RELIGIOUS SOCIALIZATION OF MALTREATED YOUTH AND THE IMPACT OF RELIGIOSITY ON THEIR DELINQUENCY

BY

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DISSECTATION

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ABSTRACT

Maltreated adolescents are more likely to experience negative outcomes, including physical and mental health problems, poor academic progress, and increased risk behavior. Although it is important to reduce risk factors for these adolescents, many risk factors may be difficult to modify or change. Another method of decreasing negative outcomes for child welfare involved adolescents is to increase the promotive factors, the factors that buffer or moderate the effect of risks; religion is one of the factors that support resiliency by providing social and material support as well as coping mechanisms and meaning making.

Religion was an important factor in the history and development of child welfare, and although its importance has been obscured over time it remains an influence today. Two common child welfare goals, cultural continuity and child well-being, both address the topic of religion. Each goal acknowledges the promotive and protective factors that can come with religious affiliation without being prescriptive about any specific faith or tradition. Religious participation can provide maltreated youth valuable social networks with peers and adults, moral directives, and coping strategies (e.g., prayer, forgiveness, meditation). These protective factors are especially important for youth who experience fractured relationships and traumatic life events. Religious affiliation can provide similar types of support for caregivers. However, when youth and parents do not share religious affiliations, the heteronomy (dissimilarity) can be a source of stress.

This research builds on previous research about adolescent religiosity by focusing on a particularly high risk population, maltreated youth. There were two areas of investigation of the role of religiosity for maltreated adolescents: religious socialization and influence of religiosity on delinquency. The first major finding in this dissertation is that caregivers are a primary
influence on their adolescent’s religiosity including 1) attendance at religious services and 2) how salient or important religion is for the adolescent. Weekly attendance of parents investigated for maltreatment and the weekly attendance of foster caregivers substantially increased the odds of youth attending weekly. Caregiver demographics and youth who had attended services with the caregiver in the past month increased the odds that youth report that religion is very important. The second major finding is that the religiosities of both maltreated youth and their caregivers are related to a decrease in the odds that maltreated adolescents were delinquent. This finding replicated previous research with the general population, in which religious commitments have been found to protect youth from risk behaviors. The positive effects of religious measures on youth outcomes and the fact that religiosity is something that maltreated youth and foster parents already experience has implications for supporting religious development of youth and considering religious matching at placement.
To Dan

I aspire to be as generous as you have been to me.
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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF TABLES</td>
<td>viii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>ix</td>
</tr>
<tr>
<td>LIST OF ABBREVIATIONS</td>
<td>x</td>
</tr>
<tr>
<td>CHAPTER 1: INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>CHAPTER 2: THE CONSTRUCT OF RELIGION</td>
<td>14</td>
</tr>
<tr>
<td>CHAPTER 3: LITERATURE REVIEW</td>
<td>33</td>
</tr>
<tr>
<td>CHAPTER 4: METHODS</td>
<td>50</td>
</tr>
<tr>
<td>CHAPTER 5: RESULTS</td>
<td>63</td>
</tr>
<tr>
<td>CHAPTER 6: DISCUSSION</td>
<td>93</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>113</td>
</tr>
<tr>
<td>APPENDIX A: GLOSSARY</td>
<td>126</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table 1: List of Delinquent Acts and Categories of Severity ........................................... 54
Table 2: Demographics of Sample at Wave 1 (includes all cases) ..................................... 64
Table 3: Patterns of Missing Variables for Delinquency ..................................................... 66
Table 4: Religious Measures at Wave 1 and Wave 2 ......................................................... 68
Table 5: Wave 1 Delinquency Subscales ............................................................................. 71
Table 6: Wave 1 and Wave 2 Delinquency Categories ....................................................... 71
Table 7: Mean Scores on Parent-Child Relationship Scale ................................................ 73
Table 8: Mean Scores on Deviant Peer Affiliation Scale .................................................... 74
Table 9: The Mean Scores on the Parental Monitoring Scale ............................................ 75
Table 10: Predictors of Adolescents Weekly Religious Attendance .................................. 76
Table 11: Change in Weekly Attendance between Wave 1 and Wave .............................. 77
Table 12: Odds Ratios for Decreases in Attendance by Movement ................................... 80
Table 13: Predictors of Adolescents Importance ............................................................... 82
Table 14: Predictors of Adolescents Delinquency ............................................................... 86
Table 15: Odds Ratio for All Types of Parent Races .......................................................... 90
Table 16: Odds Ratio for All Types of Abuse Contrasted ................................................ 91
Table 17: Change in Delinquency between Wave 1 and Wave 2 ................................... 92
LIST OF FIGURES

