

RELIGIOSITY FROM CHILDHOOD TO EMERGING ADULTHOOD: FAMILY
INDICATORS AND THE OUTCOME OF SOCIOPOLITICAL
DEVELOPMENT

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DISSERTATION ABSTRACT

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Title: Religiosity from Childhood to Emerging Adulthood: Family Indicators and the Outcome of Sociopolitical Development

Identity development is a primary task of human development that begins in childhood and continues through emerging adulthood. Relative to racial, ethnic, sexual orientation, social class, and gender identity development, there has been less attention to religious and spiritual identity development. Positive correlates and outcomes associated with religious and spiritual identity for both youth and emerging adults include closer family ties and relationships, as well as effective coping strategies for overcoming emotional and interpersonal stressors. For marginalized youth, in particular, religious and spiritual identity serves as a protective factor in coping against racial discrimination.

Sociopolitical development is another developmental process that can serve as a protective factor for marginalized youth and promote civic engagement for non-marginalized youth. Fostering sociopolitical development can assist youth in recognizing the negative impact of structural inequalities and how systemic barriers constrain well-being and personal agency. Scholars have hypothesized that sociopolitical development can be fostered through mechanisms of religious and spiritual identity, but this has not yet been empirically tested. The present study examined this possible relationship, as well

as other possible factors that may impact global religiosity and religious and spiritual identity.

I used an existing data set from Project Alliance 2 (PAL-2), a large-scale, longitudinal study. Participants for the current study ($n = 415$) are a subsample of the 593 families who participated in the Family Check-Up (FCU), a school-based intervention targeting substance-use prevention; both the intervention and control groups were used in the present study. I performed 12 path models to examine the stability of global religiosity over time, the possible relationship between family indicators and global religiosity, as well as the possible relationship between religiosity and sociopolitical development in emerging adulthood. Findings suggest that global religiosity is stable over time, positive family relationships as a family indicator is not associated with global religiosity or religious and spiritual identity, childhood parental monitoring as a family indicator shares a negative relationship with adolescent global religiosity, and adolescent global religiosity is positively associated with emerging adult sociopolitical development.

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CHAPTER I

INTRODUCTION

Identity development is a central task of the human developmental process and contributes to psychosocial adjustment and healthy maturation (Erikson, 1968). Identity refers to subjective understandings of self that aid in guiding life choices and decisions. Construction of identity begins in childhood and continues through adolescence, with recent literature suggesting that identity development continues through emerging adulthood (Arnett, 2000; 2004; 2007). Expectations in the U.S. for successful identity development include the ability to transition to secondary school, learn the academic tasks required for college and/or work, form close friendships and romantic relationships, participate in extracurricular activities, develop a sense of personal religious and/or spiritual salience, and form a unified identity (Erikson, 1964; Masten & Coatsworth, 1998). Group memberships, social ties, and a network of social relationships are catalysts for the development of individual behavioral expectations that, in turn, serve a vital role in the establishment of a unified identity (Burke & Reitzes, 1981; Tajfel & Turner, 1979). Identity development is an ongoing early developmental task that has important implications for personal well-being throughout the lifespan.

Central to current identity development research is a focus on cognitive, emotional, and social development (Erikson, 1968). Within these areas of development, scholars have focused on racial, ethnic, sexual orientation, social class, and gender identity development (Calzo, Antonucci, Mays, & Cochran, 2011; DeCuir-Gunby, 2009; Douglass & Umaña-Taylor, 2016; Juang & Syed, 2010; Neville & Mobley, 2001; Steensma, Kreukels, De Vries, & Cohen-Kettenis, 2013; Thomas & Azmitia, 2014). One

important domain that is sometimes excluded from consideration in this body of research is religious and spiritual development. Roehlkepartain, Benson, King, and Wagener (2006) suggest that religious and spiritual development is as important to identity development as racial, ethnic, sexual orientation, social class, and gender domains. Furthermore, social science researchers have documented the need for greater attention to scholarship in the area of religious and spiritual identity development (Davie, 2003; Paloutzian, 1996; Roehlkepartain et al., 2006; Weaver et al., 1998; Weaver et al., 2000). In the last two decades, developmental literature has been lacking in its attention to religious and spiritual development specifically for children and adolescents (Bridges & Moore, 2002; Donelson, 1999; Kerestes & Youniss, 2003; Roehlkepartain et al., 2006). Considering the integral nature of religion and spirituality on human experience, further investigation of how religious and spiritual identity impacts development is warranted (Roehlkepartain et al., 2006). A major aim of the present study is to examine the contributions of global religiosity in childhood and adolescence to emerging adult religious and spiritual identity.

The majority of both youth and emerging U.S. adults affiliate with some religious or spiritual identity (Denton, Pearce, & Smith, 2008; Pew Research Center, 2015). While the majority of youth (83%) do affiliate with a religious identity, Denton and colleagues (2008) found in a three-year longitudinal examination that public participation in religious practices, specifically, declined as an adolescent aged into emerging adulthood. Additionally, Denton and colleagues found that as adolescents aged into emerging adulthood, they increasingly identified as spiritual relative to an institutionalized religious identity. The Pew Research Center (2015) found in a survey of emerging adults that over

half of individuals surveyed (64%) affiliated with a religious identity. Specific to spiritual well-being, the Pew Research Center (2015) found that half (50%) of emerging adults that they surveyed cited feeling a sense of spiritual well-being at least once a week, even if they did not identify with a religious identity (37%).

Connection to a religious and/or spiritual identity has been found to have a host of positive correlates and outcomes not only in childhood and adolescence, but in emerging adulthood as well. For example, identifying as religious or spiritual is associated with school success, positive educational outcomes, personal life meaning, pro-social tendencies, effective coping strategies, higher levels of self-control, and lower levels of rule-breaking and risky behavior in childhood and adolescence (Chavous et al., 2003; Furrow, King, & White, 2004; Regnerus, 2000; Hill & Hood, 1999; Kasen, Wickramaratne, Gameroff, & Weissman, 2012; Laird, Marks, & Marrero, 2011; Marsiglia, Kulis, Nieri, & Parsai, 2005; Muller & Ellison, 2001; Smith & Denton, 2005). For marginalized youth, in particular, religious beliefs and practices serve as a protective factor and aid in coping with racial discrimination (Cole, 1990; Grant et al., 2000; McCubbin, Thompson, Thompson, & Futrell, 1998; O' Donnell, O' Donnell, Wardlaw, & Stueve, 2004; Spencer, Fegley, & Harpalani, 2003). Religious and spiritual identity continues to serve as an asset in emerging adulthood and is associated with lower levels of risky behavior, positive mental health, effective behavioral coping, higher academic achievement, more confident career decision making, and overcoming adversity (Cotton, Zebracki, Rosenthal, Tsevat, & Drotar, 2006; Duffy & Blustein, 2005; Edwards, Fehring, Jarrett, & Haglund, 2008; Farley, Galves, Dickenson, & Perez, 2005; Johnson, Sheets, & Kristeller, 2008; Turner-Musa & Lipscomb, 2007; Wells, 2010; Wong, Rew, & Slaikeu,

2006). Current research suggests that religious and spiritual identities are connected to a variety of positive outcomes for children, adolescents, and emerging adults alike. In light of these findings, I expect to find in the present study a significant positive relationship between child/adolescent report of global religiosity and emerging adult report of religious and spiritual identity. It is important to note that the present study provides a snapshot of religious and spiritual identity, rather than an expansive examination of a much larger, conceptually complex, and historical literature on religion and spirituality. Next, I discuss the importance of family relationships in the development of a religious/spiritual identity, in order to better highlight the factors critical in religious/spiritual development.

Family relationships, in particular, impact the development of religious and spiritual identity, with extant research suggesting that the presence of shared religious and spiritual identities among family members encourages closer familial ties (Day et al., 2009; Kelley, Athan, & Miller, 2007; Martin, White, & Perlman, 2003; Regnerus & Burdette, 2006; Smith, 2005). Another valuable asset in conjunction with religious and spiritual identity for adolescents in the transition into emerging adulthood is quality of family relationships (Burt & Paysnick, 2012; Parra, Olivia, & del Carmen Reina, 2015). The quality of family relationships refers to the degree to which family members have fun together, experience a sense of togetherness, and back each other up. It seems that positive family relations play a substantial role in not only religious and spiritual identity development in adolescence, but also identity achievement in emerging adulthood. In light of these findings, I expect to find in the present study that individuals with reports of more positive family relationships in childhood and adolescence will have higher levels

of global religiosity in youth, and a stronger religious and spiritual identity in emerging adulthood.

Similar to religious and spiritual identity, sociopolitical development can also serve as a protective factor for marginalized youth (Cabrera, Milem, Jaquette, & Marx, 2014; Diemer, 2009; Diemer et al., 2010; McWhirter & McWhirter, 2016; Olle & Fouad, 2015). Sociopolitical development can be defined as a developmental process that emphasizes the importance of cultural and political forces in shaping one's status in society and fosters one's ability to envision and help create a just society (Watts & Flanagan, 2007). A small but growing body of research suggests that fostering sociopolitical development among marginalized youth helps to mitigate the deleterious impact of structural inequalities related to poor educational, occupational, and health outcomes (Cabrera, Milem, Jaquette, & Marx, 2014; Diemer, 2009; Diemer et al., 2010; McWhirter & McWhirter, 2016; Olle & Fouad, 2015). For non-marginalized youth, fostering sociopolitical development has been shown to promote civic engagement, which plays a critical role in confronting unjust systems and advancing positive community development (Flanagan, Cumsille, Gill, & Gallay, 2007; Flanagan, Syvertsen, Gill, Gallay, & Cumsille, 2009; Godfrey & Grayman, 2014). The process of sociopolitical development is manifested via three components: critical reflection, political self-efficacy, and critical action (Watts, Williams, & Jagers, 2003). These three components involve not only the ability to analyze inequity in society, but also act in order to mitigate the consequences of inequity for individuals. Next, I discuss the intersection between sociopolitical development and religious/spiritual identity in order to provide the foundation for a major aim of the present study.

Religious and spiritual identity is sometimes synergistic with the construct of sociopolitical development (Watts, Griffith, & Abdul-Adil, 1999). While sociopolitical development is largely viewed as an individual dialectic process, U.S. group-based social movements that have addressed injustice have historically relied upon religious and spiritual belief systems in order to promote sociopolitical development (Watts et al. 1999). There may also be a 'higher purpose' for liberation behavior that is supported by various religious and spiritual practices. Another connection between religious and spiritual identity and sociopolitical development can be seen in an examination of the major western religions' focus on various social issues, such as poverty (Potter, 1996). A growing body of research has found several factors that foster sociopolitical development, but none of these studies have empirically examined the possible role of religious and spiritual identity as one of those factors (Diemer, Hsieh, & Pan, 2009; Quintana & Segura-Herrera, 2003; Watts et al., 1999; Watts et al., 2003). Watts and colleagues (2003) theoretically suggest that religious and spiritual identity may be closely tied to and may even influence sociopolitical development. As such, a major aim of the proposed study is to empirically examine whether global religiosity in childhood and adolescence is associated with sociopolitical development in emerging adulthood.

In this chapter, I begin by describing two theoretical frameworks for the present study, the ecological model of human development, and sociocultural theory, and how these theoretical frameworks are relevant to the present study. Next, I briefly review the process of identity development from childhood, through adolescence, and into emerging adulthood. Then, I highlight the importance of religious and spiritual identity in the developmental process. Additionally, I focus on the importance of family in the

development of religious and spiritual identities. Next, I define and describe the process of sociopolitical development and the factors that influence its development, including the role of the family. I then highlight the intersections between sociopolitical development and religious and spiritual identity. Finally, I summarize this literature and highlight several gaps in current understanding of both religious and spiritual identity and sociopolitical development. The literature review closes with a description of research questions and hypotheses for the present study.

Theoretical Frameworks

Bronfenbrenner's ecological model of human development. Dynamic, bi-directional, and embedded interactions exist between an individual and various social contexts that have an impact on identity formation, social development, beliefs, and values (Bronfenbrenner, 1979; 1989). Particularly relevant to the present study is Bronfenbrenner's (1979) assertion that child and adolescent development occurs within these interacting ecological systems. This model of human development serves as one of the frameworks for the present study. The ecological model allows for a complex understanding of the contexts of an individual, as well as an individual's active participation in creating these contexts (Bronfenbrenner, 1979). Furthermore, the ecological model highlights the significance of family microsystems in child and adolescent development. Family microsystems in childhood and adolescence provide scaffolding for later emerging adult identity development. Examples of these microsystems include individual factors (e.g. identity) and social relationships (e.g. parent-child relationships). These ecological systems occur within a bi-directional interplay that impacts human development and experience (Bronfenbrenner, 1989). As

such, the ecological model of human development provides a general framework for understanding how an individual's personal, social, and cultural contexts interact to impact identity formation, social development, beliefs, and values. Given the role of the family in identity formation, an aim of the present study is to account for the potential influence of positive family relationships on the development of religious and spiritual identity in emerging adulthood. Next, I describe Vygotsky's (1978) sociocultural theory in order to illuminate further the ways in which the parent/child relationship is important for human development.

Vygotsky's sociocultural theory. Social interaction is foundational in the development of cognition, or the way we come to understand the world (Vygotsky, 1978). Sociocultural theory provides an important support to Bronfenbrenner's (1989) ecological model in the context of the present study. Sociocultural theory highlights the ways in which parent identities and values are connected to youth identities and values. This theory emphasizes the significant role of parents, or caregivers, as transmitters of particular values, beliefs, and adaptive behaviors. Additionally, sociocultural theory highlights the importance of community in the process of meaning making for children. Vygotsky (1978) focuses on how learning is a social process that occurs through interactions, such as conversations, with influential adults. Vygotsky (1978) suggests that during conversation with youth, parents and influential adults transmit values, beliefs, and behaviors through an "apprenticeship" in thinking. An important facet of this "apprenticeship" is that the conversation is collaborative, active, and equal in engagement for both the youth and the parent, or influential adult. Through conversation, the influential adult is able to promote different types of social rules and behaviors related to

both morality and social conventions (Smetana, 2000). During this process, the parent or influential adult transfers the preferred social message to the child, which in turn impacts the child's identities and values (Smetana, 2000). According to Vygotsky's (1978) sociocultural theory, parents/caregivers play a significant role in influencing their child's values, beliefs, and adaptive behaviors. An aim of the present study is to empirically test whether positive family relationships influence religious/spiritual identity in emerging adulthood. In the next section, I review research to date on identity development to add to the theoretical foundation for the proposed study.

Identity Development

Construction of identity is one of the central tasks of adolescent development (Erikson, 1968). A realized sense of identity is comprised of subjective understandings of self that aid in guiding life choices and decisions. Adolescents, specifically, struggle with questions of identity and fidelity, "the opportunity to fulfill personal potentialities... to be true to himself (sic) and true to significant others... [and to] sustain loyalties...in spite of inevitable contradictions of value systems" (1968, p. 290). Additionally, Erikson (1964) paid special attention to the potential role of religion and spirituality in child and adolescent development in which he suggested that maturation of faith and hopefulness toward the future are central tasks of development. Erikson (1968) further suggested that religion provides transcendent worldviews, moral beliefs, and behavioral norms for youth. U.S. identity developmental expectations include the ability to transition to secondary school, learn the academic tasks that are required for college and/or work, form close friendships and romantic relationships, participate in activities outside of school, and form a unified identity (Masten & Coatsworth, 1998). During the processes

of exploration and commitment, adolescents are able to resolve identity challenges, cultivate skill sets that effectively function in their environments, and experience a reasonable sense of control in life (Erikson, 1968). Despite Erikson's highlighting of religion and spirituality as important facets of identity development, most research on development focuses on cognitive, emotional, and social development as these pertain to racial, ethnic, sexual orientation, social class, and gender identity development (Calzo et al., 2011; DeCuir-Gunby, 2009; Douglass & Umaña-Taylor, 2016; Juang & Syed, 2010; Neville & Mobley, 2001; Steensma et al., 2013; Thomas & Azmitia, 2014). Religious and spiritual identity development is sometimes excluded from developmental research (Roehlkepartain, et al., 2006). However, as previously mentioned, social science researchers have called for greater examination of religious and spiritual identity development (Davie, 2003; Paloutzian, 1996; Roehlkepartain et al., 2006; Weaver et al., 1998; Weaver et al., 2000). A major aim of this study is to examine the role of religiosity in childhood and adolescence and its possible relationship to emerging adult religious and spiritual identity. Next, I review the importance of group membership as it relates to religious and spiritual identity in order to establish possible factors that contribute to its development.

During the process of identity development, group membership plays a meaningful role in the salience of identity. Tajfel and Turner (1979) contend that group memberships are paramount in order for individuals to develop a sense of self-worth and social belonging. Serpe (1987) suggests that commitment to a particular identity relates to both interactional commitment and affective commitment. Interactional commitment is defined as the number of social relationships associated with a given identity. For

example, within religious communities, more relationships with individuals within the community would suggest greater interactional commitment to religious identity of the given religious community. Affective commitment is defined as the affect associated with the possible loss of those social relationships that are connected to an individual's sense of identity. An example within a religious community would entail an individual experiencing a loss of relationships within the religious community and subsequent negative affect based on the experience of loss. Stronger levels of interactional and affective commitment will result in a higher level of identity salience (Stryker & Serpe, 1994). A specific identity with many social ties and/or strong social ties will maintain a higher position on an individual's salience hierarchy than will an identity with fewer and/or weaker social ties. Burke and Reitzes (1981) suggest that these social ties, or network of social relationships, carry behavioral expectations for the individual, which in turn impact identity formation. The previously described domains of identity commitment are associated with both intrapersonal and interpersonal processes (Serpe, 2987). Furthermore, French and colleagues (2006) found that in-group membership status influences impressions of out-group members. Group membership, and thus group attitudes, shape individuals' beliefs about self and others. Next, in order to provide a basis of understanding for the age group of interest in the present study, I briefly describe the developmental period of "emerging adulthood."

Adolescence is a developmental period when identity construction begins, and more recent literature suggests that emerging adulthood is another important transitional period for identity development (Arnett, 2000; 2004; 2007). Arnett (2004) suggests that emerging adulthood is the complex and challenging life stage from 18-29 years of age

that is rich with ambiguity and uncertainty about the future. Emerging adulthood is a time of instability with an emphasis on identity change and exploration with five central features: identity exploration, instability, self-focus, in-between feeling, and hoping for a range of possibilities (Arnett, 2007). Grotevant and Cooper (1998) suggest that progress from the stage of identity exploration to the stage of identity achievement is more feasible when individuals are raised in a warm and supportive family environment that encourages individual self-expression. It is important to note that emerging adulthood is a culturally constructed period of time that is not universal, but rather descriptive of relatively privileged individuals whom are able to rely on the financial support of parents (Arnett, 2000). For these privileged individuals, emerging adulthood is a yet another important transitional period for the development and construction of identity. In the present study, emerging adult outcomes will be of central focus. Next, I discuss relevant literature on both global religiosity and religious and spiritual identity and further discuss the importance of these constructs for the proposed study.

