescent RL W-IV	(-6.32*)-(9.69*)	.12**	4.0

Note: ($N = 6,504$); RQ = Relationship Quality; RL = Religiousness Level;
* = z-score; ** = median was used

The median z-score for mother's religiousness was approximately one SD above the mean while the median z-score for fathers was about one-half of a SD above the mean. Adolescent religious levels had a median z-score of .82 SD units above the mean at

Wave I, -.10 SD units below the mean at Wave III and, and .12 SD units above the mean at Wave IV.

Table 2 presents self-report religious affiliations across all three waves of analysis for both parents and adolescents. Christian religions represented the majority of the parent's religious affiliations at Wave I with 86.9% of parents identifying themselves as Protestant, Catholic, or Other-Christian. National estimates of self-

Table 2
Self-report Religious Affiliation Percentage

	P: W1	A: W1	A: W3	A: W4
None/Atheist/Agnostic	6.1	11.8	19.2	18.9
Protestant	49.9	42.3	16.7	32.9
Catholic	25.9	22.7	21.1	18.2
Jewish	1.0	.8	.9	.7
Buddhist	.3	.4	.4	.5
Hindu	.2	.1	.1	.1
Muslim	.2	.4	.3	.3
Other	5.5	5.7	8.6	6.5
Other-Christian	11.1	15.7	32.8*	22.1

Note: P: W1 = Parent Wave 1, A: W1 = Adolescent Wave 1, A: W3 = Adolescent Wave 3, A: W4 = Adolescent Wave 4

* Most respondents (85%) replied "Protestant" to follow up question.

described religious identification in 1990 were similar (86%) according the U.S. Census (2012). Adolescents at Wave I self-identified primarily with a Christian religion with 80.7% responding as being Protestant, Catholic, or Other-Christian. At Wave III, emerging adults continued to identify primarily with a Christian religion (70.6%). National estimates of self-described religious identification with a Christian religion in 2001 were somewhat higher (77%), but these estimates reflect the total

adult population (U.S. Census, 2012). Protestant affiliation dropped substantially between Wave I and Wave III. However, 85% of the respondents who initially identified themselves as “Other-Christian” clarified that their affiliation was a Protestant religion during follow-up questioning. Therefore, Protestant affiliation is likely 44.6% during Wave III. Finally, Christian religions were the most self-identified religious affiliation at Wave IV representing 73.2% of the total sample. Again, this proportion mirrors national projections of religion identification in 2008 with 76% identifying with a Christian religion (U.S. Census, 2012).

A Priori Power Analysis

A priori power was assessed for the proposed hierarchical, multiple regression analysis (MRA). Power was evaluated using the GPower 3.1 program (Faul, Erdfelder, Buchner, & Lang, 2009). Green (1991) recommends the a priori analysis to evaluate both: (a) the overall significance of the MRA model and (b) the unique contribution of individual predictors. The significance level for both analyses was set to $p = .05$. Medium effect sizes were assumed according to Cohen’s (1988) recommendations for MRA (i.e., both f^2 values = .15). Finally, power was set to .80, meaning there would be an 80% probability of reaching statistical significance if the predictors had an effect in the population.

Results from the power analysis showed a minimum of 127 cases was necessary to evaluate a model with 12 predictors (Wave IV analysis had the most predictors) and 55 cases were necessary to evaluate individual predictors. Taking

the more conservative approach, it was assumed that MRA models with $N > 127$ were sensitive to medium effect sizes at the $p = .05$ significance level at 80% power.

Hypotheses 1 & 2

Hypotheses 1 and 2 stated that mother and father's religiousness and relationship quality at baseline (Wave I) would provide a statistically significant prediction of their children's religiousness across adolescence, emerging adulthood and early adulthood. To test these hypotheses, hierarchical multiple regression analysis was performed with parental data being the final step of the model for each parent. Results from the father's religiousness and relationship quality (RQ) predicting adolescent religiousness at are summarized in Table 3. As predicted, the addition of father's religiousness and RQ provided a statistically significant increase in the explained variance of adolescent religiousness at Wave I, $\Delta R^2 = .139$, $F(2, 229) = 28.286$, $p = .001$. The overall model accounted for roughly 44% of the total variance in adolescent religiousness at Wave I, $R^2 = .436$ ($N = 238$, $p = .001$). These findings demonstrate that the inclusion of father's religiousness and RQ has predictive power above and beyond that provided by the previously measured variables, including the adolescent's general health, having children, professing to be born again, and demographic characteristics. Unique contributions of each significant predictor were assessed through the interpretation of squared-partial coefficients (Meyers, Gamst, & Guarina, 2006; Tabachnick & Fidell, 2007). The relative contributions reveal that father's religiousness at Wave I accounts for approximately 22% of the overall

Table 3
Father religiousness and RQ predicting adolescent religiousness (Wave 1)

Variable	<i>B</i>	<i>SE B</i>	β	pr^2	f^2
Constant	-6.302	1.209			
Females	.824	.451	.092	-	
Race – African American	1.815	.676	.140**	.031	.055
Race – Asian	.870	.814	.055	-	
Race – Hispanic	.733	.747	.051	-	
General Health Wave 1	.499	.233	.110**	.020	.035
Children Wave 1	2.819	3.411	.042	-	
Born Again Wave 1	3.333	.516	.332***	.154	.274
Father Religious Wave 1	.498	.070	.378***	.181	.320
Father RQ Wave 1	.174	.066	.136**	.030	.053

Note: $R^2 = .436$ ($N = 238$, $p = .001$), pr^2 = squared partial coefficient; f^2 = Cohen's (1988) effect size statistic for multiple regression analyses.

* $p = .05$, ** $p = .01$, *** $p = .001$.

variance explained by the model while father's RQ accounts for about 3% of the overall explained variance. Lastly, effect sizes were estimated for each significant predictor using Cohen's (1988) f^2 , where values of .02 equal a small effect, values of .15 equal a medium effect, and values of .35 a large effect. Results revealed that

Table 4

Mother religiousness and RQ predicting adolescent religiousness (Wave I)

Variable	<i>B</i>	<i>SE B</i>	β	pr^2	f^2
Constant	-3.817	.272			
Females	.687	.086	.086***	.013	.022
Race – African American	.211	.104	.022*	.001	.001
Race – Asian	.835	.257	.035***	.002	.004
Race – Hispanic	.271	.139	.021*	.001	.001
General Health Wave 1	.253	.048	.057***	.005	.009
Children Wave 1	-.182	.416	-.005		
Born Again Wave 1	2.756	.101	.312***	.130	.228
Mother Religious Wave 1	.567	.014	.458***	.239	.421
Mother RQ Wave 1	.113	.014	.089***	.013	.023

Note: $R^2 = .432$ ($N = 5,047$, $p = .001$), pr^2 = squared partial coefficient; f^2 = Cohen's (1988) effect size statistic for multiple regression analyses.

* $p = .05$, ** $p = .01$, *** $p = .001$.

father's religiousness had a medium-to-large effect on adolescent religiousness while father RQ had a small effect on adolescent religiousness.

Results from the mother's religiousness and RQ predicting adolescent religiousness are summarized in Table 4. As predicted, the addition of mother's religiousness and RQ provided a statistically significant increase in the explained

variance of adolescent religiousness at, $\Delta R^2 = .187$, $F(2, 5038) = 831.61$, $p = .001$.

The overall model accounted for roughly 43% of the total variance in adolescent religiousness at Wave I, $R^2 = .432$ ($N = 5,047$, $p = .001$). These findings demonstrate that the inclusion of mother's religiousness and RQ has predictive power above and beyond that provided by the previously measured variables, including the adolescent's general health, having children, and demographic characteristics. Unique contributions of each significant predictor were assessed through the interpretation of squared-partial coefficients (Meyers, Gamst, & Guarina, 2006; Tabachnick & Fidell, 2007).

The relative contributions reveal that mother's religiousness accounted for approximately 32% of the overall variance explained by the model while mother's RQ accounted for about 1% of the overall explained variance. Lastly, effect sizes were estimated for each significant predictor using Cohen's (1988) f^2 , where values of .02 equal a small effect, values of .15 equal a medium effect, and values of .35 a large effect. Results revealed that mother's religiousness had a large effect on adolescent religiousness while mother RQ had a small effect on adolescent religiousness.

Results from the father's religiousness and RQ predicting emerging adult's religiousness are summarized in Table 5. Contrary to the hypothesis, the addition of father's religiousness and RQ did not provide a statistically significant increase in the explained variance of emerging adult's religiousness, $\Delta R^2 = .004$, $F(2, 167) = .251$, $p = .638$. The overall model accounted for roughly 34% of the total variance in emerging adult's religiousness, $R^2 = .344$ ($N = 179$, $p = .001$). These findings demonstrate that the inclusion of father's religiousness and RQ during adolescence

Table 5
Father religiousness and RQ predicting emerging adult's religiousness (Wave III)

Variable	<i>B</i>	<i>SE B</i>	β	pr^2	f^2
Constant	-6.497	2.499			
Females	-.585	.766	-.064	-	
Race – African American	.867	1.167	.042	-	
Race – Asian	1.429	1.462	.030	-	
Race – Hispanic	1.044	1.343	.029	-	
General Health Wave 1	.264	.446	.063	-	
Children Wave 3	1.974	.984	.108	-	
Born Again Wave 3	4.314	1.125	.254***	.076	.117
AD Religious Wave 1	.009	.100	.005	-	
AD Religious/Spiritual Exp.	4.980	.886	.433***	.195	.298
Went to College	1.172	.729	-.031	-	
Father Religious Wave 1	-.013	.130	-.032	-	
Father RQ Wave 1	.155	.110	.054	-	

Note: $R^2 = .344$ ($N = 179$, $p = .001$), pr^2 = squared partial coefficient; f^2 = Cohen's (1988) effect size statistic for multiple regression analyses.

* $p = .05$, ** $p = .01$, *** $p = .001$.

cannot predict religiousness during emerging adulthood above and beyond that provided by the previously measured variables, specifically professing to be born

again and having a religious or spiritual experience that changed your life. Unique contributions of both significant predictors were assessed through the interpretation of squared-partial coefficients (Meyers, Gamst, & Guarina, 2006; Tabachnick & Fidell, 2007). Since father's religiousness and RQ were not significant, their squared-partial coefficients were not interpreted. The relative contributions reveal that having a life-changing religious or spiritual experience was the strongest predictor of religiousness during emerging adulthood and accounted for approximately 20% of the overall variance explained by the model. Lastly, effect sizes were estimated for each significant predictor using Cohen's (1988) f^2 , where values of .02 equal a small effect, values of .15 equal a medium effect, and values of .35 a large effect. Results revealed that born-again professions had a small-to-medium effect on emerging adult's religiousness while having had a religious or spiritual experience that was life changing had a medium-to-large effect on emerging adult's religiousness.

Results from the mother's religiousness and RQ predicting emerging adult's religiousness are summarized in Table 6. Contrary to the hypothesis, the addition of mother's religiousness and RQ did not provide a statistically significant increase in the explained variance of emerging adult's religiousness, $\Delta R^2 = .001$, $F(2, 3712) = 1.565$, $p = .209$. The overall model accounted for roughly 23% of the total variance in emerging adult's religiousness, $R^2 = .228$ ($N = 3,724$, $p = .001$). These findings demonstrate that the inclusion of mother's religiousness and RQ during adolescence cannot predict religiousness during emerging adulthood above and beyond that provided by the previously measured variables, including general health, having

Table 6
Mother religiousness and RQ prediction emerging adult's religiousness (Wave III)

Variable	<i>B</i>	<i>SE B</i>	β	pr^2	f^2
Constant	-4.571	.528			
Females	-.149	.152	-.014	-	
Race – African American	.163	.184	.013	-	
Race – Asian	.414	.461	.013	-	
Race – Hispanic	.495	.243	.030*	.001	.001
General Health Wave 3	.495	.089	.081***	.010	.013
Children Wave 3	.990	.188	.079***	.005	.006
Born Again Wave 3	2.562	.230	.167***	.030	.038
AD Religious Wave 1	-.013	.023	-.010	-	
AD Religious/Spiritual Exp.	4.231	.171	.371***	.136	.176
Went to College	1.148	.158	.110***	.016	.020
Mother Religious Wave 1	.040	.029	.024	-	
Mother RQ Wave 1	.040	.024	.024	-	

Note: $R^2 = .228$ ($N = 3,724$, $p = .001$), pr^2 = squared partial coefficient; f^2 = Cohen's (1988) effect size statistic for multiple regression analyses.

* $p = .05$, ** $p = .01$, *** $p = .001$.

children, born again professions, whether emerging adults have had a religious or spiritual experience that changed their lives, and whether emerging adults had gone to

college. Unique contributions of each significant predictor were assessed through the interpretation of squared-partial coefficients (Meyers, Gamst, & Guarina, 2006; Tabachnick & Fidell, 2007). Since mother's religiousness and RQ were not significant, their squared-partial coefficients were not interpreted. The relative contributions reveal that having a life-changing religious or spiritual experience was the strongest predictor of religiousness during emerging adulthood and accounted for approximately 14% of the overall variance explained by the model. Lastly, effect sizes were estimated for each significant predictor using Cohen's (1988) f^2 , where values of .02 equal a small effect, values of .15 equal a medium effect, and values of .35 a large effect. Results revealed that having had a religious or spiritual experience that was life changing had a medium effect on emerging adult's religiousness.

Results from the father's religiousness and RQ predicting religiousness in early adulthood are summarized in Table 7. As predicted, the addition of father's religiousness and RQ provided a statistically significant increase in the explained variance of religiousness in early adulthood, $\Delta R^2 = .084$, $F(2, 117) = 9.582$, $p = .001$. The overall model accounted for almost 49% of the total variance in religiousness in early adulthood, $R^2 = .487$ ($N = 129$, $p = .001$). These findings demonstrate that the inclusion of father's religiousness and RQ has predictive power above and beyond that provided by the previously measured variables, including gender, having children, and religiousness during adolescence and emerging adulthood. Unique contributions of each significant predictor were assessed through the interpretation of squared-partial coefficients (Meyers, Gamst, & Guarina, 2006; Tabachnick & Fidell, 2007). The

Table 7
Father religiousness and RQ predicting religiousness in early adulthood (Wave IV)

Variable	<i>B</i>	<i>SE B</i>	β	pr^2	f^2
Constant	-5.543	1.851			
Females	2.313	.640	.250***	.102	.198
Race – African American	.257	1.054	.015	-	
Race – Asian	.546	1.296	.032	-	
Race – Hispanic	-.539	1.162	-.028	-	
General Health Wave 4	-.567	.337	-.123	-	
Children Wave 4	1.246	.634	.142*	.033	.065
AD Religiousness Wave 1	.265	.090	.257**	.065	.126
AD Religiousness Wave 3	.120	.062	.190*	.044	.086
AD Religious/Spiritual Exp.	-.577	.789	-.091	-	
Went to College	1.093	.686	.134	-	
Father Religiousness Wave 1	.389	.117	.296***	.094	.183
Father RQ Wave 1	.254	..090	.207**	.068	.133

Note: $R^2 = .487$ ($N = 129$, $p = .001$), pr^2 = squared partial coefficient; f^2 = Cohen's (1988) effect size statistic for multiple regression analyses.

* $p = .05$, ** $p = .01$, *** $p = .001$.

relative contributions reveal that father's religiousness accounted for almost 10% of the overall variance explained by the model while relationship quality accounted for

about 7% of the overall explained variance. Lastly, effect sizes were estimated for each significant predictor using Cohen's (1988) f^2 , where values of .02 equal a small effect, values of .15 equal a medium effect, and values of .35 a large effect. Results revealed that father's religiousness had a medium effect while father RQ had a small-to-medium effect on religiousness in early adulthood.

Results from the mother's Wave I religiousness predicting adolescent religiousness at Wave IV are summarized in Table 8. Consistent with hypothesis 1 but contrary to hypothesis 2, the addition of mother's religiousness but not RQ provided a statistically significant increase in the explained variance of religiousness in early adulthood, $\Delta R^2 = .018$, $F(2, 2980) = 38.231$, $p = .001$. The overall model accounted for roughly 31% of the total variance in adolescent religiousness at Wave IV, $R^2 = .312$ ($N = 2,992$, $p = .001$). This finding demonstrates that the inclusion of mother's religiousness has predictive power above and beyond that provided by the previously measured variables including gender, general health, having children, their religiousness in adolescence, having attended college, and identifying as African American. Unique contributions of each significant predictor were assessed through the interpretation of squared-partial coefficients (Meyers, Gamst, & Guarina, 2006; Tabachnick & Fidell, 2007). The relative contributions reveal that mother's religiousness accounts for approximately 3% of the variance explained by the model. Mother's RQ was not assessed through the interpretation of squared-partial coefficients since it was not a significant predictor of religiousness in early adulthood. Lastly, effect sizes were estimated for each significant predictor using Cohen's (1988)

Table 8
Mother religiousness and RQ predicting religiousness in early adulthood (Wave IV)

Variable	<i>B</i>	<i>SE B</i>	β	pr^2	f^2
Constant	-2.760	.409			
Females	.889	.130	.109***	.015	.022
Race – African American	2.044	.155	.211***	.055	.080
Race – Asian	-.381	.388	-.015	-	
Race – Hispanic	.080	.211	.006	-	
General Health Wave 4	.136	.069	.031*	.001	.002
Children Wave 4	1.052	.129	.128***	.022	.031
AD Religiousness Wave 1	.306	.020	.299***	.075	.109
AD Religiousness Wave 3	.004	.013	.004	-	
AD Religious/Spiritual Exp.	.012	.150	.003	-	
Went to College	.458	.128	.053***	.004	.005
Mother Religious Wave 1	.210	.024	.166***	.025	.036
Mother RQ Wave 1	.031	.020	.024	-	

Note: $R^2 = .312$ ($N = 2,994$, $p = .001$), pr^2 = squared partial coefficient; f^2 = Cohen's (1988) effect size statistic for multiple regression analyses.