Global Religiosity and Religious and Spiritual Identity

Due to the lack of consensus in the research on definitions for religiosity, religious identity, and spiritual identity, a thorough description of definitions for all relevant terms is necessary (Roehlkepartain et al., 2006). The construct of *global religiosity* includes facets of behavior, cognition, affect, interpersonal relationships, as well as physiological dimensions (Hill & Hood, 1999). Global religiosity consists of engagement in religious behaviors and practices, religious perceptions and salience, and religious identity. Engagement in religious behaviors and practices includes attendance at religious services or participation in individual religious practices, such as prayer or

meditation, as well as personal adherence to moral values that are encouraged by the specific religious belief system. Religious perceptions are defined as individuals' awareness of a specific religion's negative sanctions against certain behaviors. Religious salience can be defined as the importance of religiosity or spirituality in an individual's life. Religious identity refers to the extent to which an individual ascribes to a particular religious orientation. For the purpose of the present study, a religious orientation, or tradition, can be defined in terms of specific organized religions (Oregon Social Learning Center, 1997). Finally, the construct of spiritual identity can be described as individual beliefs related to personal transcendence, transcendent consciousness sensitivity, awareness of interconnections among and between persons, an experience of awe, personal meaningfulness, and search for the sacred, but not including devotion to a specific organized religion (Cole, 1990; MacDonald, 2000; Roehlkepartain et al., 2006). In light of the complexity, depth, and fluidity of global religiosity, religious identity, and spiritual identity, the present study incorporates the aforementioned definitional descriptions. Next, I describe the current landscape of religious spiritual identities in the U.S. among youth and emerging adults.

As previously described, U.S. trends indicate that the majority of youth (83%) ages 13 to 17 endorse some religious identity (Denton et al., 2008). Over half of the youth surveyed identified with the orientation of Protestantism (56%). The Pew Research Center (2015) conducted a survey of 35,000 U.S. adults and found in the survey of emerging adults that over half of the individuals surveyed identified with some religious orientation (64%). Specifically, the orientation of Protestantism (36%) or Unaffiliated (36%) had the largest endorsements, followed by Catholicism (16%). The category

described as Unaffiliated is defined as individuals that identify as Atheist, Agnostic, or “Nothing in particular.” According to Denton and colleagues (2008), as an adolescent aged into the early years of emerging adulthood (18 – 21 years of age), public participation in religious practices once a week or more declined by 13 percent. Additionally, Denton and colleagues found that as adolescents aged into emerging adulthood, they increasingly identified as “spiritual, but not religious” (p. 24). In the study of emerging adults (Pew Research Center, 2015), half (50%) of emerging adults cited feeling a sense of spiritual well-being at least once a week, even if they did not identify with a religious group or tradition (37%). These findings suggest that religious identity is salient for the majority of both youth and emerging adults. In the next section, I describe how religious/spiritual identification serves as an asset for youth and emerging adults.

Relevant research suggests that maintaining a religious and spiritual identity can serve as an advantage for both youth and emerging adults. Hill and Hood (1999) found that religious systems of meaning, social support, and social control serve as a developmental asset for youth. During adolescence, religiosity is associated with school success, positive educational outcomes, personal life meaning, and pro-social tendencies (Furrow et al., 2000). Empirical findings highlight the protective role of religiosity across attitudinal and behavioral domains for adolescents (Chavous et al., 2003; Muller & Ellison, 2001). Specifically, religiosity acts as a protective factor for youth against risky behaviors such as substance use, including alcohol, marijuana, and illicit drug use (Marsiglia et al., 2005). Religiosity also promotes higher levels of self-control and lower levels of rule-breaking behavior for both African American and White adolescents (Laird

et al., 2011). Smith and Denton (2005) found that religiosity provides adolescents with effective coping strategies for overcoming mental, emotional, and interpersonal stressors. Additionally, adolescents with higher levels of religious service attendance were found to have reduced odds of developing a mood disorder, even when they had a hereditary predisposition (Kasen et al., 2012). Religiosity also aids youth in coping with racial discrimination and serve as a protective factor for marginalized youth (Cole, 1990; Grant et al., 2000; McCubbin et al., 1998; O' Donnell et al., 2004; Spencer et al., 2003). More specifically, Grant and colleagues (2000) found that community based religious involvement for African American girls served as a protective factor against racial and economic stress. Spencer et al. (2003) found that employment of religious and spiritual coping was effective for African American boys experiencing racial discrimination and also promoted a healthy sense of identity and healthy sense of self in relation to others. Additionally, O'Donnell and colleagues (2004) found that religiosity was a coping tool for African American and Latina/o youth living in disadvantaged neighborhoods.

Religious and spiritual identity continues to serve as an asset through adolescence into emerging adult development. Religious and spiritual identity in emerging adulthood is similarly associated with lower levels of risky behavior, such as substance use and risky sexual behavior (Cotton et al., 2006; Edwards, Fehring, Jarrett, & Haglund, 2008; Johnson et al., 2008; Wells, 2010). Empirical findings suggest that religious and spiritual identity is also associated with positive mental health, effective behavioral coping, and higher academic achievement in emerging adulthood (Turner-Musa & Lipscomb, 2007; Wong et al., 2006). Furthermore, Duffy and Blustein (2005) found that emerging adults in college who reported a developed spiritual connection to a higher power were more

confident in their career decision-making and were also more amenable to pursuing a variety of career potentials. Farley and colleagues (2005) found in their examination of emerging adults in college that religiosity was associated with overcoming adversity and predictive of thriving. In sum, this literature suggests the benefit of maintaining a religious and spiritual identity for both youth and emerging adults. Next, I discuss theoretical mechanisms by which religious and spiritual values are developed.

Smith (2003) theorizes that religiosity has the aforementioned positive effects through three different mechanisms derived via religious and spiritual values. First, religiosity impacts an individual's concepts of moral order and moral values. Next, religiosity affects an individual's learned competencies, or coping skills and resources. Finally, religiosity offers an individual social and organizational ties, or social capital and extra-community bonds. In sum, these factors strongly impact religious and spiritual identity construction and achievement. It is important to note that certain forms of religiosity may be harmful, particularly when the belief system exists within a conflict ridden, fragmented, and authoritarian orientation (Hill et al., 2000). However, a large body of research on religiosity in the U.S. suggests not only that adolescence and emerging adulthood are important transitional periods for the development of religious and spiritual identity, but also that identification with a religious/spiritual identity and engagement in religious and spiritual practices offers a largely positive support for an individual and also serves as a protective factor (Chavous et al., 2003; Furrow, King, & White, 2004; Regnerus, 2000; Hill & Hood, 1999; Kasen, Wickramaratne, Gameroff, & Weissman, 2012; Laird, Marks, & Marrero, 2011; Marsiglia, Kulis, Nieri, & Parsai, 2005; Muller & Ellison, 2001; Smith & Denton, 2005). Research suggests that religious

and spiritual identity serves as an asset for both youth and emerging adults. Next, I discuss family relationships and the role these play in the development of religious and spiritual identity.

Family and Religiosity

Family relationships play an important role in the development of religious and spiritual identity. Martin, White, and Perlman (2003) offer what they refer to as the “channeling hypothesis” to describe how parents impact their children’s development of values. The “channeling hypothesis” highlights how parents/caregivers socialize their children by “channeling” them into groups or experiences that reinforce parental values and expectations. As such, parents’ encouragement to engage in religious practices can be viewed as an act of channeling. A significant factor involved in the “channeling” process is the quality of family relationships, which in turn impacts the salience of religiosity in youth (Kelley, Athan, & Miller, 2007). Day and colleagues (2009) specifically highlight the importance of family processes and parent-adolescent relationships in the transmission of religiosity. Kelly and colleagues (2007) found that experiencing warm and positive family relations increases the likelihood of parent transmission of religious values, ethics, and practices. Furthermore, Smith (2005) suggests that family participation in religious services and activities supports more opportunities to promote the development of positive family relations, and thus encourages warm relationships between adolescents and family. More specifically, the construct of adolescent *personal religious salience* was associated with better family relations generally and more fulfillment in parental relationships specifically (Regnerus & Burdette, 2006). Regnerus and Burdette (2006) suggest *personal religious salience* shapes religious norm adherence,

potentially acting as a catalyst to obey religious moral directives concerning the family. The quality of family relationships is not the only important factor to consider when exploring adolescent religious and spiritual identity. King, Furrow, and Roth (2002) found that family communication about God was the strongest predictor for the importance of religion and faith in adolescence. It seems that both family relationships and communication about God are important factors in the development of salient religious and spiritual identities in adolescence. Next, I discuss the importance of family relationships not only for child and adolescent global religiosity, but for emerging adult religious and spiritual identity as well.

Family relationships are important throughout the transition from adolescence into emerging adulthood. Family functioning, specifically, is a construct that is longitudinally predictive of more successful transition into emerging adulthood (Burt & Paysnick, 2012). Peer relationships, connections to teachers/other supportive adults, pro-social romantic partners, cognitive ability, plan-fulness, relational contexts, and self-control are additional constructs that are longitudinally predictive of a more successful emerging adulthood transition. Parra, Olivia, and del Carmen Reina (2015) found that the well-being of emerging adults is highly related to the quality of their family relationships. A major task of emerging adulthood is transitioning out of their families of origin, while still maintaining connections to them (Burt & Paysnick, 2012). As such, family relations continue to play a pivotal role in not only identity development in adolescence, but also identity achievement in emerging adulthood. Positive family relationships, in combination with parental channeling of religious and spiritual values, are likely associated with religious and spiritual salience in both adolescence and emerging adults.

Next, I discuss sociopolitical development as another developmental outcome for emerging adults that may relate to global religiosity in childhood and adolescence.

Sociopolitical Development

Sociopolitical development can be defined as a process that emphasizes an understanding of cultural and political forces that shape one's status within society and fosters the capacity to envision and help create a just society (Watts & Flanagan, 2007). Watts and Flanagan's model for sociopolitical development was originally inspired by the work of Paulo Freire's (1970) and his idea of *concientización*, or critical consciousness. This includes a cognitive process of growth related to knowledge and analytical skills, as well as characteristics of both efficacy and action (behavior). As previously mentioned, a small but growing body of research has found that fostering sociopolitical development can assist youth in recognizing the negative impact of structural inequalities and promote positive community development for all (Cabrera et al., 2014; Diemer, 2009; Diemer et al., 2010; Flanagan et al. 2007; Flanagan et al. 2009; Godfrey & Grayman, 2014; McWhirter & McWhirter, 2016; Olle & Fouad, 2015). Watts and colleagues (2011) contend that sociopolitical development has three components: critical reflection, political efficacy, and critical action. Critical reflection refers to the analysis of structural inequalities and recognition of the ways in which systemic barriers constrain well-being and personal agency. Political efficacy, also referred to as critical motivation, is the perceived ability to impact social and political change through activism. Finally, critical action is the individual or collective action that takes place to change institutional policies and practices. Additionally, Watts and colleagues (2003) suggest that there are five stages in sociopolitical development: acritical stage, adaptive

stage, pre-critical stage, critical stage, and liberation stage. The first stage begins with a lack of awareness of inequity and evolves to concerns about injustice and oppression until the final stage in which one is compelled to engage in liberation behavior. However, it is important to note that the process of sociopolitical development does not always follow the model proposed by Watts and colleagues (2003; Freire, 2000). Sociopolitical development may be a bidirectional and nonlinear process such that engaging in critical action first can aid in promotion of critical awareness and critical agency (Freire, 2000). Because of its association with numerous positive outcomes, sociopolitical development appears to be a beneficial and salient developmental process, particularly for marginalized youth. The mechanisms by which sociopolitical development occurs are not yet well understood, though there is a small and growing literature with this focus.

Sociopolitical development evolves from different experiences with individuals' environments. Specific to the factors that cultivate sociopolitical development, feelings of discontent, indignation, empathy, and other emotions provide the drive understand inequity, as well as to act (Watts et al., 2003). Watts and colleagues (1999) contend that critical thinking and reflection about inequity and structural oppression are integral components of sociopolitical development. A number of interventions have sought to foster sociopolitical development (Cabrera et al., 2014; Godfrey & Grayman, 2014; Zion, Allen, & Jean, 2015). Cabrera and colleagues (2014) found that participation in one or more Mexican American Studies (MAS) classes was associated with not only increased state standardized test scores for students, but also an increased likelihood that students would graduate from high school. The MAS classes focused on both affirming cultural contributions and strengths, as well as examining and critiquing oppressive social

structures. In another study focused on promoting sociopolitical development, Godfrey and Grayman (2014) examined how an open classroom climate in which social justice attitudes and controversial topics were freely discussed promoted the components of sociopolitical development. The authors found that engagement in the open classroom climate was positively related to both sociopolitical efficacy and critical action for students. While the previously described interventions focused on fostering student sociopolitical development, Zion and colleagues (2015) focused their efforts on cultivating sociopolitical development for teachers. The authors qualitatively examined teachers' insights after engagement in a critical civic inquiry (CCI) project. The CCI project was developed to foster the ability to share power with students, engage in critical dialogue about educational equity, and assist students through action research. Zion and colleagues found that teachers whom participated in the CCI project were able to recognize privilege and oppression, detect when systems harm students, and develop skills to take action. Of particular note is that each teacher in this study identified transformation in their thinking and teaching praxis that resulted in incorporation of components of sociopolitical development. Finally, Rapa (2016) conducted an intervention with youth in which the students reflected on how values related to sociopolitical development were meaningful and how they could act out these values in their communities, schools, and neighborhoods, which cultivated sociopolitical development for the participating youth. Freire (2000) developed his pedagogy of building critical consciousness via discussion groups with Brazilian peasants in order to teach them how to read. He would teach by using ubiquitous objects from the environment that represented inequity, such that he would teach them how to read the

word and “read the world” (p. 26; Diemer et al., 2016). The commonality among these interventions is fostering reflection related to issues of inequity in society, a fundamental component of sociopolitical development. Next, I review other factors related to the cultivation of sociopolitical development.

Social contexts, development of self-image, and significant life experiences also play a role in sociopolitical development (Watts & Flanagan, 2007). Emotional reactions to injustice, the ability to critically think and reflect, and significant life experiences are factors that have been shown to aid in advancing sociopolitical development (Watts & Flanagan, 2007). Quintana and Segura-Herrera (2003) suggest that self-definition is a vital factor related sociopolitical development for youth of color. Quintana and Segura-Herrera define self-definition as reclamation of one’s agency and definition of oneself apart from how societal ideologies and stereotypes define one’s social, racial, or ethnic group. Additionally, Diemer and colleagues (2009) found school influence, parental influence, and parental encouragements to be significantly associated with the growth of sociopolitical development. In the context of Diemer and colleagues’ work, school influence is defined as the power that a school possesses and the role that student race relations and a school principal can have on student development. Parental influence is defined as the effect parents have on their child(ren) when they provide support to their child(ren) in challenging injustice and modeling resistance to injustice. Parental encouragement is defined as the parental act of encouraging child(ren) to live according to just beliefs. As a result of these findings, Diemer and colleagues suggest that through discussions with their parents, children are able to understand and analyze their social world. Diemer (2012) conducted another study to further explore the role of parental

political discussions with youth in promoting sociopolitical development. Diemer used a subsample of Latina/o, African American, and Asian families from the Educational Longitudinal Study of 2002 (ELS) to examine the impact of parental political discussions with youth. Based on the results of this study, Diemer found that political conversations with parents predicted commitment to enact social change for all three ethnic-minority youth groups. Furthermore, Diemer found that engaging in political conversations with parents predicted political participation for the Latina/o and Asian youth subsamples, but not for the African American youth subsample. In sum, research suggests that there are several dynamic factors at play in the growth of sociopolitical development, with one important factor as parent/child relationships and discussions with parents. In light of these findings, I expect to find a significant positive association between child/adolescent report of parent/child relationships and emerging adult sociopolitical development. In the next section, I discuss the intersections between sociopolitical development and religious/spiritual identity.

Connections Between Sociopolitical Development and Religious/Spiritual Identity

Religious and spiritual identity and sociopolitical development are sometimes synergistic (Watts et al., 1999). As previously described, sociopolitical development focuses on the ways in which inequity and conditions of oppression shape one's status in society (Watts & Flanagan, 2007). Religious and spiritual identity often has a strong focus on fostering a just society in response to inequity and oppression (Watts et al., 1999). For example, Christian Biblical texts appear to directly call on their followers to aid in the fight against inequity. In a direct quote from the Old Testament, the Jewish prophet, Isaiah, says "Learn to do good, Seek justice, Aid the oppressed..." (Is. 1:17). In

Christian communities, poverty has historically been a social issue that amasses a response from religious communities to act in order to alleviate the conditions experienced by individuals living in poverty (Potter, 1996). For example, Pope Francis (2017) recently stated the following:

Each individual Christian and every community is called to be an instrument of God for the liberation and promotion of the poor, and for enabling them to be fully a part of society. This demands that we be docile and attentive to the cry of the poor and to come to their aid.

Islamic religious texts also encourage followers to ‘take an active role in confronting and conquering any personal, social, or religious barriers that may impede their quest toward propagating the faith’ (Abdul-Adil & Jason, 1991). Montville (2016) suggests that the three major western religions, Judaism, Islam, and Christianity, share similar fundamental social values. He suggests that in Judaism, the concept of “hesed,” translated to kindness or love, is a love displayed through deeds or acts of kindness toward others (p. 246). In Islam, Montville suggests that a core belief of its followers ascribe to the “Abrahamic ethics,” which are equality, liberty, and social justice” (p. 253). Finally, in Christianity, generosity, charity, and social justice for those less privileged are strong moral values; Jesus, the central leader to Christian followers, was most concerned with “the least among us” (p. 250). Additionally, as previously mentioned, a common factor among interventions designed to promote sociopolitical development is a foundation in fostering reflection related to issues of inequity in society and then promoting action related to those reflections (Cabrera et al., 2014; Diemer, 2016; Freire, 2000; Godfrey & Grayman, 2014; Rapa, 2016; Zion, Allen, & Jean, 2015). It seems that the aforementioned religious

social values would encourage such reflection for individuals that are experiencing oppression and injustice and call religious followers to act in accordance with their religious values. Examination of social movements in the U.S. suggest that promotion of sociopolitical development has historically relied on religious and spiritual belief systems, particularly for members of marginalized groups and especially for individuals in African American or Black communities. Examples of such movements include civil rights movements led by both Malcom X and Dr. Martin Luther King Jr. In both movements, spirituality and religion were integral characteristics of not only the leaders, but also the movements themselves (Watts et al., 1999). These findings suggest a potential synergy between religious and spiritual identity and sociopolitical development, thus further supporting the hypothesis that these are positively associated. Next, I discuss the term spirituality, followed by a description of how I intend to address the possible empirical relationship between religious and spiritual identity and sociopolitical development.