* $p = .05$, ** $p = .01$, *** $p = .001$.

f^2 , where values of .02 equal a small effect, values of .15 equal a medium effect, and

values of .35 a large effect. Results revealed that mother's religiousness had a medium effect while father RQ had a small effect on religiousness in early adulthood.

Hypothesis 3

Hypothesis 3 stated that having a religious or spiritual experience that was life changing would predict religiousness in emerging adulthood (Wave III) and early adulthood (Wave IV). This hypothesis was partially supported by the data. Results demonstrated that having a religious or spiritual experience that was life changing was able to predict religiousness in emerging adulthood only (see tables 5 & 6).

Descriptive statistics (table 1) show that the mean age of participants at the time this "experience" occurred was between 15- and 16-years old. The average age of emerging adults (Wave III) was about 22-years old. The average age of early adults (Wave IV) was 29-years old. The time gap between when the spiritual/religious experience occurred and the average age of emerging (Wave III) and early (Wave IV) adults was about 6 years and 14 years, respectively.

Hypothesis 4

Hypothesis 4 stated that prior religiousness levels would predict future religiousness, specifically in during emerging adulthood and early adulthood. To test this hypothesis, adolescent religiousness was included as a predictor during Wave III and Wave IV analyses, while religiousness in emerging adulthood was included as a predictor during Wave IV analysis only. Results from adolescent religiousness

predicting religiousness in emerging adulthood can be found in Tables 5 and 6. Contrary to hypothesis 4, adolescent religiousness was unable to predict religiousness in emerging adulthood. Since this relationship was not significant, the relative contribution was not assessed through the interpretation of its squared-partial coefficient (Meyers, Gamst, & Guarina, 2006; Tabachnick & Fidell, 2007). Furthermore, the effect size was also not estimated using Cohen's (1988) f^2 .

Tables 7 and 8 summarize the results from adolescent religiousness predicting religiousness in early adulthood. Consistent with the hypothesis, adolescent religiousness was able to predict religiousness in early adulthood. This finding suggests that religiousness in adolescence has an enduring, predictive quality beyond emerging adulthood and into early adulthood. The unique contribution of adolescent religiousness was assessed through the interpretation of its squared-partial coefficient (Meyers, Gamst, & Guarina, 2006; Tabachnick & Fidell, 2007) and was found to account for about 7% of the total explained variance. Tables 7 and 8 also summarize the results from religiousness in emerging adulthood predicting religiousness in early adulthood. Partially consistent with hypothesis 4, religiousness in emerging adulthood was able to predict religiousness in early adulthood only for participants who had their father provide religious data (Table 7). The unique contribution of religiousness in emerging adulthood from Table 7 was assessed through the interpretation of its squared-partial coefficient (Meyers, Gamst, & Guarina, 2006; Tabachnick & Fidell, 2007). The relative contribution reveals that approximately 4% of the overall variance explained by the model can be attributed to religiousness in emerging adulthood for participants whose father provided religious data. Since the relationship was not

significant for participants who had their mother provide religious data, the relative contribution was not assessed in that model (Table 8).

Chapter 4

DISCUSSION OF RESULTS AND CONCLUSIONS

The primary purpose of this study was to determine whether parental religiousness could predict adolescent religiousness across the transition to adulthood. This project used data from the Longitudinal Study of Adolescent Health, or Add Health, to answer this question. Data on religiousness from the parents of adolescent participants and data on religiousness from adolescents themselves were analyzed across three measurement points (Waves I, III, and IV) that spanned approximately 14 years. Parental data were only available for the initial data point (Wave I), while adolescent data were available across all three waves. Secondly, this project also purposed to determine whether parental relationship quality (RQ) could predict adolescent religiousness across time. Like parental religious data, parental RQ was only assessed during the Wave I time interval. The third purpose of this study was to examine whether the occurrence of a religious or spiritual experience that was self-reported as life changing could predict religiousness across time, specifically in emerging adulthood and early adulthood. Finally, this study purposed to determine whether prior religiousness could predict religiousness in the future.

Regarding the first purpose of this study, the hypotheses stated that parental religiousness would predict adolescent religiousness, religiousness in emerging adulthood, and religiousness in early adulthood. Regarding the study's second purpose, the hypothesis stated that parental RQ would predict adolescent

religiousness, religiousness in emerging adulthood and religiousness in early adulthood. The hypothesis for the study's third purpose was that the occurrence of a religious or spiritual experience that changed was life changing would predict religiousness in emerging adulthood and early adulthood. The final hypothesis was that one's own prior religiousness would predict later religiousness.

To test these four hypotheses, six hierarchical regression models were conducted using adolescents' religious data as the outcome and parental data from either their mother or father as predictors. Separate regression models were conducted for mothers and fathers across each time interval because study design parameters specified that only one parent per adolescent participant respond to the parent questionnaire. Therefore, mother and father data were unable to be analyzed simultaneously in conjunction with any given adolescent. Each regression model had three steps. The first step included demographic information about the adolescent such as biological sex and race. The items included in the second step varied depending on the outcome being predicted. In the two models predicting adolescent religiousness, the second step included the respondent's perception of their general health, whether they had children at the time, and whether they professed to be "born-again." In the two models predicting religiousness in emerging adulthood (Wave III), the second step included the respondent's perception of their general health, whether they had children at the time, whether they professed to be "born again," whether they had attended any college, whether they had had a religious or spiritual experience that changed their lives (hypothesis 3), and religiousness in adolescence (hypothesis 4). In

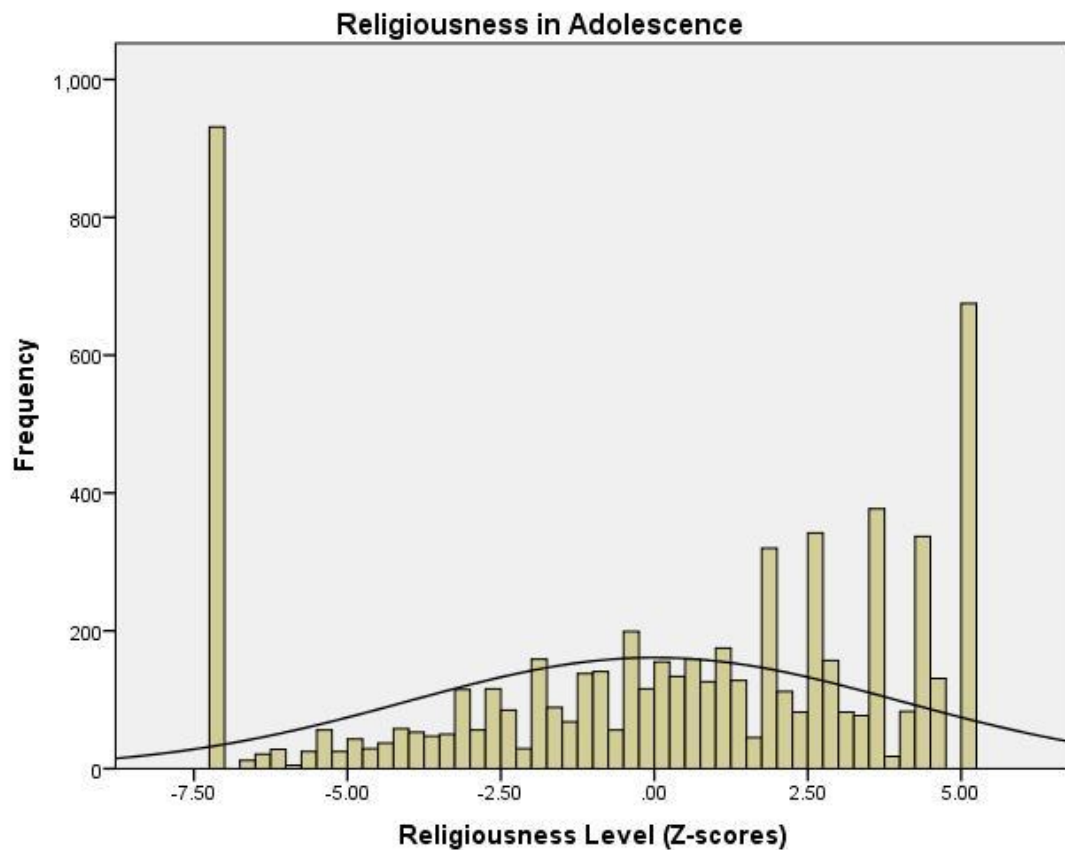
the two models predicting religiousness in early adulthood (Wave IV), the second step included the respondent's perception of their general health, whether they had children at the time, whether they had attended any college, whether they had had a religious or spiritual experience that changed their lives (hypothesis 3), and religiousness in adolescence and emerging adulthood (hypothesis 4). Born again professions were not available at Wave IV. The third step included parental religious and RQ data (hypotheses 1 and 2) that were obtained during Wave I of the Add Health study.

The following discussion has been arranged according to results from each wave rather than from each hypothesis. This was to done so that developmental patterns religiousness would be easily distinguishable across each time interval. Additionally, the three waves analyzed here align well with particular developmental periods, specifically adolescence, emerging adulthood, and early adulthood. Discussing the results from this study in the context of these periods carries both developmental significance and interpretive practicality.

Wave I: Religiousness in Adolescence

Figure 1 provides a histogram representation of religiousness in adolescence. Z-scores were used because of discrepancies in the scoring ranges of the items used to calculate adolescent religiousness. Descriptive statistics (Table 1) demonstrated the median z-score of adolescent religiousness was above the mean (.82). The histogram appears to show that adolescent religiousness is positively skewed with the extremes being heavily represented in the distribution. This would suggest that teenagers tend to

Figure 1
Religiousness in Adolescence



be either very religious or very unreligious in terms of behaviors and beliefs.

Furthermore, although unreligious teenagers had the highest frequency, it appears that teenagers in this sample were quite religious overall.

The main focus of this study was to assess the predictive relationship between parental religiousness and adolescent religiousness across time. Father's religiousness was able to predict adolescent religiousness, even after accounting for other explanatory variables such as race, gender, general health, and a personal profession of being "born again" (see Table 3). This finding suggests that fathers are influential models of religious values and behaviors to their children during adolescence. These

results also suggest that adolescents are highly impressionable regarding their understanding, adoption, and practice of religion and/or spirituality. If religion and spirituality are something parents, specifically fathers, want their children to value and practice, fathers should be aware that the quality of their own religiousness strongly influences their child's religiousness during adolescence.

The first hypothesis also stated that mother's religiousness would be able to predict adolescent religiousness. Results from this study supported this statement (see Table 4). The findings suggest that mothers are also influential models of religious values and behaviors to their children during adolescence. Additionally, the effect size of mother's religiousness on adolescent religiousness was quite large ($f^2 = .421$) and was larger than the effect of father's religiousness on adolescent religiousness ($f^2 = .32$). However, due to limitations in the data, comparisons of effect sizes of mother and father religiousness from the same family unit are not possible. Therefore, the degree to which mothers or fathers have a greater effect on adolescent religiousness is difficult to determine. Since mothers and fathers could not be analyzed within the same model across any of the developmental periods, their unique effect could not be statistically controlled for.

Relationship quality (RQ) with parents was hypothesized to be a significant predictor of religiousness during adolescence. Results from analyses of both father RQ and mother RQ supported the hypothesis. The statistical relationship between parental RQ and adolescent religiousness was significant for both parents. Furthermore, the effect size of mother's RQ ($f^2 = .023$) and father's RQ ($f^2 = .053$) would be considered

small according to the Cohen's (1988) effect size statistic. Additionally, because mother RQ and father RQ were analyzed separately, the extent to which mothers or fathers have the greater effect on adolescent religiousness is difficult to determine. Although the current analysis does not allow for determining which parent has the greater effect in terms of RQ predicting religiousness, both findings do support the notion that quality interactions, feelings of closeness, and effective communication between parents and adolescents are important factors that influence religious development in adolescence (Fowler, 1981, 1991). Furthermore, since God is commonly understood as an authority figure, it is possible that relationships with other authority figures (such as mothers and fathers) shape adolescent's understandings and perceptions of God and consequently, religiousness in adolescence.

Professing to be "born again" was another strong predictor of religiousness during adolescence and was second only to parental religiousness in terms of statistical prediction and effect size in both models. Born again professions are unique to the Christian faith so this finding is likely due to the Christian homogeneity of the sample. Thus, the findings here might suggest that a central component of religiousness among professing adolescent Christians is a personal born-again profession. This interpretation is consistent with Fowler's (1981, 1991) explanation of religious faith, specifically *individuative-reflective faith*. One of the distinguishing characteristics of *individuative-reflective faith* from *synthetic-conventional faith* is that individuals have made concrete and explicit assents into the many options and possibilities explored, reflected upon, and analyzed in the prior stage (Fowler, 1981,

1991). Indeed, a born-again profession could readily be characterized as a concrete and explicit assent. However, it is also possible that adolescents may still be primarily in the *synthetic-conventional* stage of religious faith. In this state, parents, family, places of worship, and peer groups are highly influential (Fowler, 1981, 1991). It is possible that adolescents have made personal, authentic born-again professions but their professions may also reflect a desire to not disappoint or alienate themselves from important relationships and institutions. In either case, the data here suggest that simply professing to be born again has a significant effect on whether you are religious or not in adolescence. This effect however is perhaps limited to adolescents who identify with a Christian faith as the majority of this sample did. Had the sample been more heterogeneous, it is likely that born-again professions would not have carried the same degree of significance.

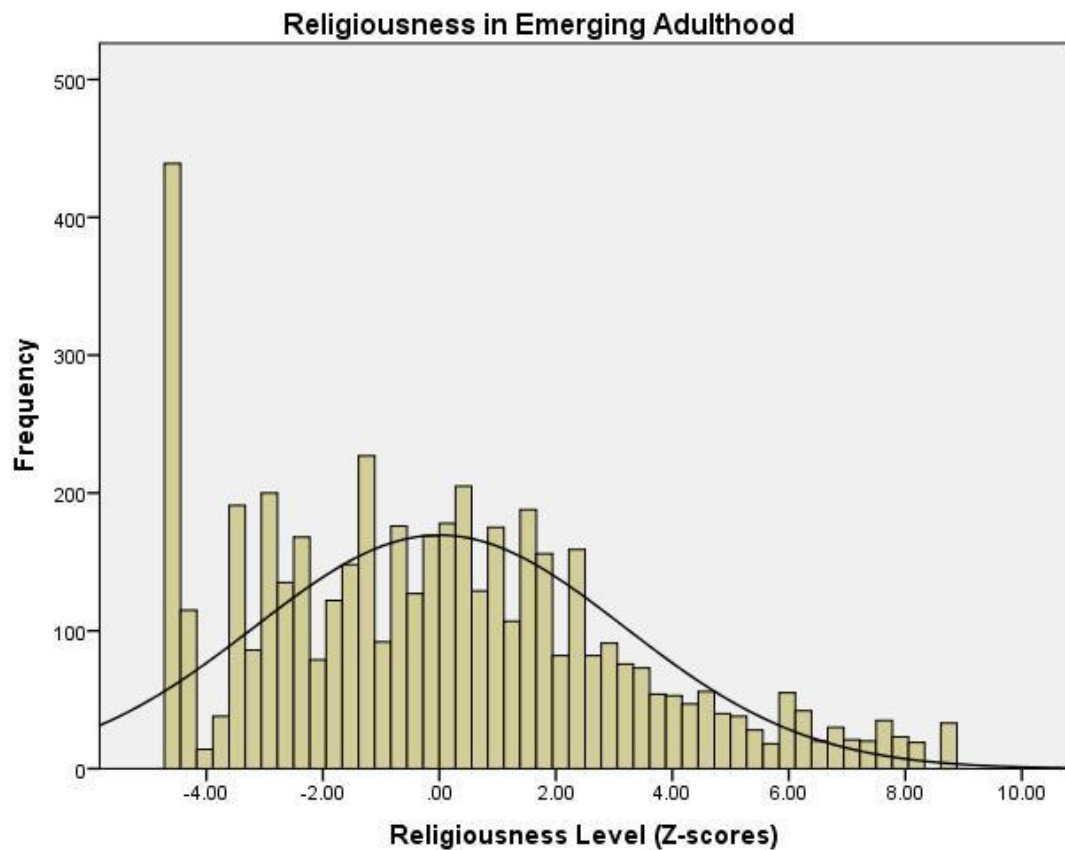
Other significant variables that emerged as predictors of religiousness during adolescence were: African American race (Table 3 &4), Asian and Hispanic race (Table 4), general health (Table 3 & 4), and being female (Table 4). These results are consistent with previous research showing that minorities, especially African Americans, are typically more religious than their White counterparts (Levin et al., 1994; Taylor et al., 1996; Taylor et al., 2007). Additionally, the finding that teenage girls are more religious than teenage boys supports previous research that has demonstrated that women typically are more religiously active than men (Sullins, 2006). Finally, this study found a positive statistical relationship between general health and religiousness during adolescence. This finding contributes to the existing

literature on health and religiousness, which has primarily focused on health-related outcomes related to religious participation (George et al., 2002). This study demonstrated that as general health improves, so does religiousness. A possible explanation for this finding is that since religiousness was a composite score of religious beliefs and behaviors, being healthy enough to participate or attend religious services and activities is needed to score high on religiousness. Furthermore, assuming that good general health means a lack of physical suffering, those who are generally healthy may be spared the agony of trying to reconcile their physical maladies with their religious beliefs. The findings here suggest that future research should continue investigate this relationship beyond the health-related benefits of religious participation to also include how good general health may be a prerequisite for religious involvement. Additionally, it is quite likely that the relationship between health and religiousness is reciprocal and any improvements in general health may positively influence religious participation and that increases in religious participation may result in health-related benefits.