Spirituality without specific religious affiliation is sometimes closely linked the growth of sociopolitical development. As previously discussed, the ubiquity of social values within religious and spiritual identities supports the theoretical hypothesis that there may be a possible ‘higher purpose’ for liberation behavior (Watts et al., 1999). A ‘higher purpose’ can produce a foundation for solidarity in mass movements against oppressive systems. Examples of possible means by which belief in a “higher power” are used as coping for marginalized groups includes the following: (1) spiritual perspective taking; (2) asymmetry means that you have less, not that you are less; (3) visualizing life in accordance with higher principles; (4) tolerance and appreciation of diversity; and (5)

purpose and destiny (Watts et al., 1999). Additionally, Sánchez Carmen and colleagues (2015) suggest that the growth of sociopolitical development for marginalized youth is more than a cognitive and intellectual process, but that it is also a spiritual endeavor. The authors suggest that sociopolitical development is fostered through “soul-work,” which has spiritual underpinnings born from the recognition and healing of collective “soul wounds” and incorporation of wisdoms from those that have lived experiences of oppression (p. 829; Flores-Ortiz, 2003).

In spite of the apparent synergies between religious and spiritual identity and sociopolitical development, to date there has not been an attempt to empirically link the two. Thus, a major aim of the present study is to empirically examine the relationship between global religiosity in childhood/adolescence and sociopolitical development in emerging adulthood, as well as the relationship between sociopolitical development and religious and spiritual identity in emerging adulthood. Based on this review of the literature, I expect that global religiosity and religious and spiritual identity at various time points (childhood, adolescence, and emerging adulthood) will be connected to emerging adult sociopolitical development. Next, I discuss the limitations in existing research in order to understand the ways in which the present study will add to the literature base.

Summary and Limitations of Existing Research

The existing research on religious and spiritual identity and sociopolitical development contains gaps that the present study intends to fill. This literature review reveals that there has been little attention in the extant research to child and adolescent religious and spiritual identity development specifically (Bridges & Moore, 2002;

Donelson, 1999; Kerestes & Youniss, 2003; Roehlkepartain et al., 2006). With respect to sociopolitical development, there has been limited examination of how to facilitate and nurture sociopolitical development, and further research is needed in order to flesh out the factors that cultivate sociopolitical development (Diemer, 2009). Relevant research suggests that sociopolitical development is cultivated through reflection about issues related to inequity in society, discussion with parents/caregivers, parental influence and encouragement, as well as school influence (Cabrera et al., 2014; Diemer, 2016; Diemer et al., 2009; Freire, 2000; Godfrey & Grayman, 2014; Zion et al., 2015; Rapa, 2016). Roderick Watts, one of the foremost scholars in sociopolitical development, has proposed that religiosity is a possible mechanism for fostering sociopolitical development; however, he has not empirically tested this hypothesis (Watts et al., 2011).

Present Study

In order to address some of the gaps in the extant research, I have created a developmental cascade model that hypothesizes sociopolitical development in emerging adulthood is influenced by global religiosity over time. A developmental cascade model is a statistical model used to examine both directly and indirectly the ways in which domains influence one another from childhood into adulthood (Masten et al., 2005). Additionally, I hypothesize that global religiosity in childhood and adolescence remains stable over time and influences emerging adult religious and spiritual identity. Furthermore, I explore the relationship between positive family relationships and global religiosity in 6th and 9th grade, positive family relationships and religious/spiritual identity in emerging adulthood, and 9th grade and emerging adult religious/spiritual identity and sociopolitical development. I hypothesize that global religiosity in childhood and

adolescence, as well as religious/spiritual identity in emerging adulthood, is influenced by positive family relationships. Specifically, when an individual has more positive family relationships during childhood and adolescence, the individual will also have higher levels of global religiosity in youth and a religious/spiritual identity in emerging adulthood.

The present study contributes to the current literature in numerous ways. First, the present study tests whether there is an empirical relationship between sociopolitical development and religious/spiritual identity in emerging adulthood, as well as global religiosity in 9th grade. Second, the present study uses a longitudinal design allowing for examination of stability of religiosity in 6th and 9th grade over an extended period of time with the emerging adult outcome of religious/spiritual identity. Next, I explore the influence of positive family relationships on global religiosity and religious/spiritual identity. Finally, the present study has important implications for the evolution of religious identity and practices from childhood into emerging adulthood, as well as emerging adult sociopolitical development and the factors that influence this process.

Research Questions and Hypotheses

The following research questions will be addressed in the present study:

1. Is there a relationship between religious/spiritual identity and sociopolitical development in emerging adulthood?
 - a. I hypothesize that emerging adult self-reported religious/spiritual identity will be positively associated with emerging adult self-reported sociopolitical development.

2. According to a developmental cascade model, does global religiosity in 6th grade (childhood) influence global religiosity in 9th grade (early adolescence); does global religiosity in 9th grade influence religious/spiritual identity in emerging adulthood?
 - a. I hypothesize that global religiosity in 6th grade (childhood) will influence global religiosity in 9th grade (early adolescence), and that global religiosity in 9th grade will influence religious/spiritual identity in emerging adulthood.
3. According to a developmental cascade model, do positive family relationships in 6th grade (childhood) influence global religiosity in 9th grade (early adolescence); do positive family relationships in 9th grade influence religious/spiritual identity in emerging adulthood? In other words, do positive family relationships influence the development of global religiosity?
 - a. I hypothesize that positive family relationships in 6th grade will influence global religiosity in 9th grade, and that positive family relationships in 9th grade will influence religious/spiritual identity in emerging adulthood.
4. Is the strength of the relationship between global religiosity in 6th grade and global religiosity in 9th grade moderated by the positivity of 6th grade family relationships; is the strength of the relationship between global religiosity in 9th grade and emerging adult religious/spiritual identity moderated by the positivity of 9th grade family relationships?
 - a. I hypothesize that allowing moderation between positive family relationships and global religiosity will improve model fit over and above

a basic developmental cascade model. In other words, individuals with higher reports of positive family relationships in childhood and adolescence will have a stronger relationship between childhood global religiosity and adolescent global religiosity, as well as a stronger relationship between adolescent global religiosity and emerging adult religious/spiritual identity.

CHAPTER II

METHODS

Design and Procedures

I use data from Project Alliance 2 (PAL-2), a large-scale, longitudinal data set developed through a family-centered intervention, for the present study. The family centered intervention was designed with the aim of preventing problem behaviors, such as substance use in childhood and adolescence, by providing family mental health therapeutic interventions. The families in the PAL-2 intervention were recruited from three middle schools in the Pacific Northwest that were ethnically and socioeconomically diverse. The families were followed longitudinally into emerging adulthood.

Families were recruited from three ethnically and socioeconomically diverse middle schools in the Pacific Northwest when the child was in sixth grade (mean age = 11.87). The parents of all 6th grade students in the three recruited middle schools were invited to participate in the study. Of those invited, 82% of parents agreed to participate with their child. Consent forms were obtained by way of mail or student delivery. Participation in the FCU was voluntary. The FCU intervention focused on prevention of youth problem behaviors by providing support to families during the transition from childhood to adolescence. Beginning in 2006 and continuing through 2010, families that were enrolled in the PAL-2 study were asked to complete self-report questionnaires. During wave 1 (baseline) of data collection, families were asked to complete self-report surveys focused on demographics, self-reported identities, adolescent risk, health, social behaviors, and parenting behaviors. Data was gathered at four time points beginning in middle school and continuing through high school. When the children from wave 1

reached the age of 19, they were contacted and asked to participate in wave 6 of data collection. Wave 6 of data collection assessed emerging adult demographics, self-reported identities, and behavior outcomes. For the present study, I use data from wave 1, 4, and 6.

Participants

Participants for the current study ($n = 415$) are “child” respondents from a subsample of the 593 families (children and their parents), who participated in the Family Check-Up (FCU) intervention and control conditions. Prior to intervention delivery, when the child was in 6th grade, 207 (35%) families were randomly assigned to the control condition. In the control condition, families engaged in “business as usual” without access the intervention services. At the same time, 386 (65%) families were randomly assigned to the FCU intervention condition. There was some attrition over the course of the study. Because emerging adult outcomes are of particular importance for the present study, all analyses are limited to “child” data from the subset of families that were still involved in the study at wave 6 and that contributed data on the relevant variables ($n = 415$). Of the 415 participants, 199 (48.7%) participants self-identified as male and 210 (51.3%) participants self-identified as female. Age of participants in sixth grade (wave 1) was an average of 11.88 years old, 15.08 years old in ninth grade (wave 4), and 20 years old in emerging adulthood (wave 6). The participants in the present study self-reported the following ethnicities: 1.7% (7) Pacific Islander, 3.1% (13) American Indian/Native American, 6.5% (27) Asian American, 15.2% (63) African American, 17.6% (73) Hispanic/Latino, 20.5% (85) Multiple ethnicities, and 35.4% (147) European/White. Ethnic group identity was dichotomized into two groups: 35.4% (147)

were labeled White Group and 64.6% (268) were labeled All Other Ethnic Groups.

Participant self-reported religious/spiritual identity is presented in Table 1.

Table 1

Participants' Self-Reported Religious/Spiritual Identity at Wave 6

Religious/Spiritual Identity	Total	Percent	Male	Female
Christian	111	27.1%	23	54
N/A	100	24.4%	48	52
Catholic	57	13.9%	23	34
Personal spiritual (unorganized)	57	13.9%	31	26
Agnostic	25	6.1%	16	9
Atheist	18	4.4%	9	9
Other organized religion	10	2.4%	5	5
Eastern (Buddhist or Hindu)	9	2.2%	3	6
Mormon	7	1.7%	5	2
Jehovah's Witness	6	1.5%	3	3
Jewish	5	1.2%	1	4
Muslim	3	0.7%	0	3
Protestant	1	0.2%	1	0

Note. Total sample = 415; Religious/Spiritual Identity subsample respondents = 409 (194 males, 215 females).

Measures

Demographic questionnaire. At the wave 1 time point when children were in 6th grade, youth completed a packet of questionnaires. The following items were included in the demographic section of the youth survey: self-reported age, gender, grade, ethnicity,

family structure (e.g. single parent), and the primary language spoken in the home. Adolescents responded to the same demographic questions again at wave 4, and emerging adults responded to a similar set of demographic items at wave 6 of data collection (age, gender, ethnicity, relationship status, household income, and primary language spoken at home).

Positive family relationships at wave 1 and wave 4. Child self-report of positive family relationships at wave 1 and wave 4 of data collection was assessed with a measure containing seven items. This measure was first developed by a team of researchers for the original Project Alliance pilot study (Oregon Social Learning Center, 1997). The 7 items were selected on the basis of a prior study that utilized 18 items from this PAL-2 data set that were focused on family functioning (Joyce & McWhirter, 2012). An exploratory factor analysis (EFA) and a reliability analysis yielded a three factor solution: (1) positive family relations, (2) perception of parents, and (3) positive reinforcement with evidence of good internal consistency reliability (i.e., $\alpha = .92, .95, \text{ and } .87$; Joyce & McWhirter, 2012). Scores for each of these three parent/child relationship factors were calculated by averaging the scores for all items on each factor. Higher scores suggest a more positive parent/child relationship. For the present study, the 7 items constituting *positive family relations* are used in the statistical analysis and referred to as *positive family relationships*.

There are two different response formats used for the *positive family relationships* items. The first set of Likert-type response options ranged from 1 (*never or almost never*) to 5 (*always or almost always*). The four items utilizing this set of response options are: (1) “How often do you talk about problems with your parents,” (2) “How much do you

enjoy being with your parents,”(3) *“My parents and I have gotten along very well with each other,”* (4) *“My parents trusted my judgment.”* The remaining three items utilize 5-point Likert-type response options ranging from 1 (*never true*) to 5 (*always true*). The three items corresponding to this set of response options are: (1) *“There has been a feeling of togetherness in my family,”* (2) *“Things my family did together have been fun and interesting,”* and (3) *“Family members really backed each other up.”* Given the two different Likert ranges, responses were first standardized and then averaged for a final positive family relationships score. Higher scores suggest a more positive parent/child relationship.

Global religiosity at wave 1 and wave 4. Child global religiosity at wave 1 and wave 4 were assessed with a self-report measure containing four items. This measure was also developed by a team of researchers at the Oregon Social Learning Center for the original Project Alliance pilot study (1997). The items assessed frequency of attendance at religious services, engagement in religious or spiritual practice, and also the salience of the aforementioned religious/spiritual practice. Likert-type response options ranged from from 1 (*never*) to 4 (*once a week or more*) for the first item, (1) *“How often do you attend religious-spiritual activities.”* The remaining items utilized the following response options: 1 (*not at all*) to 4 (*a great deal*). The corresponding items are: (2) *“I find strength and comport in religion-faith,”*(3) *“I pray, worship, or meditate,”* and (4) *“I think about religion and spirituality daily.”* Scores for global religiosity were derived by calculating the mean across all global religiosity items. Higher mean scores suggest higher self-reported global religiosity.

Joyce and McWhirter (2012) conducted an exploratory factor analysis (EFA) and a reliability analysis on the items in this measure from the PAL-2 dataset and found that scores on this measure of global religiosity provide evidence of good internal consistency reliability ($\alpha = .92$), and a 1-factor solution explained 80.16% of the variance. Additional items used in order to describe the sample include two questions asked about the participant's family's religious practices. Because these items were related to family member's religious practices, rather than child report of practices or beliefs, they were not included in the calculation of the child global religiosity factor score. They were used only to describe the participant sample, in order to provide context for the generalization of results, and as evidence of the validity of the measure of global religiosity. At wave 1, correlations between "my family members pray" and "family members attend religious or spiritual events or celebrations" were $r = .75$ and $.73$ respectively. At wave 4, correlations between "my family members pray" and "family members attend religious or spiritual events or celebrations" were $r = .73$ and $.73$ respectively.

Family relationships at wave 6. Emerging adult self-report of family relationships at wave 6 of data collection was assessed with a measure containing four items. These items were developed by a team of researchers for the original Project Alliance pilot study (Oregon Social Learning Center, 1997). Response options were on a 5-point Likert-type scale ranging from 1 (*never true*) to 5 (*always true*). Based on experiences within the last three month period, participants respond to the following: (1) "*There was a feeling of closeness in our family,*" (2) "*We spent time together as a family,*" (3) "*Family members backed each other up,*" and (4) "*Things our family did were fun and interesting.*" Scores for family relationships were derived by calculating the

mean across all four items. Higher scores suggest a higher degree of self-reported positive family relationships. Cronbach's alpha for the four items provided evidence of good internal consistency reliability ($\alpha = .90$).

In order to assess the factor structure of these items, I submitted them to an EFA using principle axis factoring with an oblique rotation. Missing values were deleted on a listwise basis. The initial analysis extracted one factor using Kaiser's rule (Kline, 2016), which accounted for 77.67% of the variance of the four items. All factor loadings and extracted communalities are reported in Table 2. Item communalities were moderate (.64 - .74). The pattern of factor loadings suggested that the 1-factor solution extracted was uniquely defined. Visual inspection of the scree plot also confirmed that a 1-factor solution was appropriate. The identified factor was labeled as Family Relationships. Correlations among the items within this factor ranged from .80 to .86.

Table 2

Factor Loadings and Extracted Communalities for Family Relationship Items

“Over the last 3 months, how often were the following statements true about your family?”	EFA structure coefficients	
	Factor 1	h^2
Things our family did were fun and interesting.	0.86	0.74
There was a feeling of closeness in our family.	0.85	0.73
We spent time together as a family.	0.84	0.70
Family members backed each other up.	0.80	0.64

Religious/Spiritual identity at wave 6. Emerging adult religious/spiritual identity was assessed at wave 6 of data collection via a self-report measure containing five items. For the original Project Alliance pilot study, this measure was first developed as a parent self-report measure to assess religious and spiritual identity (Oregon Social Learning Center, 1997). The items assess presence of religious/spiritual beliefs, religious/spiritual orientation, salience of beliefs, engagement in religious or spiritual practices, and personal religious/spiritual orientation compared to parents.

Two of the five items were combined as the indicator of religious and spiritual identity. First, a self-report item assessed the importance of beliefs: (1) *“How important are these beliefs in your life?”* with Likert-type response options ranging from 1 (*very important*) to 5 (*not at all important*). The self-report engagement in religious or spiritual practices item asked, (2) *“In general, how often do you practice your religion or spirituality? For example, attending services, individual prayers, meditation, inspirational reading, or Bible study?”* and the 6 response options were: *daily; several times a week; weekly; less than weekly; holidays; not at all*. Scores for religious/spiritual identity were derived by calculating the mean across items. Higher mean scores suggest higher religious/spiritual salience.

Three additional descriptive questions asked participants about their (1) religious and spiritual beliefs, (2) specific orientations, and (3) shared religious/spiritual orientation with parents. Because these items differed in measurement from the previously described items, they were not included in the calculation for religious/spiritual identity score. The self-report presence of religious/spiritual beliefs was measured on a dichotomous scale (*Yes/No*): *“Do you have religious or spiritual beliefs?”* The item *“How would you*

describe your religious or spiritual orientation?” had 13 response options: *Protestant; Catholic; Christian; Muslim; Jewish; Mormon; Eastern (Buddhist or Hindu); Jehovah’s Witness; Other organized religion; Personal spiritual (unorganized); Atheist; Agnostic; N/A*. The final item, *“Do you practice the same religion or spirituality as your parents?”* had the following response options: *Yes; No; Sometimes; N/A (We do not practice a religion)*.

Sociopolitical development at wave 6. Emerging adult sociopolitical development at wave 6 of data collection was assessed with a self-report measure containing six items. The items included on this measure are a subset of 17- items developed to measure critical consciousness (McWhirter & McWhirter, 2016). McWhirter and McWhirter found support for the validity of the original 17-item measure with a sample of Latina/o high school students, but reduced and refined the items in a subsequent study. Response options were on a 4-point Likert-type scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). Participants report their agreement with the following items: (1) *“Racism and discrimination affect people today,”* (2) *“In the future, I will participate in activities and groups that promote equality and justice,”* (3) *“I talk about community and political issues with friends,”* (4) *“Ethnic minorities are treated as equals today,”* (5) *“I speak up when I see things that are unfair,”* and (6) *“It is important to me to contribute to my community.”* Scores for sociopolitical development were derived by calculating the mean across all six items, with one item reverse coded (i.e. *“Ethnic minorities are treated as equals today”*). Higher scores suggest a higher degree of self-reported sociopolitical development. Cronbach’s alpha for the six items was $\alpha = .66$. Item (4) was removed, resulting in stronger internal consistency reliability ($\alpha = .78$).

The underlying factor structure of scores on the sociopolitical development measure was explored using a principal-axis factor analysis with an oblique rotation. Missing values were deleted on a listwise basis. The item “*Ethnic minorities are treated as equals today*” was excluded from this analysis. The initial analysis extracted one factor using Kaiser’s rule, which accounted for 53.9% of the variance of the five items. All factor loadings and extracted communalities are reported in Table 3. Item communalities ranged from low to moderate (.27 - .59). The pattern of factor loadings suggested that the 1-factor solution extracted was uniquely defined. Visual inspection of the scree plot also suggested that a 1-factor solution was appropriate. The identified factor was labeled as Sociopolitical Development. Item correlations ranged from .52 to .77. The moderate size of the item correlations suggests that these characteristics of sociopolitical development are related.

Table 3

Factor Loadings and Extracted Communalities for Sociopolitical Development Items

Item	EFA structure coefficients	
	Factor 1	h^2
In the future, I will participate in activities and groups that promote equality and justice.	0.77	0.59
It is important to me to contribute to my community.	0.73	0.53
I talk about community and political issues with friends.	0.67	0.45
Racism and discrimination affect people today.	0.56	0.31
I speak up when I see things that are unfair.	0.52	0.27

Measures used in post hoc analyses: parental monitoring at wave 1 and wave

4. Child self-report of parental monitoring at wave 1 and 4 of data collection was assessed with a survey containing ten items that asked about parents' knowledge of child whereabouts, school functioning, and interests (OSLC, 1997). Response options were on a 5-point Likert-type scale ranging from 1 (*never or almost never*) to 5 (*always or almost always*). Examples of items include: How often does at least one of your parents... (1) "*know what you do during your free time,*" (2) "*know who you hang out with during your free time,*" and (3) "*find out if you do something bad outside of the home.*" Scores for parental monitoring were derived by calculating the mean across all ten items. Higher scores suggest a higher degree of self-reported parental monitoring. Cronbach's alpha for the ten items provided evidence of excellent internal consistency reliability at wave 1 and 4 ($\alpha = .94$; $\alpha = .95$).

The underlying factor structure of scores on the parental monitoring measure at wave 1 was established using a principal-axis factor analysis with an oblique rotation. Missing values were deleted on a listwise basis. The initial analysis for wave 1 parental monitoring extracted one factor using Kaiser's rule, which accounted for 65.53% of the variance of the ten items. All factor loadings and extracted communalities are reported in Table 4. Item communalities were moderate (.40 - .75). The pattern of factor loadings suggested that the 1-factor solution extracted was uniquely defined. Visual inspection of the scree plot also confirmed that a 1-factor solution was appropriate. The identified factor was labeled as wave 1 Parental Monitoring. Correlations among the items within this factor ranged from .63 to .87. The moderate size of the factor correlations suggests that these characteristics of parental monitoring are related.

Table 4

Factor Loadings and Extracted Communalities for Parental Monitoring Items at Wave 1.

“How often does at least one of your parents...” Item	EFA structure coefficients	
	Factor 1	h^2
Know what you are doing when you are away from home?	0.87	0.75
Know where you go and what you do after school?	0.86	0.74
Know where you are after school?	0.86	0.73
Know what you do during your free time?	0.80	0.63
Know who you hang out with during your free time?	0.79	0.62
Know where you go when you are out with your friends at night?	0.77	0.60
Have a pretty good idea about your plans for the coming day?	0.77	0.60
Have a pretty good idea about your interests, activities, and whereabouts?	0.76	0.59
Know how you do in different subjects at school?	0.75	0.57
Find out if you do something bad outside of the home?	0.63	0.40

CHAPTER III

RESULTS

Data Analytic Strategy

In order to test the developmental cascade hypothesis, I compared eight path models depicting the trajectory of global religiosity and family relationships over time, with a hypothesized influence of religiosity on sociopolitical development in emerging adulthood. The first two models separately analyzed wave 1 data with wave 4 data, and then wave 4 data with wave 6 data, respectively, before combining all three waves for the third basic continuity model. The relationship between religious/spiritual identity and sociopolitical development was tested as a coefficient for that path in the model. The continuity-only models assume that each variable is predicted by its previous measurement (e.g. global religiosity at wave 1 is predictive of global religiosity at wave 4 is predictive of religious/spiritual identity at wave 6), and that variables measured at the same time covary (e.g. global religiosity at wave 1 covaries with family relationships at wave 1), but also assumes there are no relationships among different variables over time (see Figures 1, 2, and 3). In other words, this is a basic longitudinal model that assumes only that there is continuity in each variable over time. I used this continuity model as a null model against which I examined the more theoretically interesting relationships among the variables, represented in the next four models. In contrast to the continuity-only models, the fourth model depicts relationships between positive family relationships and global religiosity and religious/spiritual identity such that positive family relationships influence later global religiosity and religious/spiritual identity (see Figure 4). By comparing the fit of the fourth model to the third continuity-only model with a χ^2

test (Masten et al., 2005), I was able to test the hypothesis that positive family relationships influence later global religiosity and religious/spiritual identity. While the developmental cascade model provides an elegant way to test the relationship between family relationships and religiosity over time, it is possible that the relationship is actually more complicated than that. More specifically, the relationship between 6th grade global religiosity and 9th grade global religiosity may depend on the positivity of 6th grade family relationships tested in the fifth model (Figure 5). Similarly, the relationship between 9th grade global religiosity and emerging adult religious/spiritual identity may depend on 9th grade positive family relationships tested in the sixth model (Figure 6). The complete wave 1 to wave 6 moderation model that allows for interactions is depicted in Figure 7. This exploration of how early global religiosity and family relationships influences later religious/spiritual identity has implications for sociopolitical development, if emerging adult sociopolitical development is a function of religious/spiritual identity, as suggested in the previously described extant literature. Finally, the eighth path model tested the inverse relationship, such that global religiosity influences later positive family relationships (Figure 10). This analysis sheds light on the directionality of the relationships. Participants in the treatment and control groups for the FCU are not tested separately. Previously conducted intention to treat (ITT) analyses found an ITT effect when evaluating substance use, antisocial behavior, family relationship quality, and adolescent self-regulation; however, no ITT effect of the FCU has been found for promoting religiosity or religious and spiritual identity when comparing individuals whom participated in the FCU versus individuals whom did not, and thus, the results of the present study can reliably be assumed to not exist as a product

of the FCU intervention (Caruthers et al., 2014; Connell, Dishion, & Deater-Deckard, 2006; Fosco, Frank, Stormshak, & Dishion, 2013; Fosco, Van Ryzin Connell, & Stormshak, 2016; Smith, Knoble, Zerr, Dishion, & Stormshak, 2014).

Preliminary Analyses

Data were assessed to determine whether it met the assumptions of linearity, normality, and homoscedasticity. Univariate and multivariate assumptions were tenable. Correlations, means, standard deviations, and internal reliability for all study variables were assessed. Table 5 depicts descriptive and reliability statistics. No serious violations of skew (-0.90 to 0.63) or kurtosis (-1.13 to 0.80) values were found (Kline, 2016). Table 6 depicts correlations between study variables.

Table 5

Means, Standard Deviations, Reliability, and Skew of Study Variables

Variable	α	Mean(SD)	Skew	Kurtosis
Positive Family Relationships W1	.92	3.89(.93)	-0.90(.12)	0.24(.24)
Positive Family Relationships W4	.92	3.18(1.09)	-0.07(.12)	-0.90(.25)
Family Relationships W6	.90	0.00(.92)	-0.45(.14)	-0.55(.28)
Global Religiosity W1	.92	2.28(.93)	0.24(.12)	-1.05(.24)
Global Religiosity W4	.92	2.00(.88)	0.63(.12)	-0.51(.25)
Religious/Spiritual Identity W6	.70	2.32(1.60)	-0.17(.12)	-1.13(.24)
Sociopolitical Development	.78	0.00(.90)	-0.49(.12)	0.80(.24)

Note. W = Wave; α = Cronbach's α , SD = Standard Deviation; Sample size = 415; Skew (-0.90-0.63) and Kurtosis (-1.13-0.80) Indices reported with standard errors.

Table 6

Correlations Between Study Variables

Variable	PFR1	PFR4	FR6	GR1	GR4	RSI6	SPD
Positive Family Relationships W1 (PFR1)	-	.354**	.259**	.218**	.075	.081	.060
Positive Family Relationships W4 (PFR4)	-	-	.353**	.046	.173**	.094	.125*
Family Relationships W6 (FR6)	-	-	-	.111*	.169**	.145**	.117*
Global Religiosity W1 (GR1)	-	-	-	-	.602**	.416**	.194**
Global Religiosity W4 (GR4)	-	-	-	-	-	.453**	.160**
Religious/Spiritual Identity W6 (RSI6)	-	-	-	-	-	-	.109*
Sociopolitical Development (SPD)	-	-	-	-	-	-	-

Note. W = Wave; ** $p < .001$; * $p < .05$

Path Modeling

Path modeling was used to understand the structural relationship of possible direct and indirect effects between global religiosity in childhood and adolescence and emerging adult outcomes of religious/spiritual identity and sociopolitical development. Little's MCAR test ($\chi^2 [119] = 146.99, p = .042$) was significant, indicating the data was not missing completely at random. Students with missing data were more likely to be All

Other Ethnic Groups and male. Missing data was handled with full information maximum likelihood (FIML), a common procedure in structural equation modeling that results in similar estimates to multiple imputation (Enders & Bandalos, 2001). All path models were analyzed using Mplus version 8 (Muthén & Satorra, 1995). Model fit was assessed using the following recommended cut off values by Kline (2016): comparative fit index (CFI) > 0.90, root mean square error of approximation (RMSEA) < 0.10, and standardized root mean square residual (SRMR) < 0.10. Invariance testing was conducted in order to examine whether the fit of path models differed as a function of participant ethnicity (White versus All Other Ethnic Groups) or gender (male versus female).

Model 1: Associations of global religiosity and positive family relationships from wave 1 to wave 4. The fit statistics for this model are good (CFI = 0.998, RMSEA = 0.023, SRMR = 0.022). This model suggests there is a significant positive relationship between the exogenous variables at wave 1 and the endogenous variables at wave 4 (See Figure 1). Specifically, wave 1 global religiosity is positively associated with wave 4 global religiosity ($\beta = 0.610$, $Z = 19.484$, $p < .001$) and wave 1 positive family relationships are positively associated with wave 4 positive family relationships ($\beta = 0.364$, $Z = 8.445$, $p < .001$). Results of this model further indicated that all four observed variables significantly covaried (see Figure 1).

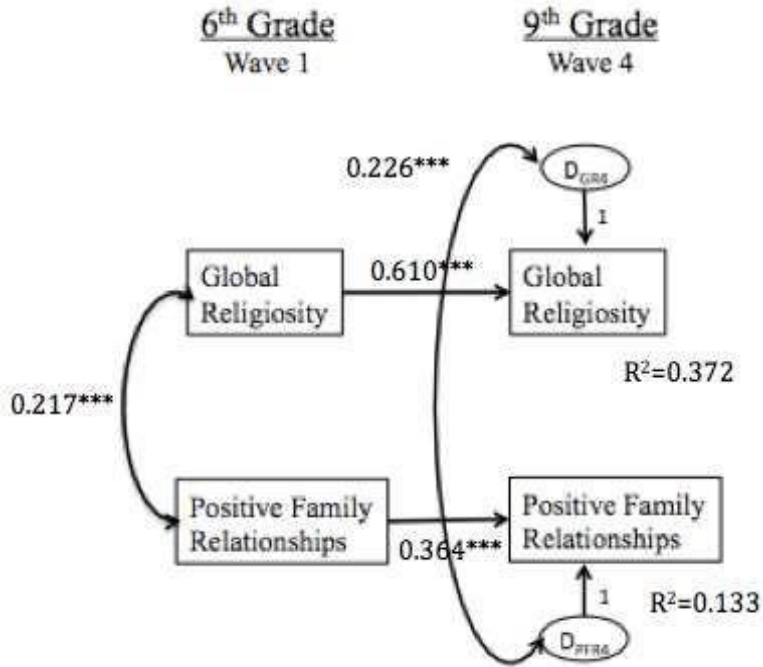


Figure 1. Continuity Model: Null Hypothesis Wave 1 to Wave 4

Model 2: Associations of global religiosity, religious and spiritual identity, positive family relationships, and family relationships from wave 4 to wave 6. The fit statistics for this model are good (CFI = 0.970, RMSEA = 0.054, SRMR = 0.034). The model results show significant positive relationships between the exogenous variables at wave 4 and the endogenous variables as wave 6 (see Figure 2). Specifically, wave 4 global religiosity is positively associated with wave 6 religious and spiritual identity ($\beta = .461$, $Z = 11.497$, $p < .001$). Additionally, wave 4 positive family relationships is positively associated with wave 6 family relationships ($\beta = 0.279$, $Z = 5.013$, $p < .001$). Finally, wave 6 sociopolitical development shared a significant positive relationship with wave 4 global religiosity ($\beta = 0.145$, $Z = 2.558$, $p < .01$), but did not share a significant relationship with wave 6 religious and spiritual identity ($\beta = 0.048$, $Z = 0.865$, $p > .05$).

Results of this model (see Figure 2) indicated that there were positive covariances between variables.

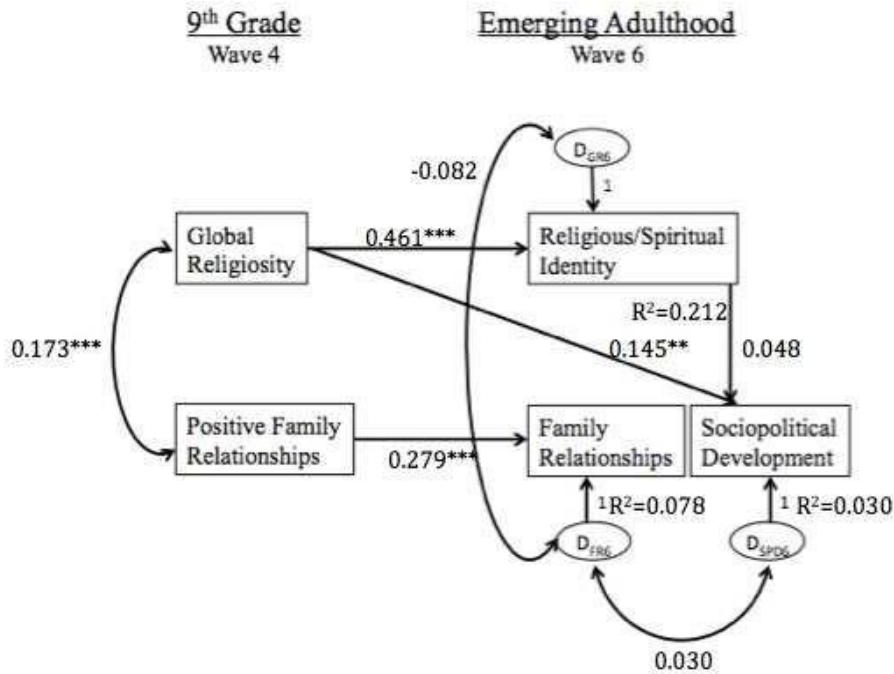


Figure 2. Continuity Model: Null Hypothesis Wave 4 to Wave 6

Model 3: Associations of global religiosity, religious and spiritual identity, positive family relationships, and family relationships from wave 1 to wave 6. The fit statistics for this model are good (CFI = 0.934, RMSEA = 0.075, SRMR = 0.044). This model (see Figure 3) suggests the same relationships as the previously described piecewise models (see Figure 1 and 2). Results of the test of this model indicated that four observed variables significantly covaried (see Figure 3). The model was tested for gender differences; no gender differences emerged and the path estimates did not statistically differ by gender ($\chi^2(9) = 11.123, p = 0.267$). The model was tested for differences in fit for White relative to all other participants; no ethnic group differences

emerged and the path estimates did not statistically differ by ethnicity ($\chi^2(9) = 15.264, p = 0.084$).

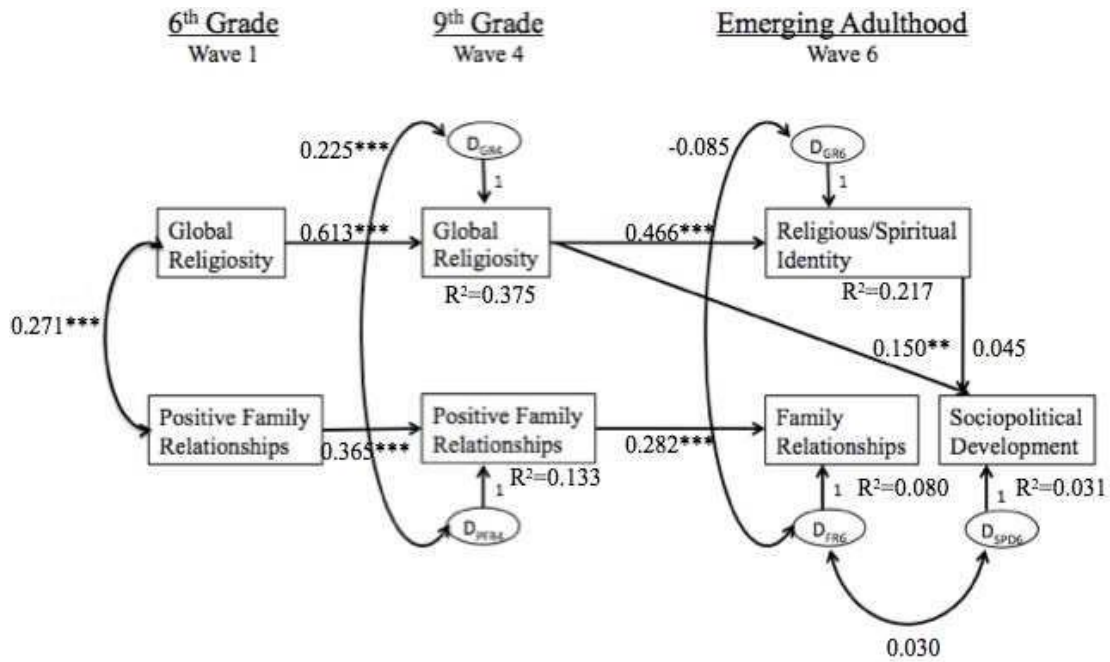


Figure 3. Continuity Model: Complete Null Hypothesis for Developmental Cascade Model

Model 4: Influence of positive family relationships and family relationships on global religiosity and religious and spiritual identity from wave 1 to wave 6. The fit statistics for this model are good (CFI = 0.935, RMSEA = 0.083, SRMR = 0.044). The model results suggest that there are not significant relationships between the religiosity measures and the family relationships measures from wave 1 to wave 4, or from wave 4 to wave 6 (see Figure 4; $\beta = -0.056, Z = -1.418, p > .05$; $\beta = 0.029, Z = 0.441, p > .05$). This model replicates earlier results that there are significant positive relationships between wave 1 global religiosity with wave 4 global religiosity, as well as wave 4 global religiosity with wave 6 religious and spiritual identity (see Figure 4; $\beta = 0.462, Z =$

19.643, $p < .001$). This model also replicates the significant positive relationship between wave 1 positive family relationships and wave 4 positive family relationships, as well as wave 4 positive family relationships and wave 6 family relationships ($\beta = 0.353$, $Z = 7.912$, $p < .001$; $\beta = 0.279$, $Z = 5.018$, $p < .001$). Finally, wave 6 sociopolitical development shares a significant positive relationship with wave 4 global religiosity ($\beta = 0.151$, $Z = 2.699$, $p < .01$) but not with wave 6 religious and spiritual identity ($\beta = 0.045$, $Z = 0.810$, $p > .05$), consistent with the earlier models. Results for this model indicated that four observed variables significantly covaried. This developmental cascades model (see Figure 4) did not show a significant improvement in model fit over the null model (see Figure 3; $\chi^2(2) = 2.188$, $p = 0.335$). In other words, modeling relationships between downstream global religiosity effects and earlier reports of positive family relationships does not significantly improve model fit over a model that allows only for continuity in each construct over time. The model was tested for gender differences; no gender differences emerged and the path estimates did not statistically differ by gender ($\chi^2(11) = 17.515$, $p = 0.096$). The model was tested for differences in fit for White relative to all other participants; no ethnic group differences emerged and the path estimates did not statistically differ by ethnicity ($\chi^2(11) = 16.115$, $p = 0.137$).