Wave III: Religiousness in Emerging Adulthood

Figure 2 is a histogram representation of religiousness in emerging adulthood (Wave III). Again, z-scores were used because of discrepancies in scoring ranges in the items used to calculate religiousness in emerging adulthood. Descriptive statistics (Table 1) demonstrated the median z-score of religiousness in emerging

Figure 2
Religiousness in Emerging Adulthood



adulthood was below the mean (-.10). Figure 2 also shows that emerging adult's religiousness is negatively skewed with the negative extreme being disproportionately represented in the distribution. This is quite the contrast from religiousness during adolescence where both the positive and negative extremes were similarly represented and the overall distribution being positively skewed. The distribution of z-scores presented in Figure 2 suggests that religiousness in emerging adulthood is not exceptionally high or low but relatively average to slightly below average. Therefore, as adolescents transition into emerging adulthood they likely experience a transition in religiousness as well. While explicit comparisons between adolescent's and emerging

adult's religiousness should be done cautiously (since religiousness in this study was measured using z-scores relative to each time period), it does appear that emerging adulthood may facilitate transitions in religiousness given what was observed in adolescence. Other scholars have noted elsewhere that as youth transition into early adulthood, levels of religiousness may decline (Hayward & Krause, 2012; Petts, 2009). Reasons for this decline may be partially explained by the developmental processes underlying Fowler's fourth stage of FDT (Fowler, 1981, 1991). Recall that during stage 4 of FDT, Fowler argued that individuals go through a reflective process upon which they begin making explicit commitments (as opposed to tacit or inferred commitments) one way or another. Secondly, Fowler also stated that individuals in stage 4 begin to redefine their faith apart from the memberships and institutional affiliations that previously defined it (Fowler, 1981, 1991). This redefining process is reminiscent of Erikson's identity versus role confusion stage of ego development (Erikson, 1968). Here, as Erikson argues, is where individuals explore new identity possibilities, examine existing identity structures, and ultimately arrive at what they believe to be an authentic, genuine self. Erikson further describes this process as equipping the ego with the virtue of "fidelity", or the capacity to sustain loyalty to one's commitments (Markstrom-Adams, Hofstra, & Dougher, 1994). Marcia (1966) likewise argues that in order for true identity achievement to occur one must experience a crisis, or introspective examination, prior to making any commitment. Without experiencing a crisis, identity commitments are said to be in foreclosure (Marcia, 1966). When comparing Figures 1 and 2, it appears that as adolescents

transition into emerging adulthood they may also be experiencing a religious moratorium (Marcia, 1966). This religious moratorium, or religious identity exploration (Erikson, 1968), is when emerging adults reexamine their prior commitments made to religious institutions or belief systems and are instead reflecting upon the degree to which they want to continue to identify with them. Indeed previous research supports the notion that emerging adults may become skeptical of institutionalized religion (Arnett & Jenson, 2002) and behavioral declines in various aspects of religiousness are not unusual (Stoppa & Lefkowitz, 2010). The data here, however, pose challenges to accurately interpreting religious development apart from within the context of formal institutions. One may speculate that a part of the redefining process involves not only exploring new possibilities but also intentionally disengaging from past realities. Certain relationships, memberships, or affiliations that previously defined religious faith at stage 3 could potentially be barriers to faith maturing and transitioning into stage 4. Furthermore, if some emerging adults do choose to “disengage” from particular relationships, religious memberships, or affiliations they previously held, what are they replacing them with or what are they doing instead? The measurements used in this study assume that religiousness is partially predicated upon engagement with some sort of formal religious institution. However, circumstances such as moving away to attend college but continuing to listen to sermon podcasts online, getting involved with a religious student organization but not involved with a formal religious institution (church, synagogue, mosque, etc.) or taking a more solitary approach to religion and spirituality (meditation, readings or

mantras, walks in nature, etc.) may result in the appearance of religious decline when in fact religiousness has just taken on a different form. Future studies of religiousness, especially during emerging adulthood, should be careful to include other outlets of religious expression and participation beyond its institutionalized form to accommodate alternative methods of religious engagement.

Tables 5 and 6 displayed results from father's religiousness and mother's religiousness predicting religiousness during emerging adulthood, respectively. As noted earlier, the data did not support the first hypothesis. Father's and mother's religiousness were unable to predict religiousness in emerging adulthood. The second hypothesis was also not supported by the data because neither father's RQ nor mother's RQ was able to predict emerging adult's religiousness. Hypothesis 4, which stated that adolescent religiousness would predict religiousness in emerging adulthood, also failed to find support in the data. The finding that parental religiousness, parental RQ and adolescent religiousness could not predict religiousness in emerging adulthood is supported elsewhere in the literature. Previous research has found little relationship between childhood religious socialization and religious beliefs and participation as emerging adults (Arnett & Jenson, 2002). Assuming that emerging adults are in stage 4 of FDT (Fowler, 1981, 1991) and/or Erikson's identity versus role confusion stage (Erikson, 1968), the findings here support the faith and identity processes occurring during these stages of development, respectively. Emerging adults typically are searching for and exploring various identity constellations while also reflecting upon their prior identity commitments, like those to religious institutions

and belief systems. Previous research has demonstrated that while the importance of having religious beliefs may remain relatively constant (Stoppa & Lefkowitz, 2010), emerging adults are typically looking for more personalized forms of religious expression (Petts, 2009). Whether that means exploring other belief systems, visiting alternative places of worship, or ceasing religious activity all together, emerging adults are apparently looking for a highly individualized form of religious expression (Arnett & Jenson, 2002).

Contrary to the findings here, other research has found that parental religiosity (G1) during their child's (G2) teenage years was related to G2s religiosity in early adulthood (Spilman, Neppl, Donnellan, Schofield, & Conger, 2013). These discrepancies, however, are perhaps due to time of measurement effects related to collecting family-level data about religiousness. One data point is hardly sufficient to capture how consistently family-level religiousness manifests on a daily basis. Furthermore, as was the case in this study, parents and children are generally asked to report broad indicators of religiousness such as how often they attended religious services or activities in the past year and their level of agreement with a particular dogmatic statement. While this information is indeed useful, it lacks the depth and degree needed to determine how much religion is engrained and intertwined in the everyday life of the family. Previous research has found that youth who are raised in a family where they received a consistent religious message are more likely to delay any decline in religious involvement throughout adolescence and into early adulthood (Petts, 2009). Data that captures the long-term consistency and integration between

religious institutional life (i.e. attending services, participating in sanctioned activities or outings, etc.) and family life beyond retrospective accounts of attendance and general agreement with belief statements is scant in the literature. Perhaps more qualitatively focused investigations would be helpful moving forward because they have the potential to capture the lived experiences of religious and non-religious families as they pertain to religious involvement, belief, and commitment in their everyday lives.

The third hypothesis, as it related to religiousness in emerging adulthood, was supported by the data. Having a religious or spiritual experience that changed one's life was a significant predictor of religiousness in emerging adulthood. Descriptive statistics show that the average age of participants during Wave III was 21.82 and that this "experience" occurred somewhere between the ages of 15-16 (15.53 years), or six years prior. It is not possible to determine what the participants meant or were referencing regarding the religious or spiritual experience they had since those data were not available. Consequently, the interpretation of this finding is limited to the knowledge that participants *believed* that whatever event/experience did occur held religious or spiritual significance for them. Whether they were referring to a retreat or conference they attended, a conversation they had, a death in the family or perhaps a spiritual encounter remains uncertain. Future studies, which include specific foci on such a question, would benefit from more detailed follow-up questions beyond the age that the event/experience occurred. Examples of follow-up questions could include

asking them to identify the event/experience they are referencing and/or why they believe it to have spiritual or religious significance.

Other independent variables that surfaced as significant predictors of religiousness in emerging adulthood were born again professions (Tables 5 & 6), general health (Table 6), having children (Table 6), and attending college (Table 6). General health was a significant predictor of religiousness during adolescence and similar rationale could be applied here regarding why it was significant. Contrary to findings from adolescence, having children was a significant predictor of religiousness in emerging adulthood. Descriptive statistics (Table 1) show that 16.2% of respondents identified having a son or daughter on their household roster as emerging adults compared to only 1.4% as adolescents. Previous research has shown that both mothers and fathers may increase their religious involvement during the transition to parenthood (Petts, 2007; Petts, 2012). Palkovitz (2002) asserts that the transition to fatherhood often triggers men to “settle down.” This can include reducing risk, quitting a party lifestyle, and reconsidering religiousness. Specifically, transitioning to parenthood causes parents to focus on their core beliefs and values as they consider what they want to teach their children about many issues in life, including religiousness. Coupled with the increase in the percentage of respondents identifying having a son or daughter, these possible lifestyle changes could partially explain this finding.

A widely held opinion is that attending college will negatively influence religious beliefs and values because of exposure to more liberal ways of thinking

simultaneously coupled with a greater degree of freedom from parental monitoring. However, contrary to that popular opinion, the findings here suggest that attending college is positively related to religiousness in emerging adulthood. Previous research would also argue that college students are no more likely to develop liberal beliefs than non-students and that some college students are actually more likely to retain their initial religious beliefs (Mayrl & Uecker, 2011). Additionally, Hill (2011) found that graduating from college actually increases the preference for institutionalized religion. Perhaps it is because attending college does expose emerging adults to alternative ways of thinking (or believing) which facilitates identity exploration (Erikson, 1968) and individuation-reflective faith development (Fowler, 1981, 1991) processes that explains why a positive statistical relationship between college attendance and religiousness was found. An alternative interpretation may be that individuals who attend college become accustomed to the instructional discourse and relationship dynamics that characterize college and university campuses and therefore prefer a more organized/institutionalized approach to religious expression.