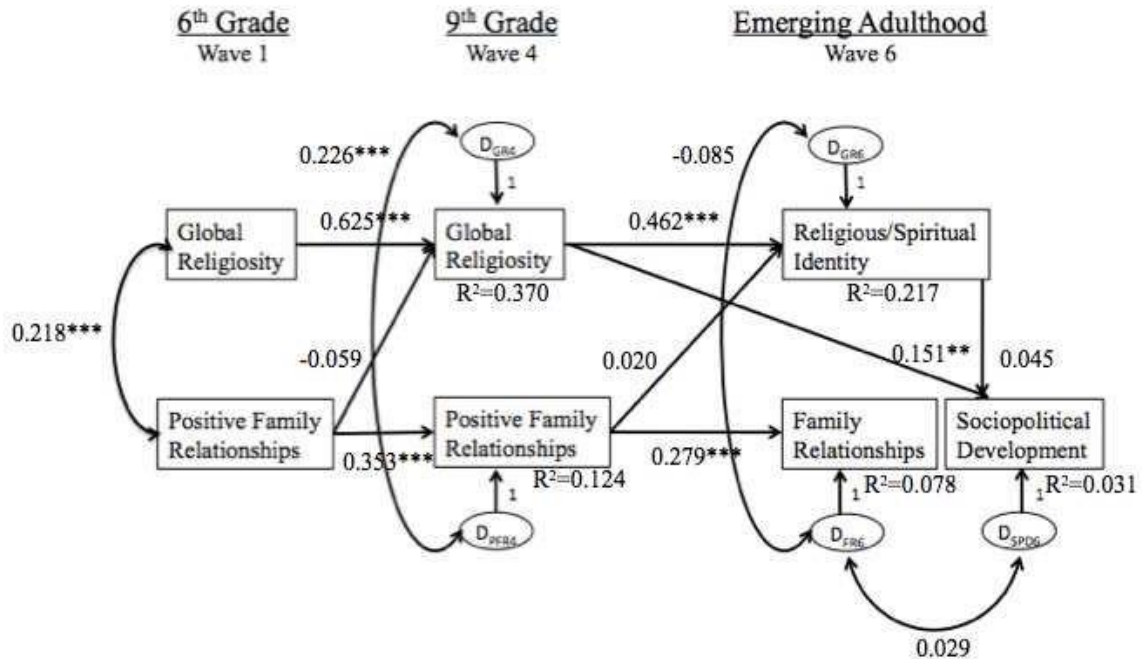


Figure 4. Early Positive Family Relationships Predicts Higher Later Global Religiosity and Religious/Spiritual Identity and Sociopolitical Development

Model 5: Interactions between positive family relationships and family relationships with global religiosity and religious and spiritual identity from wave 1 to wave 4. The fit statistics for this model are good (CFI = 0.998, RMSEA = 0.024, SRMR = 0.018). An interaction was added to this model to examine whether the degree of positive family relationships influenced the relationship between wave 1 and wave 4 global religiosity. In other words, it tested whether the extent to which wave 1 global religiosity predicts wave 4 global religiosity depends on positive family relationships at wave 1. The results of the test of the model suggest that the degree of positive family relationships at wave 1 did not significantly influence global religiosity at wave 4 ($\beta = -0.040$, $Z = -0.969$, $p > .05$). There were positive covariances between variables in this model (see Figure 5).

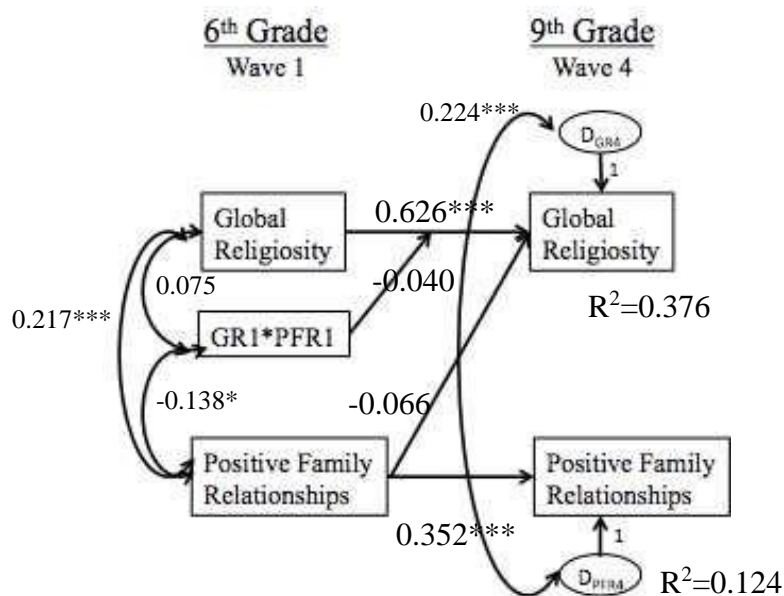


Figure 5. Early Positive Family Relationships Interact With Global Religiosity to Predict Later Global Religiosity: Wave 1 to Wave 4

Model 6: Interactions between positive family relationships and family relationships with global religiosity and religious and spiritual identity from wave 4 to wave 6. The fit statistics for this model are good (CFI = 0.931, RMSEA = 0.081, SRMR = 0.037). This model reflects the same stability of relationships as Model 3, 4, and 5, as well as the same relationships between sociopolitical development at wave 6 and the religious measures at wave 4 and wave 6 (see Figure 6). An interaction term was added to the model to examine whether the degree of positive family relationships at wave 4 influenced wave 6 religious and spiritual identity, similar to the approach taken in Model 5. The results of the test of this model suggest that the degree of positive family relationships at wave 4 did not significantly influence religious and spiritual identity at

wave 6 (see Figure 6; $\beta = -0.060$, $Z = -1.296$, $p > .05$). There were positive covariances between model variables (see Figure 6).

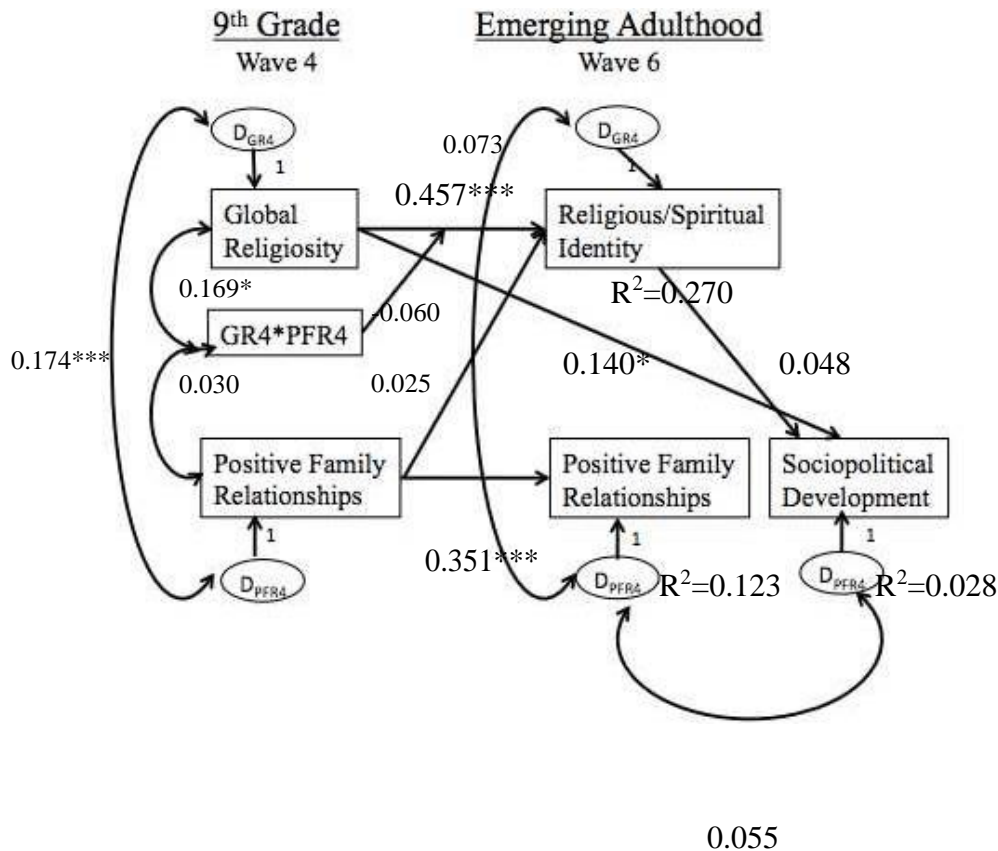


Figure 6. Positive Family Relationships at Wave 4 Interacts With Global Religiosity to Predict Later Religious/Spiritual Identity at Wave 6 and Sociopolitical Development

Model 7: Interactions between positive family relationships and family relationships with global religiosity and religious and spiritual identity from wave 1 to wave 6. The fit statistics for this model are good (CFI = 0.923, RMSEA = 0.073, SRMR = 0.047). This model reflects the same stability of relationships as Models 3 and 4, as well as the same relationships between sociopolitical development at wave 6 and the religious measures at wave 4 and wave 6 (see Figure 7). The results of the test of the model suggest that the degree of positive family relationships at wave 1 and wave 4 did

not significantly influence global religiosity at wave 4 or religious and spiritual identity at

wave 6 (see Figure 7; $\beta = -0.046$, $Z = -1.100$, $p > .05$; $\beta = -0.091$, $Z = -1.268$, $p > .05$).

There were positive covariances between study variables (see Figure 7).

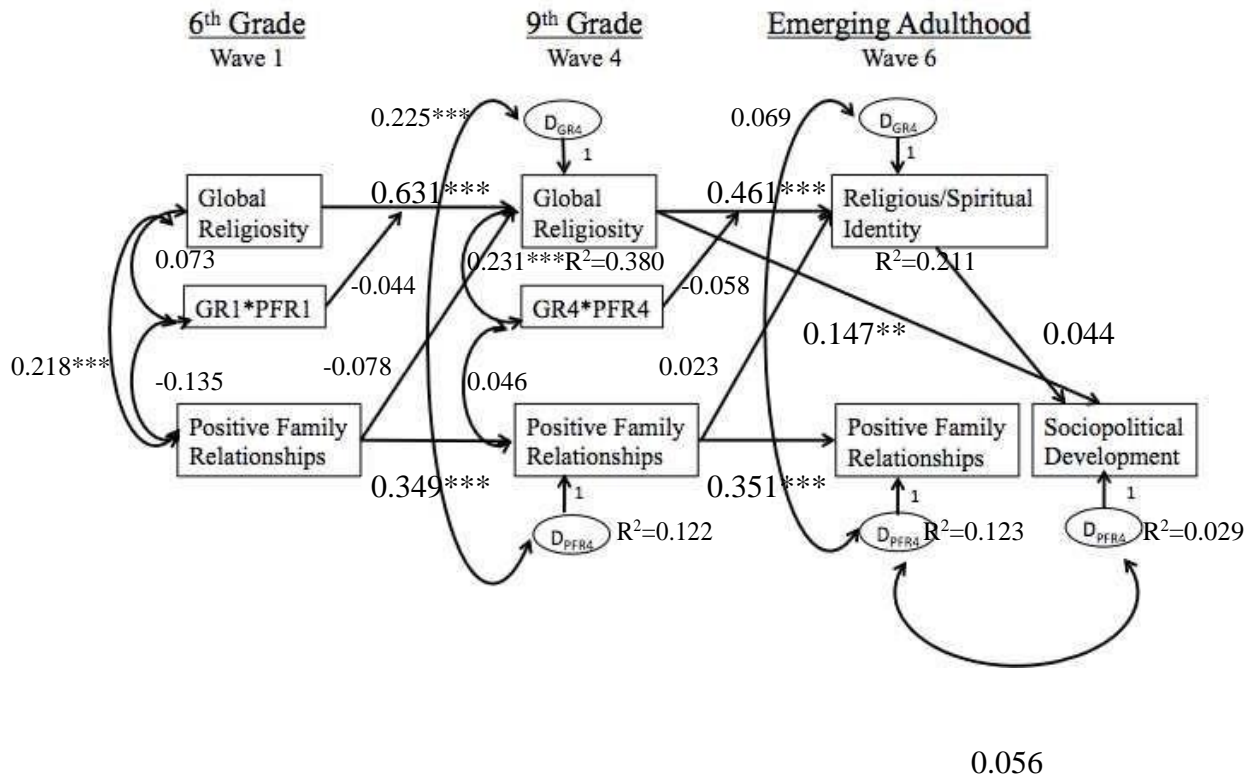


Figure 7. Early Positive Family Relationships Interact With Global Religiosity to Predict Later Religious/Spiritual Identity and Sociopolitical Development

Group comparisons by gender for positive family relationships interaction with global religiosity and religious/spiritual identity from wave 1 to wave 6. I used path analysis invariance testing to determine whether path estimates in the model varied by gender. A model with all paths held invariant across gender showed significantly worse fit than an unconstrained model where all paths were estimated freely in each group ($\chi^2(19) = 37.783$, $p = 0.006$). Follow up analyses were conducted to identify which path(s) differed by gender by using a series of models that were only partially invariant. When only wave 1 to wave 4 family and religious parameters and their covariances were

allowed to vary by gender, the partially invariant model still differed significantly from

the unconstrained model ($\chi^2(11) = 19.865, p = 0.047$). A model with only wave 4 to wave 6 family and religious parameters and their covariances were allowed to vary by gender was also significantly worse than the unconstrained model ($\chi^2(12) = 23.332, p = 0.025$). However, when both wave 1 to wave 4 and wave 4 to wave 6 family and religious parameters, as well as their corresponding covariances, were allowed to vary by gender, the partially invariant model did not differ significantly from the unconstrained model ($\chi^2(4) = 5.192, p = 0.268$). Therefore, results indicate that male and female participants differ in the way that positive family relationships, global religiosity, and their interactions predict the next wave of global religiosity both from wave 1 to wave 4 and from wave 4 to wave 6. Figure 8 depicts the estimates for male/female groups. Unstandardized effects were used to compare group differences, as recommended by Muthén and Muthén (2017).

As depicted in Model 8, Wave 1 positive family relationships is significant and positively associated with wave 4 positive family relationships for both the male ($\beta = 0.357, Z = 4.385, p < .001$) and female ($\beta = 0.448, Z = 5.889, p < .001$) groups. Similarly, wave 1 global religiosity is significant and positively associated with wave 4 global religiosity for males ($\beta = 0.599, Z = 11.933, p < .001$) or females ($\beta = 0.594, Z = 10.855, p < .001$). The relationship between wave 1 positive family relationships and wave 4 global religiosity is not significant for males ($\beta = -0.031, Z = -0.513, p > .05$), but it is significantly negative for females ($\beta = -0.124, Z = -2.374, p < .05$). The interaction between wave 1 positive family relationships and global religiosity predicting wave 4 global religiosity is not significant for both males ($\beta = -0.084, Z = -1.408, p > .05$) and females ($\beta = 0.008, Z = 0.139, p > .05$). The relationship between wave 4 positive family

relationships is significant and positively associated with wave 6 family relationships for both males ($\beta = 0.376$, $Z = 6.295$, $p < .001$) and females ($\beta = 0.250$, $Z = 4.393$, $p < .001$). For both the male and female groups, wave 4 global religiosity is significant and positively associated with wave 6 religious/spiritual identity ($\beta = 0.752$, $Z = 6.403$, $p < .001$; $\beta = 0.909$, $Z = 7.830$, $p < .001$). The relationship between wave 4 positive family relationships and wave 6 religious/spiritual identity is not significant for males ($\beta = 0.180$, $Z = 1.876$, $p > .05$) or females ($\beta = -0.057$, $Z = -0.631$, $p > .05$). For the male group, the relationship between wave 4 positive family relationships and global religiosity interaction parameter is significantly and negatively associated with wave 6 religious/spiritual identity ($\beta = -0.257$, $Z = -2.544$, $p < .05$), but is not significant for the female group ($\beta = 0.080$, $Z = 0.796$, $p > .05$). In other words, males with lower positive family relationships at wave 4 have a stronger relationship between wave 4 global religiosity and wave 6 religious/spiritual identity. For both the male and female groups, the wave 4 positive family relationships and global religiosity interaction parameter is significant and positively associated with wave 1 positive family relationships and global religiosity interaction parameter ($\beta = 0.401$, $Z = 4.938$, $p < .001$; $\beta = 0.249$, $Z = 2.991$, $p < .01$).

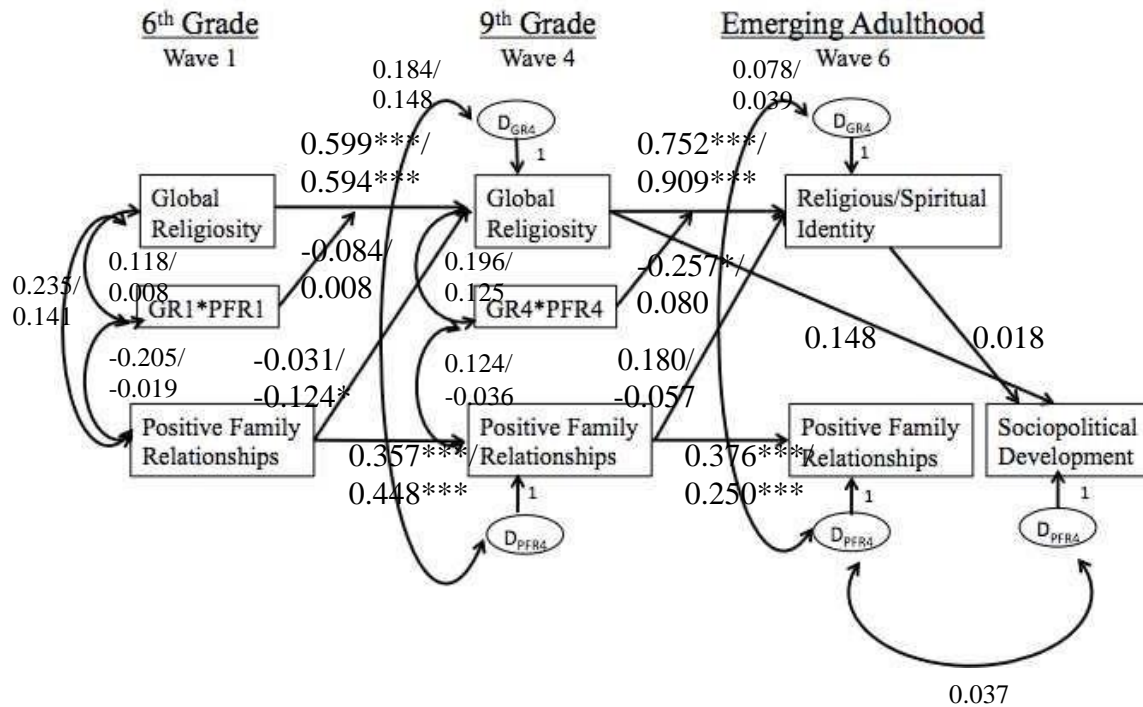


Figure 8. Group Comparison by Gender for Positive Family Relationships Interaction:
Male/Female

Group comparisons by ethnicity for positive family relationships interaction with global religiosity and religious/spiritual identity from wave 1 to wave 6. A model with all paths held invariant across ethnicity showed significantly worse fit than an unconstrained model where all paths were estimated freely for each group ($\chi^2(18) = 42.446, p = 0.001$). When wave 1 to wave 4 family and religious parameters and their covariances were allowed to vary by ethnicity, the partially invariant model still differed significantly from the unconstrained model ($\chi^2(11) = 27.544, p = 0.004$). When wave 4 to wave 6 family and religious parameters and their covariances were allowed to vary by ethnicity, the partially invariant model still differed significantly from the unconstrained model ($\chi^2(12) = 57.326, p = 0.001$). However, when both wave 1 to wave 4 and wave 4 to wave 6 family and religious parameters, as well as their corresponding covariances, were

allowed to vary by ethnicity, the partially invariant model did not differ significantly from the unconstrained model ($\chi^2(4) = 5.017, p = 0.286$). Therefore, results indicate All Other Ethnic Groups and the White Group differ in the way that positive family relationships, global religiosity, and their interactions predict the next wave of global religiosity both from wave 1 to wave 4 and from wave 4 to wave 6. Figure 9 depicts the estimates for All Other Ethnic Groups/White Group.