Other than having a religious or spiritual experience that changed one's life, "born again" professions were the only other significant predictor that emerged in both models of religiousness in emerging adulthood. Descriptive statistics (Table 1) show, however, a substantial drop in those professing to be "born again" from Wave I to Wave III (27.4% to 9.8%, respectively). Although not reported in the results section, a cross tabulation of "born again" professions during adolescence and "born again" professions in emerging adulthood revealed that only 163 of the 1784 (or 9%)

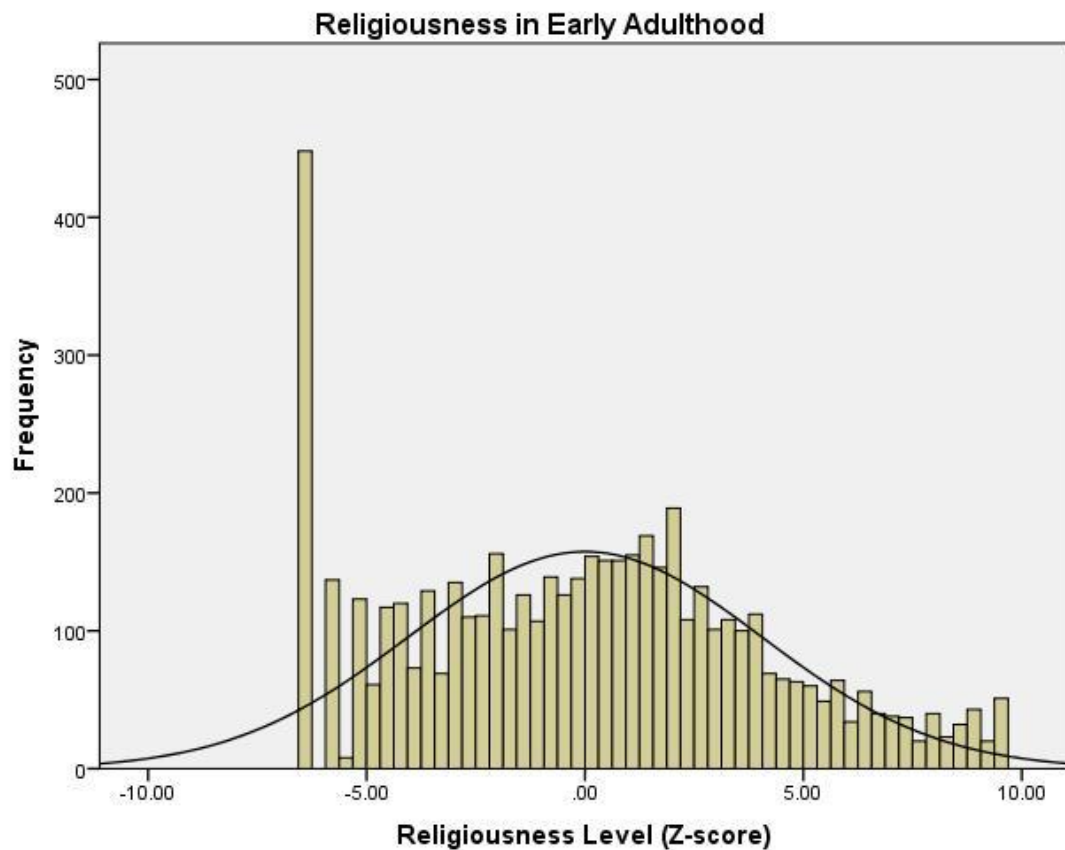
professing adolescents also professed to be “born again” as emerging adults. Additionally, of the 4720 adolescents who professed to *not* be “born again,” 474 (or 10%) professed to be “born again” as emerging adults. Despite the drastic overall decline between adolescence and emerging adulthood, “born again” professions still had a significant, albeit small effect on religiousness in emerging adulthood. The reasoning(s) behind the substantial decline and change in “born again” professions remains uncertain. Perhaps emerging adults who professed to be “born again” as adolescents wished to not have that label as a part of their developing identity and consequently their religiousness decreased. It could also be that although their earlier “born again” experience played a significant role in their identification with religiousness, following the personalization of religious identity and individuation from family and previous religious groups, “born again” status is less defining to more mature persons than their emerging engagement in religiousness. Additionally, those who professed to be “born again” as teenagers may have reflected on their previous profession, found it to be in vain, and changed their profession to avoid identity foreclosure. Alternatively, those who professed *not* be “born again” as adolescents but made that profession as emerging adults may have had some exposure to Christian teachings, attended Christian worship services, or met truly committed followers somewhere between adolescence and emerging adulthood and consequently made a “born again” profession. Perhaps the “spiritual or religious experience” was actually referring to the moment participants were “born again.” Indeed, although not reported in this study’s findings, “born again” professions in emerging adulthood and having a

religious or spiritual experience that changed one's life were significantly correlated ($r=.27$). While this relationship is not overwhelming, speculation about whether it applies to the 10% who professed to be "born again" in emerging adulthood (even more so the 7% who made the profession as emerging adults but not as adolescents) is an enticing possibility.

Wave IV: Religiousness in Early Adulthood

Figure 3 is a histogram representation of religiousness in early adulthood. Z-scores were once again used due to discrepancies in the scoring ranges of the items used to calculate the religiousness measure. Descriptive statistics (Table 1) demonstrated the median z-score of religiousness during early adulthood was slightly above the mean (.12). Figure 3 also shows that religiousness levels in early adulthood follow the normal curve closely except that the most negative extreme was the most frequent level, or mode, of religiousness. As noted earlier, comparisons between religiousness levels across time should be done cautiously. While it appears that religiousness levels in early adulthood are higher (or at least less negatively skewed) in comparison to emerging adulthood, any shifts or increases in religiousness are difficult to determine given how the data were coded. Yet, results from Wave IV analysis offer some insight into a possible religiousness "rebound" between emerging adulthood and early adulthood by examining the variables that were significant predictors of religiousness in early adulthood.

Figure 3
Religiousness in Early Adulthood



Tables 7 and 8 displayed results from father's religiousness and mother's religiousness predicting religiousness in early adulthood, respectively. Here, the data supported the first hypothesis, which stated that father's and mother's religiousness would be able to predict religiousness in early adulthood. These findings support the notion that the effect of parental religiousness extends *beyond* adolescence (see Tables 3 and 4) and into early adulthood. These findings are interesting given the absence of a significant effect for parental religiousness in emerging adulthood. Religiously active parents who want their children to adopt their religious beliefs and behaviors should

be encouraged by these results and look at the larger developmental picture. Although it appears that parents have no influence on whether their child is religiously active in emerging adulthood, the “exploratory” behaviors that emerging adults tend to exhibit are related to normative identity exploration (Erikson, 1968) and individuation-reflective faith development (Fowler, 1981, 1991) processes. Furthermore, the data here suggests the transition into early adulthood facilitates resurgence in the parental effect on religiousness. The Bible encourages parents in Proverbs 22:6 to “train up a child in the way he should go, and when he is old he will not depart from it” (New King James Translation). The results from this study suggest that once emerging adults have explored possible adult identities and grappled with issues of forming an authentic, personal faith they may ultimately return to the same point where they began; what their parents taught and modeled to them. Looking at the larger developmental picture explored here, the data suggest that adolescence may possibly be characterized as a period of religious-identity foreclosure, emerging adulthood as a period of religious-identity moratorium, and early adulthood as the time when people *arrive* at a state of religious-identity achievement. While individual differences may well exist, such as earlier religious-identity achievement or prolonged religious-identity moratorium, the results from this study suggest that religious-identity achievement can be thought of as an ongoing process that begins in adolescence (or perhaps earlier), undergoes a crisis in emerging adulthood and then ultimately comes to realization in early adulthood.

Another interesting finding from this analysis is the diminished effect of parental religiousness over time. Effect sizes for parental religiousness shrank between adolescence and early adulthood for father's religiousness ($f^2 = .320$ to $f^2 = .183$) and mother's religiousness ($f^2 = .421$ and $f^2 = .036$), respectively. However, while father's religiousness experienced a 42.81% decrease in effect, mother's religiousness experienced a 91.45% reduction in effect. The smaller reduction in effect for fathers is perhaps related to the findings from parental RQ and religiousness in early adulthood, which are discussed next.

Relationship quality (RQ) with parents was hypothesized to be a significant predictor of religiousness during early adulthood. Contrary to the hypothesis, only father RQ significantly predicted religiousness in early adulthood. It is important to reiterate at this point that the majority of this sample identified with a Christian faith (73.2% of early adults). Since the Christian faith describes and references God using male pronouns and titles such as "He" and "Father", it is possible that qualities, characteristics, and dynamics of the father-child relationship spill over into our understandings and perceptions of God as a "loving, heavenly father" (1 John 3:1, New King James Translation). Indeed the Bible gives special instruction to fathers to "not provoke your children to wrath (or anger), but bring them up in the training and admonition of the Lord" (Ephesians 6:4, New King James Translation). Interestingly, the Bible does not provide similar instruction to mothers. As discussed previously, the data here demonstrate that the effect of being exposed to a religiously active father diminishes less across time compared to the effect of having a religiously active

mother. Furthermore, father's RQ remained significant and effectual into early adulthood whereas mother's RQ did not. These findings, along with the special biblical instruction given to fathers (and not to mothers), may mean that fathers have a unique responsibility as religious models and authority, specifically within the Christian faith community. It is possible then, that as emerging adults transition into early adulthood, the *fatherly* quality of God may be considered in light of the tangible relationship they have had with their own father. The data here suggest that father RQ and religiousness (primarily in a Christian context) in early adulthood are positively related across time.