For both All Other Ethnic Groups and the White Group, wave 1 positive family relationships is significant and positively associated with wave 4 positive family relationships ($\beta = 0.273, Z = 3.849, p < .001$; $\beta = 0.649, Z = 7.712, p < .001$). The relationship between wave 1 global religiosity is significant and positively associated with wave 4 global religiosity for All Other Ethnic Groups ($\beta = 0.606, Z = 11.963, p < .001$) and the White Group ($\beta = 0.480, Z = 8.781, p < .001$). For both All Other Ethnic Groups and the White Group, the relationship between wave 1 positive family relationships and wave 4 global religiosity is not significant ($\beta = -0.064, Z = -1.238, p > .05$; $\beta = -0.038, Z = -0.594, p > .05$). For both All Other Ethnic Groups and the White Group, the relationship between wave 1 positive family relationships and global religiosity interaction parameter is not significantly associated with wave 4 global religiosity ($\beta = -0.082, Z = -1.490, p > .05$; $\beta = 0.022, Z = 0.338, p > .05$). The relationship between wave 4 positive family relationships is significant and positively associated with wave 6 family relationships for All Other Ethnic Groups ($\beta = 0.311, Z = 5.750, p < .001$) and the White Group ($\beta = 0.300, Z = 4.761, p < .001$). For both All Other Ethnic Groups and the White Group, wave 4 global religiosity is significant and positively associated with wave 6 religious/spiritual identity ($\beta = 0.792, Z = 8.100, p < .001$).

.001; $\beta = 0.726$, $Z = 4.199$, $p < .001$). The relationship between wave 4 positive family relationships and wave 6 religious/spiritual identity is not significant for All Other Ethnic Groups ($\beta = 0.123$, $Z = 1.499$, $p > .05$) or the White Group ($\beta = -0.104$, $Z = -0.888$, $p > .05$). For All Other Ethnic Groups, the relationship between wave 4 positive family relationships and global religiosity interaction parameter is not significantly associated with wave 6 religious/spiritual identity ($\beta = -0.025$, $Z = -0.296$, $p > .05$). In contrast, the relationship between wave 4 positive family relationships and global religiosity interaction parameter is significantly and negatively associated with wave 6 religious/spiritual identity for the White Group ($\beta = -0.291$, $Z = -2.097$, $p < .05$). In other words, individuals in the White Group with lower positive family relationships at wave 4 have a stronger relationship between wave 4 global religiosity and wave 6 religious/spiritual identity. For both All Other Ethnic Groups and the White Group, wave 4 positive family relationships and global religiosity interaction parameter is significant and positively associated with wave 1 positive family relationships and global religiosity interaction parameter ($\beta = 0.261$, $Z = 3.351$, $p < .01$; $\beta = 0.442$, $Z = 5.533$, $p < .001$).

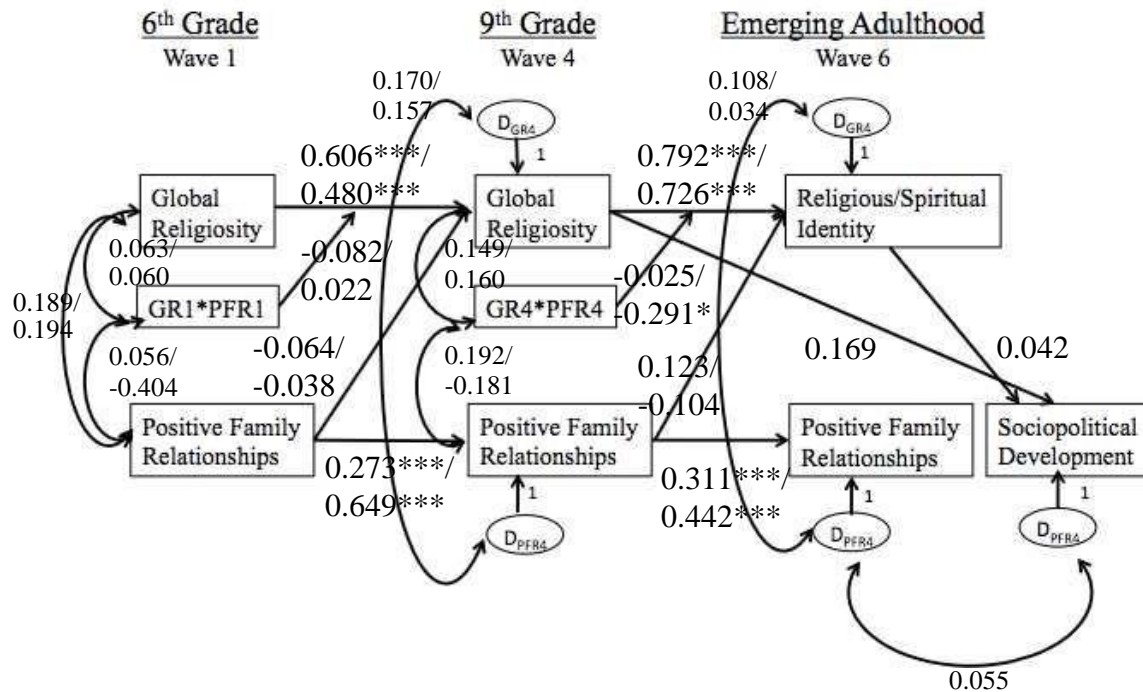


Figure 9. Group Comparison by Ethnicity for Positive Family Relationships Interaction:
All Other Ethnic Groups/White Group

Model 8: Influence of global religiosity and religious and spiritual identity on positive family relationships and family relationships from wave 1 to wave 6. The fit statistics for this model were good (CFI = 0.934, RMSEA = 0.079, SRMR = 0.038). This path model also suggests there are not significant relationships between the religious measures and the family relationships measures from wave 1 to wave 4, or wave 4 to wave 6 when the direction of the relationship is shifted to the inverse of Model 4 (see Figure 8; $\beta = -0.033$, $Z = -0.688$, $p > .05$; $\beta = 0.097$, $Z = 1.666$, $p > .05$). This model reflects the same stability of relationships as Models 3 and 4, as well as the same relationships between sociopolitical development at wave 6 and the religious measures at wave 4 and wave 6 (see Figure 8). Model variables significantly covaried (see Figure 8). This inverse developmental cascades model (see Figure 8) did not show a significant

improvement in model fit over the null model (Figure 3; $\chi^2(2) = 0.731, p = 0.393$. In other words, modeling relationships between downstream positive family relationships effects and earlier reports of global religiosity does not significantly improve model fit over a model that allows only for continuity in each construct over time. The model was tested for gender differences; no gender differences emerged and the path estimates did not statistically differ by gender ($\chi^2(11) = 10.605, p = 0.477$). The model was tested for differences in fit for White relative to all other participants; no ethnic group differences emerged and the path estimates did not statistically differ by ethnicity ($\chi^2(11) = 17.602, p = 0.091$).

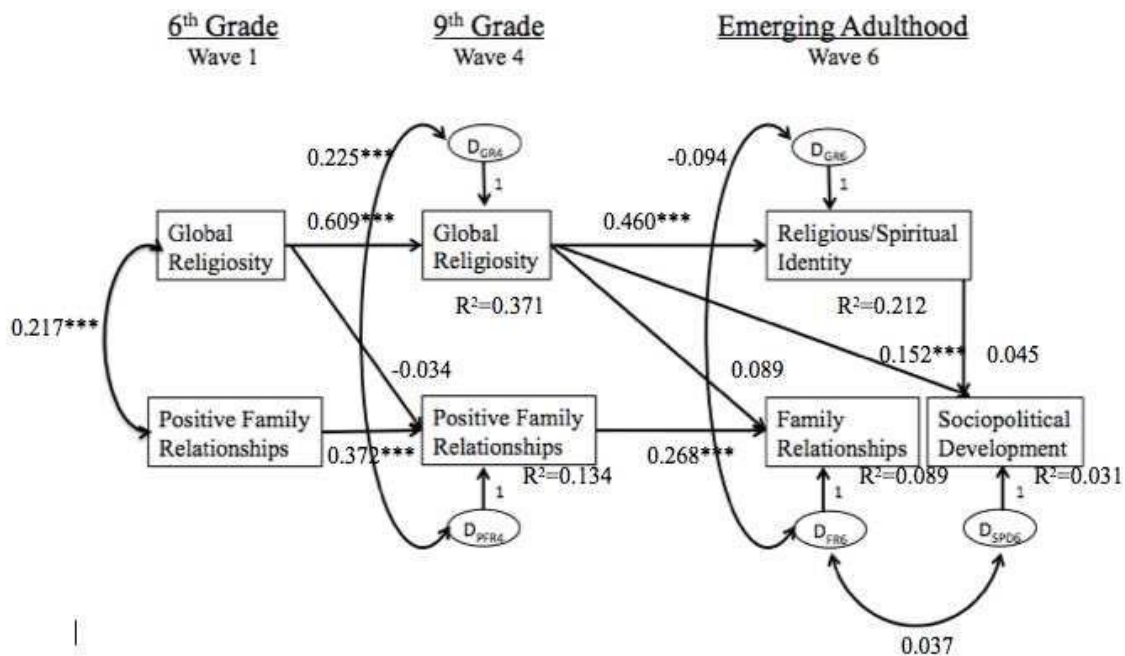


Figure 10. Early Global Religiosity Predicts Higher Later Positive Family Relationships

Summary of Results

Results from testing the eight path models suggest that there is stability in paths from wave 1 global religiosity to wave 4 global religiosity to wave 6 religious and

spiritual identity. Furthermore, stability is also found from wave 1 positive family relationships to wave 4 positive family relationships to wave 6 family relationships. In the models that tested for relationships with sociopolitical development (models 2, 3, 4, 6, 7, and 8), results suggest a small significant relationship between global religiosity at wave 4 and sociopolitical development at wave 6, but wave 6 sociopolitical development is not significantly associated with religious and spiritual identity at wave 6. The models testing cross lag effects in which positive family relationships influenced downstream religiosity or vice versa (models 5, 6, and 7) did not produce any significant findings. While there were no group differences found in the main effects of models 1, 2, 3, 4, and 8, group differences were found in the interaction models. Specifically, the group comparison tests indicate that the relationship between wave 1 positive family relationships and wave 4 global religiosity is significantly negative for females; however, this is true only when the interaction between positive family relationships and global religiosity is added to the cascade model. In order to calculate interaction effects within a path model, the variables are centered and standardized (Schielzeth, 2010). Schielzeth (2010) suggests that once the variables are centered and standardized, the main effects within the model should not be interpreted, and instead the main effect model should be relied on for interpretation of results. For this reason, the significant effect found for females from wave 1 positive family relationships to wave 4 global religiosity should not be interpreted from the interaction model and instead the cascade model should be used to interpret main effects. The group comparison tests also indicate that individuals in the male group with lower reports of positive family relationships at wave 4 have a stronger

relationship between wave 4 global religiosity and wave 6 religious/spiritual identity. This same moderating relationship was found for individuals in the White Group.

When comparing the inverse model and the cascade model to the null model, there were no significant improvements in model fit when compared to the null model. Taken together, these results draw a strong picture of continuity over time in both religious feeling and positivity of family relationships. There is also evidence that the developmental trajectory for global religiosity from wave 1 to wave 4 predicts a small amount of variance in sociopolitical development in emerging adulthood.

Post Hoc Analyses

Given the absence of significant direct relationships between the family measures and the religious measures in the main effects of the previously described models, and a body of literature suggesting that such a relationship could be expected, I conducted a series of post hoc analyses. These analyses tested additional models in which I substituted a different measure of family relationships for the positive family relationships factor: parental monitoring. First, I conducted exploratory factor analyses and internal consistency reliability analyses for the measure to be sure that the factor structure and reliability of the scale was appropriate for the analyses.

Post Hoc Data Analytic Strategy

All previous models were tested again, substituting Parental Monitoring for Positive Family Relationships in the second set of four models (models 9, 10, 11, and 12). It is important to note that due to the lack of a wave 6 measure for Parental Monitoring, the subsequent models do not include a wave separation analyses as was done in Models 1, 2, 4, and 6.

Post Hoc Preliminary Analyses and Path Modeling

Data were assessed to determine whether it met the assumptions of linearity, normality, and homoscedasticity. Univariate and multivariate assumptions were tenable. Correlations, means, standard deviations, and internal reliability for all study variables were assessed. Table 7 depicts descriptive and reliability statistics. No serious violations of skew (-0.65 to 0.17) or kurtosis (-0.97 to 2.58) values were found (Kline, 2016). Table 8 depicts correlations between the additional study variables and the remaining religious and sociopolitical development variables. Standard errors were adjusted in all models to account for the dependence among scores by using maximum likelihood estimation with robust standard errors (MLR) (Muthén & Satorra, 1995). Data was not missing completely at random; Little's MCAR test ($\chi^2 [119] = 146.99, p = .042$) was significant. Students with missing data were more likely to be All Other Ethnic Groups and male. Again, missing data was handled with full information maximum likelihood (FIML), a common procedure in structural equation modeling that produces estimates similar to those produced in multiple imputation (Enders & Bandalos, 2001). All path models were analyzed using Mplus version 8 (Muthén & Satorra, 1995). Model fit was assessed with the same cutoffs used in the main analysis. Invariance testing was conducted in order to examine whether the fit of the path models differed as a function of ethnic group membership and gender.

Table 7

Means, Standard Deviations, Reliability, and Skew of Additional Study Variables

Variable	α	Mean(SD)	Skew	Kurtosis
Parental Monitoring W1	.94	0.00(.97)	-1.75(.12)	2.58(.24)
Parental Monitoring W4	.95	0.00(.98)	-0.65(.12)	-0.49(.25)

Note. W = Wave; α = Cronbach's α , SD = Standard Deviation; Sample size = 415; Skew and Kurtosis Indices reported with standard errors.

Table 8

Correlations Between Additional Study Variables

Variable	PM1	PM4	GR1	GR4	RSI6	SPD
Parental Monitoring W1 (PM1)	-	.247**	.082	-.069	-.017	.113*
Parental Monitoring W4 (PM4)	-	-	.007	.158**	.044	.117*
Global Religiosity W1 (GR1)	-	-	-	.602**	.416**	.194**
Global Religiosity W4 (GR4)	-	-	-	-	.453**	.160**
Religious/Spiritual Identity W6 (RSI6)	-	-	-	-	-	.109*
Sociopolitical Development (SPD)	-	-	-	-	-	-

Note. W = Wave; ** $p < .001$; * $p < .05$

Model 9: Associations of global religiosity and parental monitoring from wave 1 to wave 6. The fit statistics for this model were good (CFI = 0.920, RMSEA =

0.098, SRMR = 0.046). This path model suggests there is a significant positive relationship between the wave 1 global religiosity and wave 4 global religiosity, as well as wave 4 global religiosity with wave 6 religious and spiritual identity (see Figure 11; $\beta = 0.610$, $Z = 19.634$, $p < .001$; $\beta = 0.460$, $Z = 11.574$, $p < .001$). Furthermore, wave 1 parental monitoring is positively associated with wave 4 parental monitoring ($\beta = 0.281$, $Z = 5.908$, $p < .001$). Finally, wave 6 sociopolitical development is not significantly associated with wave 6 religious and spiritual identity ($\beta = 0.044$, $Z = 0.802$, $p > .05$); however, wave 6 sociopolitical development does have a significant positive relationship with wave 4 global religiosity ($\beta = 0.154$, $Z = 2.769$, $p < .01$). Results of the test of this model further indicated that two observed variables significantly covaried (see Figure 11). The model was tested for gender differences; no gender differences emerged and the path estimates did not statistically differ by gender ($\chi^2(7) = 7.391$, $p = 0.392383$). The model was tested for differences in fit for White relative to all other participants; no ethnic group differences emerged and the path estimates did not statistically differ by ethnicity ($\chi^2(7) = 11.509$, $p = 0.117906$).