This study's third hypothesis stated that having a religious or spiritual experience that changed one's life would be a significant predictor of religiousness in early adulthood. This hypothesis was not supported by the data. Although this variable was significant in predicting religiousness in emerging adulthood, perhaps it is time-sensitive because on average this religious/spiritual experience occurred 14 years prior to Wave IV data being collected (see Table 1). Additionally, because data are not available to provide additional details about what respondents meant by a religious/spiritual experience, further explanation is not possible as to why this variable was no longer significant.

The study's fourth hypothesis was partially supported during early adulthood. Tables 7 and 8 display results of religiousness in adolescence and emerging adulthood predicting religiousness in early adulthood. Table 7 shows that religiousness in adolescence and emerging adulthood are significant predictors of religiousness in

early adulthood while Table 8 shows only religiousness in adolescence being statistically significant. These results suggest that prior religiousness is indicative of future religiousness, especially religiousness in adolescence. Again, the Bible offers a possible explanation regarding the longitudinal influence of prior religiousness on future religiousness. In 2 Timothy 3:14-15, Paul encourages his protégé Timothy to “continue in the things which you have learned and been assured of, knowing from whom you have learned *them*, and that from childhood you have known the Holy Scriptures, which are able to make you wise for salvation through faith which is in Christ Jesus.” (New King James Translation). The results from this study may be interpreted in light of the principles taught in these verses. Following a period of religious moratorium during emerging adulthood, early adulthood potentially ushers in a return to *the things which you have learned and been assured of...from childhood*. Additionally, Paul suggests that continuing in *the things you have learned* is facilitated by *knowing from whom you have learned them*. It is possible the “*whom*” in this verse refers to Paul since he was a spiritual role model to Timothy. However, a more appropriate application would be to Timothy’s grandmother Lois and mother Eunice. Previously in this letter, Paul reflected on how faith was first seen in them and now seen in Timothy (2 Timothy 1:5, New King James Translation). The fact that Paul mentions Lois and Eunice by name and goes on to encourage Timothy to *continue in the things which he has learned* (arguably from his mother and grandmother), further supports the notion that parents are influential figures in the development of personal

faith and that this influence is something that has long-term effects (Fowler, 1981, 1991).

Other significant predictors of religiousness in early adulthood were being female (Tables 7 & 8), having children (Tables 7 & 8), African American race (Table 7), having positive general health (Table 7) and attending college (Table 8). General health was a significant predictor of religiousness across all three periods and similar rationale could be applied here regarding why it continues to be significant. Similar to the findings from emerging adulthood, having children was a significant predictor of religiousness in early adulthood. Descriptive statistics (Table 1) show that by early adulthood 36.4% of respondents identified having a son or daughter on their household roster. Citing previous research that has shown that both mothers and fathers may increase their religious involvement during the transition to parenthood (Palkovitz, 2002; Petts, 2007; Petts, 2012) this finding is consistent with other findings regarding religiousness and parenthood. Once again results are consistent with previous research showing that minorities, especially African Americans, typically are more religious than their White counterparts (Levin et al., 1994; Taylor et al., 1996; Taylor et al., 2007). Additionally, the results support the notion that women typically are more religious than men (Sullins, 2006). General health also resurfaced as a significant predictor of religiousness in early adulthood. As discussed earlier, this finding contributes to the existing literature on health and religiousness, which has primarily focused on health-related outcomes from religious participation (George et al., 2002). The data here show that as general health improves, so does religiousness in

early adulthood. The ability to score high on religiousness is influenced by the ability to attend services and religious activities. Perhaps taken for granted is the general health of individuals when considering their religious attendance and participation. Also, assuming that good general health means a lack of physical suffering, young adults who are generally healthy may not be questioning their religious beliefs in light any health problems they are experiencing. Future research should investigate the relationship between health and religiousness beyond the unidirectional effects of religion on health to consider how good health may be a prerequisite to being religiously active.

Study Limitations

Although this study provides important and substantive insights into longitudinal patterns of religious development beginning in adolescence and extending into early adulthood, the findings here should be interpreted with caution given its' limitations. First, this study utilized secondary data and was therefore limited to the information gathered by the original researchers. Several measures used in this study would have been strengthened if more details were available or follow-up questioning had occurred in the original study. For example, the third hypotheses was restricted to assessing the predictive power of a broad statement concerning an experience of something religious or spiritual in nature that changed your life. It would have been beneficial to this analysis had there been further details regarding the type of religious or spiritual experience that occurred, where it happened, in what context it occurred,

whether it had a negative or positive influence on their development or why the respondent believed it to be a religious or spiritual experience as opposed to coincidence or serendipity. Future studies that choose to include such a measure should consider follow-up questions to clarify the context, meaning, and impact of these religious and spiritual experiences.

Secondly, the ability to separate the religious or spiritual components of the religiousness construct from other components like social support is difficult, if not impossible. Did people report attending religious services primarily because they believe the God they worship is present and active in the service or because they feel that by attending religious services they are connected to a community of supportive peers? Did people believe religion is important because it provides them sense of meaning or connection with God that transcends reality or because without religion they would be disconnected from a valuable social support system? In essence, for those who scored high (or low) on religiousness, why did they score high or low? These questions cannot be accurately answered given the available data. The argument could be made that people who scored high on religiousness did so not because of the religious or spiritual qualities of the religion but because of the social capital and support that religious congregations provide. If that is the case, then membership or affiliation with religious institutions is no different than joining a country club or fraternity. Future studies, especially longitudinal studies of religiousness, should collect information about levels of religiousness (such as attending services and prayer) as well as information regarding why people are (or are not) religious. This

would enrich our understandings about underlying motives for religious involvement or why people choose not to participate or identify with a religious faith.

Another major limitation related to using Add Health data is the disparity of information regarding father's religiousness compared to mother's religiousness. The parental survey was administered to only one parent, and the majority of respondents were the adolescent's mother. Therefore, the influence of parental religiousness was limited to either mother-adolescent or father-adolescent within any given family. The ability to compare mothers and fathers of the same adolescent would better clarify the unique parental influences on religious development across adolescence, emerging adulthood, and early adulthood. Furthermore, the small sample of fathers resulted in the inability to analyze specific parent-child dyads because of power issues. The a priori power analysis recommended a minimum of 127 cases to analyze a regression model with 12 predictors. By Wave IV, only 129 cases remained where study participants' father provided religious data. Splitting the subsample of father-child pairs into father-son or father-daughter dyads would have resulted in a loss of statistical power.

Statistical power also resulted in the exclusion of other relevant variables. Variables such as co-residence with parents and child gender (e.g. emerging adults giving birth to a daughter) were not explored in this study. Primary consideration was given to variables that were relevant the research questions and to applying Fowler's (1981, 1991) FDT. Additionally, given the results from the a priori power analysis, a maximum of 12 predictors could be used to be sensitive to the power parameters

outlined earlier. Therefore, important questions such as how co-residence with parents may affect religiousness or how the transition to parenthood may have different effects on religiousness depending on the parent-child dyad were not be addressed in the current study.

There are important time of measurement effects that need to be mentioned regarding Add Health data. As stated earlier, Wave III data were collected during 2001-2002 and Wave IV in 2008-2009. Noteworthy historical events that occurred during these years were the terrorist attacks on 9/11 and the housing market crash of 2007/2008, respectively. A Barna Group survey (2013) indicated that 40% of American adults believed that the 9/11 attacks made people turn back to God. However, the majority of those who held that opinion were Born-Again Christians. Other research regarding the religious and spiritual aftermath of the 9/11 attacks suggest that the attacks did little to change the patterns of religiousness in young adults (Uecker, 2008). Using Add Health data, Uecker (2008) studied the religious and spiritual responses to 9/11 by comparing adolescents surveyed prior to 9/11 and those following 9/11 during Wave III data collection. Uecker found that although there were modest effects of 9/11 on young adults' religious and spiritual outcomes, the effects were short lived and did not result in what many believed to be a religious "revival" following 9/11, specifically for young people. Additionally, since Add Health researchers asked participants to provide answers based on the previous 12 months, any "resurgence" that took place immediately following 9/11 may be diluted from such a long time frame. Other Barna polls taken shortly after the 9/11 attacks support

Uecker's (2008) findings and suggest that the increase in religious attendance following 9/11 were not statistically different from the previous November and were more likely an artifact of typical seasonal increases in service attendance during religious holidays (Barna Group, 2001). To my knowledge, research on the effects of the housing crash of 2008 on religiousness is unavailable. Recent research has found that young adults who viewed the 2008 recession as punishment from God had greater depressed moods and less life satisfaction (Stein, Hoffmann, Bonar, Leith, Abraham, Hamill, Kraus, Gumber, & Fago, 2012). This offers insight as to how young people interpret stressful life events such as the recession in the context of religion, not how the recession influenced religiousness or religious involvement. The Pew Forum on Religion and Public Life (2012) conducted a study of the religious landscape of the U.S. around the time of the 2008 housing crash and found that twice as many people (16.1%) report no religious affiliation compared to when they were children. Whether this disaffiliation with formal religious institutions is directly related to the 2008 housing crash is uncertain.