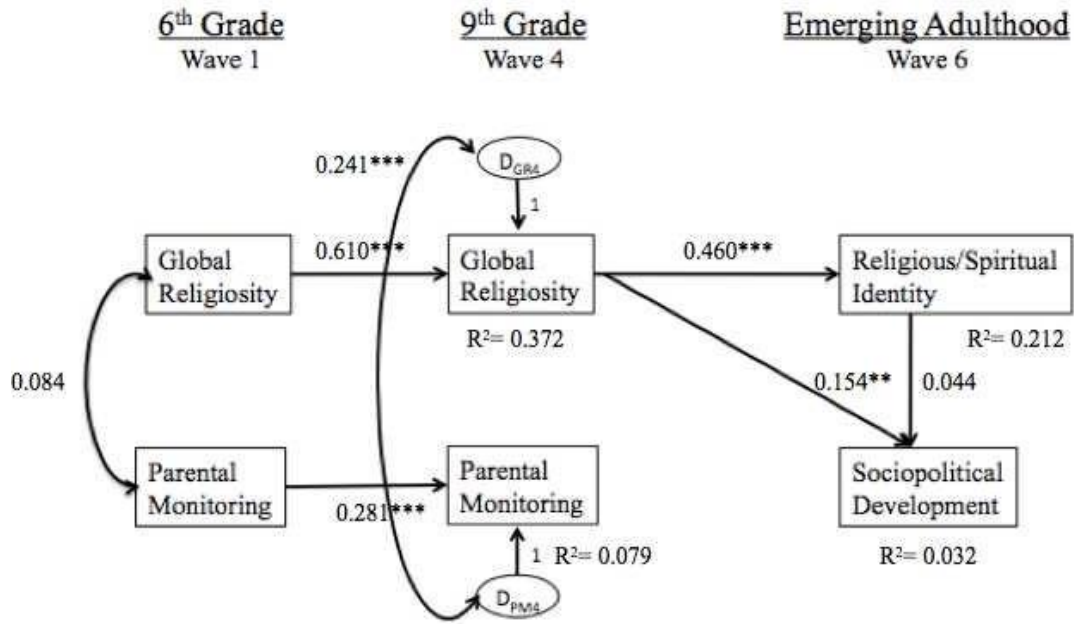


Figure 11. Continuity Model: Null Hypothesis with Parental Monitoring

Model 10: Influence of parental monitoring on global religiosity and religious and spiritual identity from wave 1 to wave 6. The fit statistics for this model were adequate (CFI = 0.928, RMSEA = 0.100, SRMR = 0.045). This path model suggests there is a significant negative relationship between the parental monitoring measure at wave 1 and global religiosity at wave 4 (see Figure 12; $\beta = -0.112$, $Z = -2.704$, $p < .01$). This model reflects the same significant stability of relationships as model 9, as well as the same relationship between sociopolitical development at wave 6 with the religious measures at wave 4 and wave 6 (see Figure 12). Results of the test of this model further indicated that two observed variables significantly covaried (see Figure 12). The developmental cascades model (see Figure 12) showed a significant improvement in model fit over the null model (see Figure 11), $\chi^2(1) = 3.939$, $p = .047$, suggesting that downstream religion effects are not independent from earlier reports of parental

monitoring, although the path estimates suggest that this relationship exists only from wave 1 to wave 4 and not wave 4 to wave 6. The model was tested for gender differences; no gender differences emerged and the path estimates did not statistically differ by gender ($\chi^2(9) = 12.539, p = .185$). The model was tested for differences in fit for White relative to all other participants; no ethnic group differences emerged and the path estimates did not statistically differ by ethnicity ($\chi^2(9) = 13.182, p = .155$).

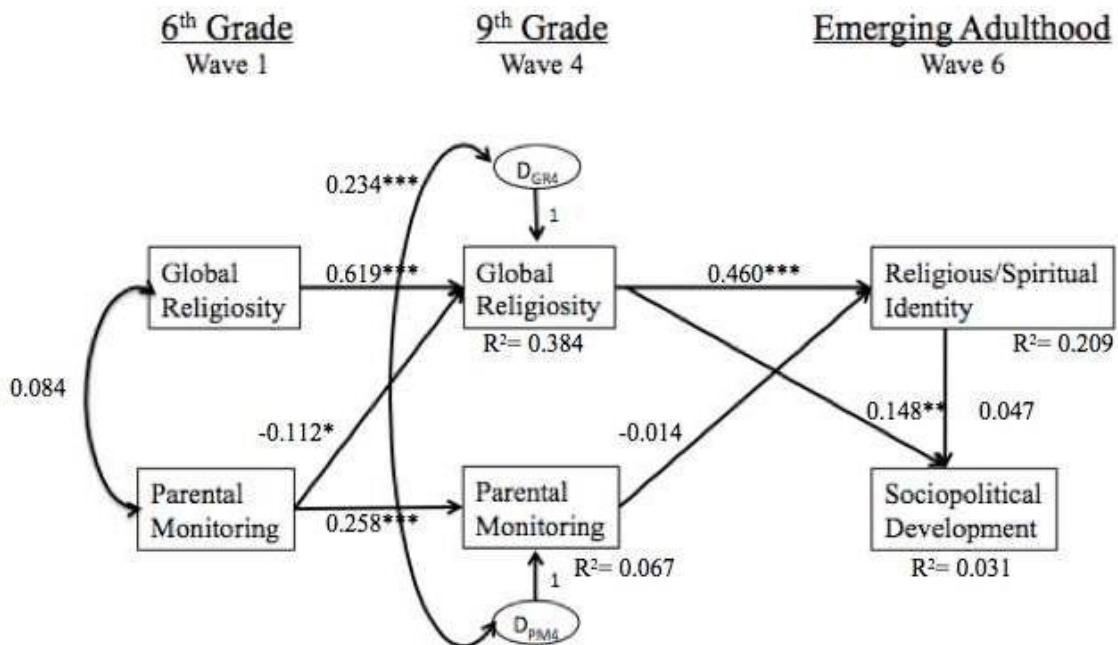


Figure 12. Early Parental Monitoring Predicts Higher Later Global Religiosity and Religious/Spiritual Identity and Sociopolitical Development

Model 11: Interactions between parental monitoring and family relationships with global religiosity and religious and spiritual identity from wave 1 to wave 6.

The fit statistics for this model are good (CFI = 0.937, RMSEA = 0.070, SRMR = 0.040).

This model reflects the same stability of relationships as Model 9 and 10, as well as the same relationships between sociopolitical development at wave 6 and the religious

measures at wave 4 and wave 6 (see Figure 13). The results of the test of the model suggest that the degree of parental monitoring at wave 1 and wave 4 did not significantly influence the relationship between wave 1 and wave 4 global religiosity, or wave 4 global religiosity and religious and spiritual identity at wave 6, respectively (see Figure 13; $\beta = -0.014$, $Z = -0.332$, $p > .05$; $\beta = -0.027$, $Z = -0.582$, $p > .05$). When the parental monitoring and global religiosity interaction parameter was added to the model, the negative relationship between wave 1 positive monitoring and wave 4 global religiosity remained significantly negative ($\beta = -0.122$, $Z = 19.331$, $p < .01$). Model variables significantly covaried (see Figure 13). The model was tested for gender differences; no gender differences emerged and the path estimates did not statistically differ by gender within the main effects of the model ($\chi^2(16) = 41.995$, $p = 0.001$). The model was tested for differences in fit for White relative to all other participants; no ethnic group differences emerged and the path estimates did not statistically differ by ethnicity in the main effects of the model ($\chi^2(16) = 67.09$, $p = 0.001$).

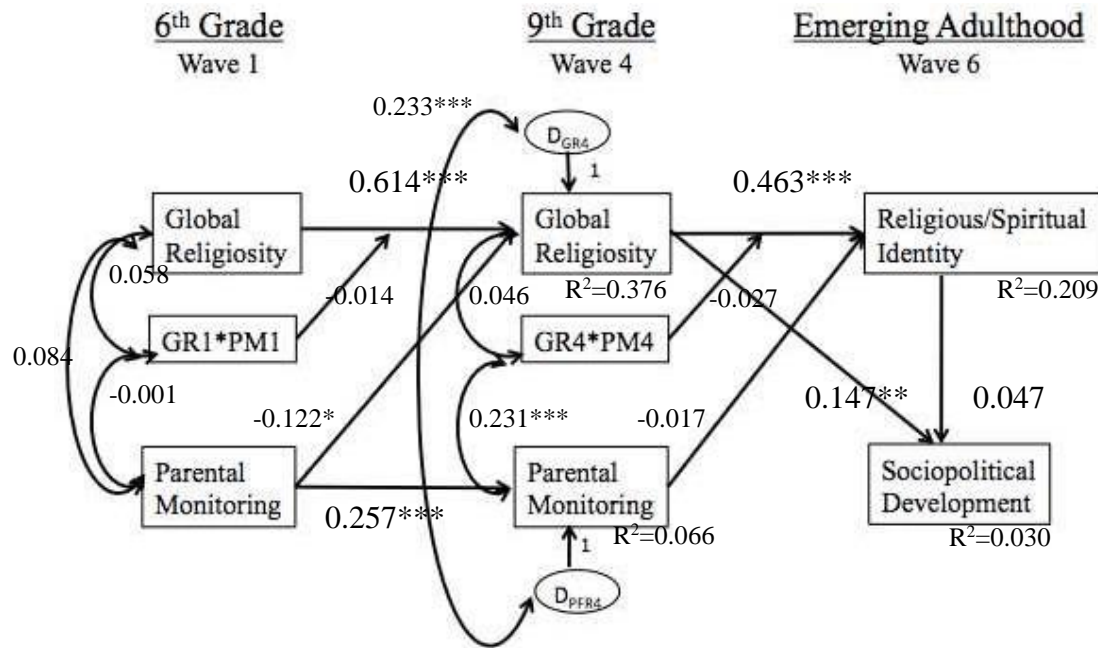


Figure 13. Early Parental Monitoring Interacts with Global Religiosity to Predict Later Global Religiosity and Religious/Spiritual Identity and Sociopolitical Development

Model 12: Influence of global religiosity and religious and spiritual identity on parental monitoring from wave 1 to wave 6. This model does not quite meet the standards for a good model fit (CFI = 0.917, RMSEA = 0.108, SRMR = 0.045), but it is very close and the model is theoretically motivated, so I analyzed it as planned rather than attempting modifications to improve fit. This path model suggests there are not significant relationships between the religious measures and the parental monitoring measures when the relationship is shifted to the inverse of Model 10 (see Figure 14; $\beta = -0.017$, $Z = -0.346$, $p > .05$). This model continues to suggest the same stability relationships as Model 13 and 14, as well as the same relationships between sociopolitical development at wave 6 and the religious measures at wave 4 and wave 6 (see Figure 14). Results of this model indicated that two observed variables significantly covaried (see

Figure 14). The inverse developmental cascades model (see Figure 14) did not show a significant improvement in model fit over the null model (see Figure 13; $\chi^2(1) = 0.119$, $p = 0.730$). In other words, modeling relationships between downstream parental monitoring effects and earlier reports of global religiosity does not significantly improve model fit over a model that allows only for continuity in each construct over time. The model was tested for gender differences; no gender differences emerged and the path estimates did not statistically differ by gender ($\chi^2(8) = 7.64$, $p = .469$). The model was tested for differences in fit for White relative to all other participants; no ethnic group differences emerged and the path estimates did not statistically differ by ethnicity ($\chi^2(8) = 12.768$, $p = .120$).

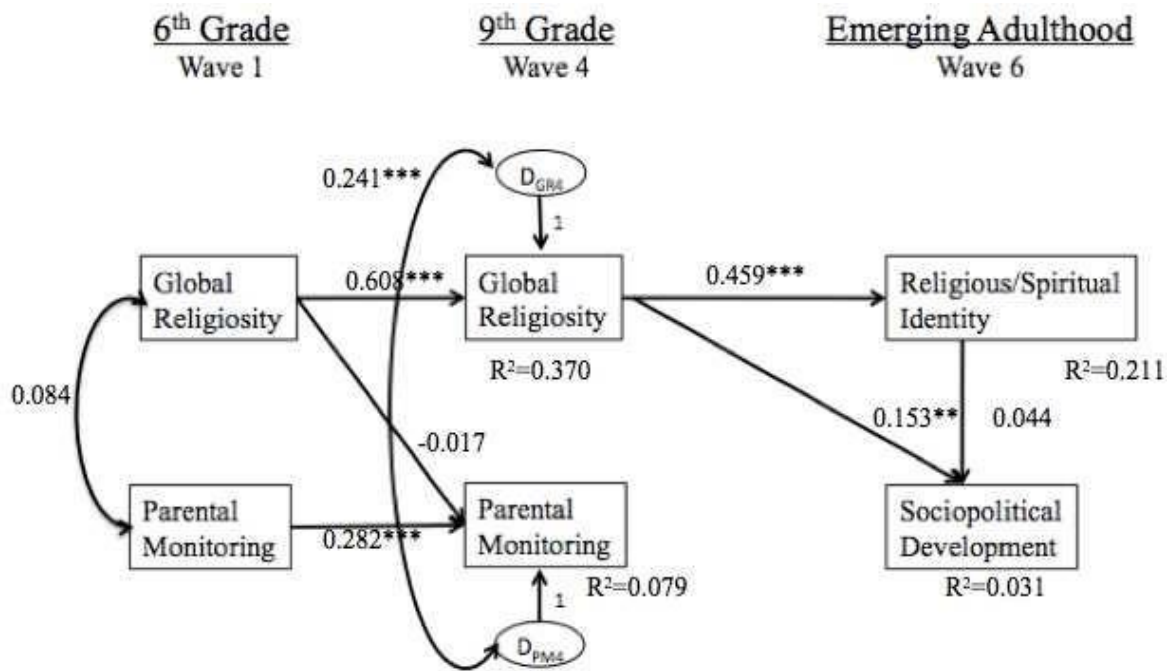


Figure 14. Early Global Religiosity Predicts Higher Later Parental Monitoring

Summary of Post Hoc Results

Results from testing the four post hoc path models suggest that there is stability in paths from wave 1 global religiosity to wave 4 global religiosity to wave 6 religious and spiritual identity. There is also stability found from wave 1 parental monitoring to wave 4 parental monitoring. There was not a wave 6 parental monitoring measure available for use in the models.

Results from post hoc testing indicate that there is a significant negative relationship between wave 1 parental monitoring and wave 4 global religiosity. This suggests that the less parental monitoring an individual has at wave 1, the more global religiosity an individual endorses at wave 4. Sociopolitical development at wave 6 shared a significantly positive relationship with global religiosity at wave 4, but not with religious and spiritual identity at wave 6. When the cascade model for parental monitoring was compared to the null model, a significant improvement was found, suggesting that the cascade model for parental monitoring is a better model fit than the corresponding null model. There were no group differences in the main effects of models 9, 10, and 12. Group differences were found in analyses of the interaction model, model 11; however, these differences were found only in the main effects of the interaction model and therefore, not interpretable (Schielzeth, 2010). Finally, when comparing the inverse model to the corresponding null model, there was not a significant improvement in model fit. Table 9 provides a summary of all the models.

Table 9

Summary Table of Models

Model	Family/Parenting Indicator	Hypothesis	Result
1	Positive family relationships	Continuity: Wave (W)1 and 4	Continuity supported.
2	Positive family relationships	Continuity: W4 and W6	Continuity supported.
3	Positive family relationships	Continuity: W1, W4, and W6	Continuity supported. Serves as null model. No significant relationships between family and religious variables.
4	Positive family relationships	Developmental Cascade: W1, W4, and W6	Continuity supported. No significant improvements in model fit. No significant relationships between family and religious variables.
5	Positive family relationships	Interactions: W1 and W4	Continuity supported. No significant interactions.
6	Positive family relationships	Interactions: W4 and W6	Continuity supported. No significant interactions.
7	Positive family relationships	Interactions: W1, W4, and W6	Continuity supported. No significant interactions. Group differences found in main effects and interactions.
8	Positive family relationships	Inverse: wave 1, 4, and 6	Continuity supported. No significant improvements in model fit. No significant relationships between family and religious variables.
9	Parental monitoring (PM)	Continuity: W1, W4, and W6	Continuity supported. Serves as null model. Significantly negative relationship between W1 PM and W4 global religiosity.
10	Parental monitoring (PM)	Developmental Cascade: W1, W4, and W6	Continuity supported. Significant improvement in model fit. Significantly negative relationship between W1 PM and W4 global religiosity.
11	Parental monitoring (PM)	Interactions: W1, W4, and W6	Continuity supported. No significant interactions. Group differences found in main effects.
12	Parental monitoring (PM)	Inverse: W1, W4, and W6	Continuity supported. No significant improvements in model fit. No significant relationships between family and religious variables.

CHAPTER IV

DISCUSSION

The purpose of the present study was three-fold. First, I examined the stability of global religiosity from 6th grade (childhood) to 9th grade (adolescence) to the emerging adult outcome of religious/spiritual identity. I also explored the influence of two different family variables on global religiosity and religious/spiritual identity in order to identify the possible role of family qualities on religiosity over time. Finally, the present study explored whether there is a relationship between global religiosity in 9th grade (adolescence) and sociopolitical development in emerging adulthood, as well as whether there is a relationship between emerging adult religious/spiritual identity and emerging adult sociopolitical development. As is typical when examining phenomena longitudinally from childhood into adulthood, I tested a developmental cascade model against a continuity only model (Masten et al., 2005). The theoretical frameworks for the present study are Bronfenbrenner's Ecological Model of Human Development (1979) and Vygotsky's Sociocultural Theory (1978). The models tested were generally informed by these theoretical frameworks and, more specifically, informed by the literature on the factors that influence religious and spiritual identity development and sociopolitical development.

Results indicated that there is stability in religiosity over time from childhood through adolescence into emerging adulthood. Positive family relationships were not directly associated with global religiosity or religious and spiritual identity. However, positive family relationships during adolescence were indirectly associated with emerging adult religious and spiritual identity by way of adolescent global religiosity for

some participants. Specifically, for male and White participants, respectively, with lower positive family relationships as adolescents, there was a stronger relationship between adolescent global religiosity and emerging adult religious/spiritual identity. Post hoc testing of the same models, replacing positive family relationships with parental monitoring, found that lower parental monitoring in childhood was associated with higher global religiosity in adolescence. This relationship did not persist from adolescence to emerging adulthood. Finally, results from the analyses suggest that there is a significant, yet small, relationship between global religiosity in adolescence and sociopolitical development in emerging adulthood. There was, however, no significant relationship between emerging adult sociopolitical development and emerging adult religious/spiritual identity. In this chapter, I discuss results in the context of current literature. I also highlight study limitations and provide research and practice implications of the findings.

Religious Stability

Results of the present study indicate that stability in global religiosity is strongest between childhood and adolescence, possibly suggesting that child to adolescent development is a particularly rich stage for the evolution of and commitment to religious belief systems. This is supported by Elkind's (1964) seminal work on age changes and the meaning of religion that was later replicated by van der Straten Wailet and Roskam (2012). Children evolve through three stages of religious meaning development during childhood (Elkind, 1964; van der Straten Wailet & Roskam, 2012). The first stage is characterized by undifferentiated religious conception (5-7 years of age) followed by a stage of concrete conception of religiosity (7-9 years of age). Finally, when the child reaches 10 years of age, they develop a sense of abstract conception of religiosity. This

abstract conception is noteworthy for the child's ability to assert an individualized belief associated with religion. The present study first surveyed children with a mean age of 11.88, suggesting that the children are in a developmental stage in which they may be developing a solidified sense of religious belief system, if pertinent. The next time point in which youth were surveyed was after the early years of adolescence at the mean age of 15.08. This period of adolescence is considered a stage of development in which religious commitment is most common (Good & Willoughby, 2008; Spika, Hood, Hunsberger, & Gorsuch, 2003). During the early years of adolescence, an individual begins to think more abstractly and complexly, and thus develop hypotheses and ideas about religious and spiritual concepts (Good & Willoughby, 2008). Furthermore, commitment to a specific set of religious beliefs is a common outcome of the religious and spiritual exploration that occurs during the beginning of adolescence. Smith and Denton (2008) found this to be true in their examination of U.S. adolescents; the researchers found that 83 percent of adolescents endorsed a religious belief system. In the context of the current literature, the present study appears to confirm previous findings on the stability of religious development from childhood to adolescence.

Results from the present study also suggest that there is stability in religiosity from adolescence to emerging adulthood; however, the relationship weakens when compared to the strength of stability found for religiosity from childhood to adolescence. This is consistent with the extant literature from Denton and colleagues (2008) who found that as an adolescent aged into the early years of emerging adulthood, public participation in religious practices once a week or more declined by 13 percent. While the early years of adolescence are commonly marked by religious and/or spiritual

commitment, adolescence is also a stage of development characterized by identity exploration and questioning (Erikson, 1968; Good & Willoughby, 2008). Identity exploration begins in adolescence and continues into emerging adulthood, a stage of development that offers even greater ambiguity and uncertainty about the future (Arnett, 2004). In the present study, the population of emerging adults was surveyed at the mean age of 20 years old. This developmental stage is often characterized as a time period of instability with an emphasis on identity change (Arnett, 2007). The developmental period spanning from adolescence into emerging adulthood may be characterized by a shift in perspectives in which once solidified religious belief systems begin to be challenged and questioned. This period of instability and exploration may help explain the weakened stability of the relationship between adolescent global religiosity and emerging adult religious and spiritual identity in the present study. It is also the case that emerging adulthood generally is characterized by increasing autonomy in choices about activities, relative to adolescence (Arnett, 2007). It is possible that the decline in religious identity and participation is a function of this greater autonomy; young adults may experience greater freedom in exploring and changing their attitudes and practices as well as a much broader range of choices available to them. As such, the present study adds to the current literature on the stability of religious development from childhood to adolescence, as well as the literature on identity exploration and uncertainty from adolescence into emerging adulthood.

Influence of Family and Parenting Indicators on Religiosity

Vygotsky's sociocultural theory (1978) suggests that parents and caregivers have a significant influence on their child's belief systems. Furthermore, family participation

in religious services and activities is greater when family relationships are more positive (Kelley, Athan, & Miller, 2007; Smith, 2005). Yet, the present study found no significant direct relationships between positive family relationships and global religiosity or religious and spiritual identity. An explanation for this finding is that there are other, potentially more salient, factors that play a role in the development and stability of religiosity over time. Specific to characteristics of the family, it may be that the family structure played a substantial role in the stability of religiosity, and this was not accounted for in the present study's analyses. Chaves (2011) found that living with two parents in a "traditional family" is strongly correlated with participation in religious services and activities (p. 52). It may be that the association between religiosity and positive family relationships is present only within the context of a two-parent household.

Bronfenbrenner (1979) suggests that social contexts, such as peer and friend relationships, influence identity formation, social development, beliefs, and values, and thus may be another factor that influences religious stability. For example, openness to discussing religiosity with peers and friends is a mediator of the development and stability of religiosity for youth (Kelley et al., 2007; Smith & Denton, 2005). The present study did not account for the impact of peer influence on global religiosity, and perhaps it would have better accounted for the development and stability of global religiosity than positive family relationships. Bronfenbrenner (1979) also suggests that cultural contexts, such as ethnic group membership, impact the development of identity, beliefs, and values. Ethnic group membership was not included as a direct effect on religiosity in the present study models, and research findings indicate that ethnic group membership predicts church attendance, especially for Latina/o and African American youth (Day et

al., 2009). Religiosity serves as a valuable coping mechanism for ethnic minority youth that experience discrimination and racism, which may make religiosity especially important for ethnic minority populations (Grant et al., 2000; O' Donnell et al., 2004; Spencer et al., 2003). Family structure, peer/friend influences, and ethnicity are factors that may contribute to the development and stability of global religiosity.

Results of model testing do suggest that there is a small moderating effect between adolescent positive family relationships and adolescent global religiosity for males and White participants. This finding suggests that male and/or White individuals with lower levels of positive family relationships in adolescence have a stronger relationship between adolescent global religiosity and emerging adult religious and spiritual identity. For these two subgroups, engagement with religious systems of belief may have provided an opportunity for developing positive relationships that may have been missing in their family of origin, and they may have continued to seek such involvement in emerging adulthood through their religious and spiritual identities. Religious and spiritual identity has been found to be associated with positive mental health, effective behavioral coping, overcoming adversity, and promoting relationships (Farley et al., 2005; Turner-Musa & Lipscomb, 2007; Wong et al., 2006). It may be the case that individuals identifying as male or White whom experience lower levels of positive family relationships in adolescence seek out religious and spiritual belief systems and communities in order to promote positive well-being and relationships with others. Developmental research has found that females tend to develop social relationships and garner emotional support from others more readily compared to males (Zhang, Gao, Fokkema, Alterman, & Liu, 2015). Furthermore, males tend to seek social support in

larger groups than females (Gabriel & Gardner, 1999). In the context of the present study, it may be that males with lower levels of positive family relationships access the large group social support typical of religious communities in order to promote social relationships that females are otherwise able to garner outside of religious communities.

The post hoc analyses did reveal that a specific parenting indicator, parental monitoring, has a direct effect on global religiosity from childhood to adolescence. Specifically, results indicate that lower levels of parental monitoring in childhood results in higher levels of global religiosity in adolescence. Parental monitoring can be defined as “parenting behaviors involving attention to and tracking of the child’s whereabouts, activities, and adaptations” (Dishion & McMahon, 1998, p. 61). Parental monitoring communicates awareness and care from a parent or caregiver to an adolescent about the child’s activities (Longmore, Manning, & Giordano, 2013). Furthermore, parental monitoring not only attends to a child’s whereabouts and behavior, but also structures child environments (Fosco, Stormshak, Dishion, & Winter, 2012). Parental monitoring has largely been explored within the context of adolescent risk behaviors (Fosco et al., 2012; Hill & Tyson, 2009; Lac & Crano, 2009; Wood, Read, Mitchell, & Brand, 2004). Parental monitoring mediates several adverse youth outcomes, including but not limited to academic success, marijuana use, and alcohol consumption behavior (Hill & Tyson, 2009; Lac & Crano, 2009; Wood et al., 2004). Fosco and colleagues (2012) suggest that parental monitoring is a mechanism that can facilitate a transition into positive contexts and divert youth from risky contexts. While extant research focuses largely on parental monitoring mitigating negative influences (Hill & Tyson, 2009; Lac & Crano, 2009), the present study results suggest that lower levels of parental monitoring share a relationship

with the positive influence of religiosity. Perhaps youth global religiosity is influenced as much by positive as by negative influences, such as lower levels of parental monitoring. Youth whom report lower levels of parental monitoring may not only have more time that is unstructured, but also might have more time in which their parents are not involved in their activities (Dishion & McMahon, 1998; Longmore et al., 2013). Perhaps participation in youth religious activities provides that support and structure. Alternatively, youth whom are more involved in religious and spiritual activities may be less monitored, because their parents trust them and/or know where they are (e.g. youth group meeting). The parent/caregiver may have “channeled” their child into religious activities due to the structured religious community and belief congruence with the parent (Vygotsky, 1978). The results of the present study suggest a relationship in which lower levels of parental monitoring in childhood are associated with higher levels of global religiosity in adolescence, but further research is needed to establish the factors that account for this empirical relationship.

Religiosity shapes an individual’s concepts of moral order while also cultivating coping skills and providing organizational ties and extra-community bonds (Smith, 2003). Given that results of the present study indicate that lower levels of parental monitoring in childhood is associated with higher levels of global religiosity in adolescence, I hypothesize that youth whom are receiving less parental monitoring from their parents or caregivers may turn to religious/spiritual system as a means of increasing structure and support from other adults. As previously described, parental monitoring involves awareness and care about the behaviors and activities of youth, while also providing a structured environment (Dishion & McMahon, 1998; Fosco et al., 2012;

Longmore et al., 2013). Religious participation provides a context in which youth have a structured environment for developing extra community bonds, or social relationships, with members of the religious community. Once social relationships are developed within the context of a religious system, these relationships may function to provide what parental monitoring typically does: awareness of behavior and care for the youth. In this case, Bronfenbrenner (1979) suggests that the religious environment acts as a social context for the individual, which influences identity formation (e.g. religious and spiritual identity). Furthermore, the sense of moral order and development of coping skills provided by religiosity may, in turn, be the mechanism that mitigates problem behavior. Religiosity mitigates risky behaviors such as substance use and cultivates higher levels of self-control and lower levels of rule-breaking for youth (Laird et al., 2011; Marsiglia et al., 2005). Alternatively, it may be that youth whom receive more parental monitoring experience less of a need for religious systems that promote awareness of behavior and structure or that highly motivated youth seek activities with less structure and monitoring.

Parental monitoring did not have a direct effect on the path from adolescent global religiosity to emerging adult religious and spiritual identity. One possible explanation for this is that the developmental period from adolescence to emerging adulthood is characterized specifically by a divergence from previously held values and beliefs, which may manifest in less reliance on systems of support or authority such as parents or religious systems (Arnett, 2004). In sum, findings do not shed light on why youth receiving less parental monitoring from their parents or caregivers are more likely to participate in religious/spiritual systems, but possibilities include that religious identity

and contexts may promote a sense of structure and supervision that parents/caregivers do not, or that youth involved in religious activities require less monitoring.

Sociopolitical Development and Religiosity

Another finding of the present study pertains to the relationship between emerging adult sociopolitical development and adolescent global religiosity, as well as emerging adult religious and spiritual identity. I predicted that both global religiosity and religious and spiritual identity would account for variance in emerging adult sociopolitical development. Results suggest that adolescent global religiosity accounts for only three percent of the variance found in emerging adult sociopolitical development. Further, emerging adult religious and spiritual identity and sociopolitical development were not related. Findings suggest that early global religiosity may have a minor influence on a developmental path for sociopolitical development in emerging adulthood.

Sociopolitical development is the growing awareness of how inequity and conditions of oppression shape one's status in society and how structural inequalities and systemic barriers constrain well-being and personal agency (Watts & Flanagan, 2007). Furthermore, sociopolitical development promotes an individual's growing confidence in their ability to impact social and political change through activism (Watts et al., 2011). Given that religious and spiritual orientations often has a strong focus on fostering a just society in response to inequity and oppression, it is not surprising that early religiosity plays a role in later sociopolitical development (Watts et al., 1999). Religious social values of the three major western religions, Islam, Christianity, and Judaism, often encourage reflection about experiences of injustice and call on religious communities to act in opposition to injustice akin to the characteristics of sociopolitical development

(Montville, 2016; Watts & Flanagan, 2007). Adolescent participants who have greater global religiosity may be more likely to consider the effects of their behavior on others or to see themselves as part of a larger community. It makes sense that this could lead to sociopolitical development. What is surprising is that this effect is not stronger. It is also of note that there is not a direct relationship between emerging adult sociopolitical development and emerging adult religious and spiritual identity. The lack of direct relationship could be explained by the reality that emerging adulthood is a period of identity instability and confusion (Arnett, 2007). While the present study provides evidence for an empirical relationship between sociopolitical development and religiosity, results indicate that adolescent global religiosity accounts for only three percent of the variance found in emerging adult sociopolitical development, suggesting that other factors play a more salient role than religiosity.

In addition to religiosity, the current literature highlights several dynamic factors that influence the evolution of sociopolitical development. The growing capacities for an individual to think critically and reflect on issues of inequity are key concepts of an individual's sociopolitical development (Watts et al., 1999). The role of critical reflection is supported by a number of intervention studies aimed at identifying the mechanisms important for the cultivation of sociopolitical development (Cabrera et al., 2014; Godfrey & Grayman, 2014; Zion, Allen, & Jean, 2015). Individual environments, social contexts, and significant life experiences provide an array of diverse circumstances that can advance sociopolitical development, particularly when connected to feelings of discontent and indignation (Watts et al., 2003; Watts & Flanagan, 2007). Additional factors found to influence sociopolitical development include school influence, parental

influence, and parental encouragements (Diemer et al., 2009). Specifically for ethnic minority youth, such as Latina/o, African American, and Asian youth, political conversations with parents predicted commitment to enact social change (Diemer, 2012). A variety of factors are important for fostering sociopolitical development. The present study indicates an empirical relationship between adolescent global religiosity and emerging adult sociopolitical development, but it is clear that the majority of the variance found in sociopolitical development is due to other factors not included in this study.

The present study utilized a longitudinal design using 12 path models to examine the stability of religiosity over time, possible relationships between family variables and religiosity, as well as possible relationships between religiosity and sociopolitical development in emerging adulthood. Data was collected beginning in childhood into emerging adulthood. Findings indicate that positive family relationships are not directly associated with global religiosity; however, did have an indirect relationship with emerging adult religious and spiritual identity for males and the White group. Parental monitoring was associated with global religiosity such that levels of parental monitoring in childhood lead to more global religiosity in adolescence. Findings also suggest that a small amount of variance in sociopolitical development is accounted for by adolescent global religiosity. The present study results suggest that global religiosity and religious and spiritual identity are two important facets of youth development.

Study Limitations

Study results and corresponding implications must be considered within the context of study limitations. These limitations are associated with sample distribution limitations. Ethnic minority youth and adults were treated as a mono-ethnic group in the

present study. All Other Ethnic Groups included children and adults whom identified as Asian American, African American, Latino, Native American, Pacific Islander, and multi-racial. Each of the ethnic minority groups has unique cultural identities and heritages. In combining the ethnic minority groups, a nuanced understanding of each ethnic identity is obscured. Additionally, All Other Ethnic Groups was more likely to be missing data. These two issues restrict interpretation of findings related to ethnic group membership (Kline, 2016).

Longitudinal path models are a useful tool for analyzing and explaining multiple causalities; however, there are limitations to this approach. Path analyses require specific assumptions about the data in addition to linearity, such as the additive nature of variables and homogeneity of variance. Next, path analysis also does not correlate each residual with a variable that precedes the model, and these preceding variables may play a pivotal role in the relationships found in the path analysis. Finally, variables are measured on an interval scale and assumed to be without error variance. Even so, path modeling provides an explanation for the relationships among variables and an important step to engage in prior to using more advanced structural equation modeling.

Of particular importance to structural equation modeling, and path modeling specifically, is strong psychometric characteristics, such as good validity and reliability scores (Kline, 2016). The measures used in the present study have good psychometric properties, but were not consistent over time. The difference in measures (global religiosity at wave 4 and religious/spiritual identity and wave 6). may explain the decrease in strength of relationship from global religiosity at wave 4 to religious and spiritual identity at 6. Along similar lines, there were different measures for positive

family relationships at wave 1 and 4 relative to wave 6. Finally, the sociopolitical development measure was a truncated version of the original measure, and use of the truncated version may have limited the interpretability of results (McWhirter & McWhirter, 2016).

Research Implications

The results of the present study indicate several future directions for child, family, and emerging adult research. Prior research indicates that sociopolitical development is a strong protective factor, yet it remains unclear how it develops. The present study examined a possible empirical connection between religiosity and sociopolitical development and found a very small relationship. There are several future directions possible regarding methodological adaptations of the present study in order to further support the present study's findings. Future investigations should examine global religiosity and religious and spiritual identity in the context of parental and family variables with more complex statistical modeling techniques. Specifically, utilizing polynomials as part of the path analysis or utilizing a growth model could account for a possible curvilinear relationship among the variables (Kline, 2016). In order to potentially improve model fit and encourage greater interpretability of findings, future researchers should use the same measures for religiosity and religious and spiritual identity at all time points in order to discern if the change in measurement was responsible for the change in religiosity over time, particularly from wave 4 to wave 6. Additionally, measuring parent religiosity with the same measure as child religiosity could be used in future investigations to examine the relationship between parent-child religious socialization in particular, which would further contextualize the findings from

the present study. To nuance the relationship between sociopolitical development and religiosity, future researchers should use the 10-item measure of sociopolitical development that was created and validated by McWhirter and McWhirter (2016). Finally, sampling equivalent numbers of participants who are members of diverse ethnic minority and religious/spiritual groups could provide a nuanced understanding of both within and between group differences for religiosity, family and parenting indicators, and sociopolitical development.

Another methodological future direction for researchers could be the use of a qualitative approach to research. Qualitative designs allow for alternative methods of analysis that value researcher reflexivity, quality of analysis, and consideration of sociopolitical contexts (Morrow, 2007). Interviews with families about their religious beliefs and practices could enrich child development research in the area of religious and spiritual identity. Thematic analysis of interview data could be used as an appropriate future approach to qualitative inquiry that would offer a concrete framework for understanding the relationships between religiosity and family, as well as sociopolitical development within the context of religiosity. Grounded theory is another qualitative approach that utilizes an individual's context-dependent responses as a means to understand a phenomenon (Creswell, Hanson, Plano Clark, & Morales, 2007). Grounded theory is a framework well suited for development of new measures that could better attend to the evolving beliefs and practices of religious and spiritual systems within family (Corbin & Strauss, 1990).

Practice Implications

The present study offers unique implications for practitioners working with children and families. Religiosity has traditionally been avoided within the context of therapeutic practice, but recent literature has focused on the need for practitioners to include religiosity and spirituality as an integral part of mental health treatment (Cornish & Wade, 2010). Practitioners would be remiss not to recognize religiosity as a potential asset and resource for individuals given that the majority of youth and adults identify with some religious or spiritual belief system in the United States (Denton et al., 2008). Furthermore, Pargament (2007) suggests that while individuals may not come to therapy because of religious or spiritual issues, the lens through which individuals view their problems and potential solutions may be rooted in their religious or spiritual belief system. The results of the present study add to this growing body of literature. Specifically, results suggest that not only is global religiosity relatively stable from childhood through adolescence into emerging adulthood, but also that it may play an important role for adolescents whom receive lower levels of parental monitoring in childhood. Religiosity, in conjunction with participation in a religious community, may provide a system for engaging with community and developing social relationships outside of the home. Connection to a religious system and community could provide youth with structure and care that may divert risky behavior in adolescence, thus serving as a possible asset for healthy development. Within the context of therapeutic practice, including consideration of religious and spiritual identity as a facet of an individual's multicultural identity could assist practitioners in highlighting these religious systems as a possible support when appropriate. The results of the present study highlight the

stability of religiosity from childhood through adolescence into emerging adulthood, as well as raising questions about the possible function of religiosity for youth receiving lower levels of parental monitoring.

Study Summary

The present study utilized a longitudinal design and an existing data set to explore the stability of religiosity over time, associations between family variables and religiosity, and connections between religiosity and sociopolitical development in emerging adulthood. The first wave of data was collected during childhood, the second in adolescence, and the final wave of data collected in emerging adulthood. I tested 12 path models aimed at examining the relationships between the family indicators of positive family relationship and parental monitoring and global religiosity, as well as religious and spiritual identity. I tested continuity and developmental cascade models, as well as inverse models in order to see if changed directionality accounted for any possible relationship. While positive family relationships did not appear to share a direct relationship with global religiosity, it shared an indirect relationship with religious and spiritual identity in emerging adulthood for the male group and the White group. Additionally, the indicator of parental monitoring did share a direct relationship with global religiosity. More specifically, the results of this study indicated that lower levels of parental monitoring in childhood lead to more global religiosity in adolescence. Most notably, the current study is the first examination of the empirical relationship between sociopolitical development and religiosity, and results indicate that a small amount of variance in sociopolitical development is accounted for by adolescent global religiosity.

Taken together, the results of the present study suggest the importance of global religiosity and religious and spiritual identity over time in the lives of young people.

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