Another limitation that should be noted is that it has been 20 years since Add Health Wave I data were collected. The cohort followed by Add Health researchers since 1994 represent the tail end of Generation "X" (those born prior to 1980). Although the data support several findings from other research studies, the applicability of the findings specifically to Millennials (those born after 1980) may be difficult. Millennials are developing within a complex and rapidly changing religious climate where the institution of religion is under intense scrutiny. Furthermore, as

more and more Americans self-identify as non-religiously affiliated or non-religious (U.S. Census, 2012; Pew Research Center, 2012), researchers may be studying a small portion of the population who still view religion and faith as central to their lives and the lives of their family. However, some have interpreted the “non-religious” or “non-affiliated” trend as a reflection of heightened standards for commitment rather than a lack of interest in religious faith (Lane, 2015). We’ve seen these attitudes appear in regards to other social institutions, most notably marriage. The rising levels of cohabitation reflect a growing perception that marriage is a “super relationship” that a couple must slowly progress towards before making such a deep level of commitment (Cherlin, 2004). This argument has been applied to Millennials who would rather not commit to *any* religious faith than to potentially under-commit and sully their pursuit of religious authenticity or perfection (Lane, 2015). The other side of the argument, interestingly, is although Millennials may have heightened standards for commitment (in marriage, religion or otherwise), “recommitment” to religious institutions is seen as the better option when compared to committing with uncertainty (Lane, 2015). These complex commitment frameworks further highlight the need for future research, especially on Millennials, to investigate not only *degrees* of religiousness but *reasons* for religiousness.

The data used in this study came from those who were adolescents in grades 7-12 in the U.S. during the 1994-1995 school year (Harris et al., 2009). Application beyond that specific cohort should be done cautiously, in light of the limitations considered previously. The degree to which the results found here can extend to other

global contexts such as Europe, Asia or the Middle East is unknown. What we do know is that Add Health has assured its users that the data, including those analyzed in this study, are nationally representative of adolescents in U.S. during 1994-1995 school year (Harris et al., 2009). Claims applied to those outside that specified cohort may have external validity threats and should be stated with caution.

Finally, the interpretation of the data throughout this paper using Fowler's (1981, 1991) FDT should be considered in light of the criticisms mentioned earlier. One of the most influential sources of Fowler's theory of faith development was Lawrence Kohlberg. Kohlberg's (1968) theory of moral development has been criticized as not representing universal patterns of moral thinking but rather *men's* patterns of moral thinking. Gilligan (1977) offered a feminist critique of Kohlberg's theory by providing narratives of women's conceptions of self and morality and how these conceptions differed from Kohlberg's male-centric ideas. Had Fowler considered Gilligan's (1977) critique of Kohlberg, it is possible that his own theory would reflect differential patterns in men and women's thinking pertaining to religious faith. Furthermore, had Fowler's theory reflected the differential patterns in thinking articulated by Gilligan, the conclusions drawn throughout this paper would likely reflect those patterns as well.

Concluding Thoughts and Future Directions

This study provides insight into the developmental patterns of religiousness beginning in adolescence and extending into early adulthood. Specifically, this study

demonstrated the important role parents play in shaping these patterns. The results from this study suggest that the effect of having religiously active parents in adolescence is an important indicator of whether you will be religiously active as an adolescent and in early adulthood. Indeed, previous research investigating the religious and spiritual lives of adolescents supports the notion that “the single most important social influence on the religious and spiritual lives of adolescents is their parents” (Smith & Denton, 2005, p. 261). Additionally, results from this study suggest that fathers may have heightened responsibilities when serving as religious models, particularly within the Christian faith, which portrays God as a “heavenly father.” The long-term influence of parental religiousness and relationship quality should challenge current parents of adolescents to assess their religious impact and investments in light of the bigger developmental picture. The finding that parental religiousness and relationship quality had not effect on emerging adults’ religiousness could leave parents discouraged. However, these finding could be interpreted as indicative of normative identity exploration in emerging adulthood, specifically religious identity exploration (Erikson, 1968). The religious moratorium is normative in the sense that it’s occurring in the context of typical identity exploration. However, following the exploratory period of emerging adulthood, the best indicators that youth will be religiously active in early adulthood is whether or not they were religiously active in adolescence and whether they were raised by religiously active parents, especially fathers, with whom they have a quality relationship.

Due to the use of z-scores in the measurements of religiousness in adolescence, emerging adulthood and early adulthood, comparing levels of religiousness across these developmental periods is difficult. While changes or shifts in religiousness across time may not be discernable given how religiousness was coded, what we can discern are changes in what *predicts* religiousness across time. During adolescence, interpersonal variables such as parental religiousness and relationship quality were highly predictive of whether adolescents were religiously active. However, in emerging adulthood, more intra-personal variables such as “born again” professions and having a religious/spiritual experience that was life changing were predictive of whether someone was religiously active or not. Religiousness in early adulthood was partially explained by a mixture of intra- and inter-personal variables. Parental religiousness and relationship quality (interpersonal) were once again predictive of religiousness in early adulthood. Prior religiousness (intrapersonal), especially in adolescence, also significantly predicted religiousness in early adulthood. The ebb and flow of these predictors across the 15 years studied here arguably provides support for Fowler’s (1981, 1991) FDT. Stage 3 of FDT, or synthetic-conventional faith, is largely defined by the one’s memberships and relationships (Fowler, 1981, 1991). Stage 4 of FDT, or individuated-reflective faith, maintains that the memberships and relationships of stage 3 are still important towards defining one’s faith yet at stage 4 the final authority resides in the self (Fowler, 1981, 1991). Given this theoretical explanation of how faith develops, the data here could be interpreted as a manifestation of synthetic-conventional faith in adolescence, a transition between synthetic-conventional faith

and individuative-reflective faith in emerging adulthood, and possibly arriving at the stage of individuative reflective faith in early adulthood. Again, this interpretation says nothing about observable or measurable *levels* of religiousness across time but rather what *defines* or *predicts* religiousness across these three developmental periods.

Continuing in the vein of *what predicts* or *what defines* religiousness, future research should carefully consider more nuanced approaches to studying religious development. Several interesting questions surface throughout this study, including “what particular aspects of parental religiousness predict religiousness in adolescence?” and “what specific components of religiousness in adolescence predict religiousness in early adulthood?” While these questions are related to the variables studied here and would offer a different degree of precision towards predicting religiousness across time, they were consequently excluded from the analysis given the proposed research questions and hypotheses. Future work should investigate how various constellations of religious variables, single characteristics such as prayer or service attendance, and the personal meanings and motives underlying these elements influence and shape how religiousness does or does not develop over time.

While the primary purpose of this paper was to discuss how religious faith develops across adolescence and early adulthood, religious faith and involvement should also be discussed in light of their practical applications. Religious institutions and faith-based organizations are ideal contexts for the promotion of PYD, specifically the five “Cs” of PYD: Competence, Connection, Character, Confidence, and Caring (Lerner, Fisher, & Weinberg, 2000). It has been suggested that these five principles

prepare young people to be active participants in civil society and to eventually raise the next generation of civil servants (Lerner et al., 2000). Religious institutions and faith-based organizations provide young people opportunities for the formation of intergenerational bonds, collective activity in the community and corporate worship and service. The meaning and purpose religion provides, coupled with opportunities to engage in the community, suggests that religious institutions and faith-based organizations are positive contexts for promoting PYD as youth prepare to move towards adulthood. As a society who invests a great deal of resources in young people and their well-being, religious institutions and faith-based organizations should not be overlooked as a potential sources or wellsprings promoting positive youth development.

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Appendix A

IRB EXEMPT LETTER



RESEARCH OFFICE

210 Hullihen Hall
University of Delaware
Newark, Delaware 19716-1551
Ph: 302/831-2136
Fax: 302/831-2828

DATE: October 22, 2014

TO: James Hull
FROM: University of Delaware IRB

STUDY TITLE: [614423-1] Religious development from adolescence to early adulthood: The effects of parental religiousness and relationship quality

SUBMISSION TYPE: New Project

ACTION: DETERMINATION OF EXEMPT STATUS
DECISION DATE: October 22, 2014

REVIEW CATEGORY: Exemption category # (4)

Thank you for your submission of New Project materials for this research study. The University of Delaware IRB has determined this project is EXEMPT FROM IRB REVIEW according to federal regulations.

We will put a copy of this correspondence on file in our office. Please remember to notify us if you make any substantial changes to the project.

If you have any questions, please contact Nicole Farnese-McFarlane at (302) 831-1119 or nicolefm@udel.edu. Please include your study title and reference number in all correspondence with this office.