Figure 1: The Influence of Religiosity on Adolescent Outcomes with Mediators .................. 37

Figure 2: Maltreated Adolescent, Biological Parent, and Foster Parent Religiosity Effects on Adolescent Outcomes .................................................................................. 43

Figure 3: Caregiver Religious Attendance Conditional on Placement Setting ...................... 69

Figure 4: Adolescents’ Religious Attendance Conditional on Caregivers’ Religious Attendance ........................................................................................................... 69

Figure 5: Delinquency Categories at Wave 2 Conditional on Delinquency Categories at Wave 1 ........................................................................................................... 72

Figure 6: Percent of Adolescents Who Were Delinquent Conditional on Age .................... 72

Figure 7: Wave 1 Weighted Percentage of Deviant Peer Score .............................................. 74

Figure 8: Proportion of Adolescents Attending Weekly at Wave 1 and Wave 2 Conditional on Movement Type .................................................................................. 79

Figure 9: Proportion of Adolescents with Very High Religious Importance at Wave 1 and Wave 2 Conditional on Movement Type ......................................................... 83

Figure 10: Category of Delinquency Conditional on Religious Importance .......................... 84

Figure 11: Mediation Relationship ....................................................................................... 89
LIST OF ABBREVIATIONS

BIO-Biological or adoptive parents who retained custody of their youth after investigation (note the maltreatment may or may not have been indicated)

CPS- Child Protective Services

CFSR- Children and Family Services Review

DHHS- Department of Health and Human Services

GUF – General Use Release of NSCAW data

IRB- Institutional Review Board

KIN- Kinship foster placement

LGBTQ- Lesbian, Gay, Bisexual, Transgendered, or Queer

NDACAN- National Data Archive on Child Abuse and Neglect

NSCAW- National Survey of Child and Adolescent Wellbeing

PSU- Primary Sampling Units

S/R- Spirituality and religion

RUF- Restricted Use Release of NSCAW data

TFC-Traditional foster placement
CHAPTER 1: INTRODUCTION

The instinct to care for children comes from deep within the teachings and spiritual vision of all religious tradition, which motivates people of faith to make the commitment to take practical actions for children.


Consider two cases. The first is a mother investigated for neglect who does not attend religious services but allows her daughter to attend the neighborhood church each Sunday with a friend. At this church, the girl connects to prosocial peers and adult mentors who provide social and material support. In this case church is a promotive factor that helps compensate for the risk factors that the child experiences. In the second case, a foster youth is placed in a conservative Christian home that has very different expectations about behaviors than his family of origin. For example in his foster family children are not allowed to wear shorts, even in the summer. The foster parent expectations about behavior are based on theological beliefs that the adolescent and his birth parents do not share. These conflicting values are a strong source of conflict in the foster family, adding additional stress. The adolescent rebels, connects to deviant peers, and becomes increasingly delinquent. As these examples illustrate, practical issues concerning religion are present for children and families in child welfare; yet religion is rarely considered in child welfare research and training. The goal of this dissertation is to begin to empirically address the impact that religious measures have on maltreated youth.

Religion, which includes spirituality as defined in Chapter 2, needs to be considered in child welfare for many reasons. First, both foster children and foster parents claim that religion is important. Adolescents in foster care have claimed that religion provides emotional, spiritual and social support (Dilorenzo & Nix-Early, 2004; Haight, Finet, Bamba, and Helton, 2009; Wilson, 2004). Foster parents report that faith is a characteristic that promotes successful parenting
(Buehler, Cox & Cuddeback, 2003; Coakley, Cuddeback, Buehler & Cox, 2007). Additionally, foster parents are more religious than people in the general population (Schreiber, 2009).

Second, there is also an emerging body of scholarship that indicates that increased religiosity is correlated with improved outcomes for adolescents in the general population. Improved outcomes include decreased psychopathology (Dew, Daniel, Armstrong, Goldston, Tripplett, & Koenig, 2008), decreased behavioral problems, including decreased delinquency, delayed sexual behavior, lessened substance use (Caputo, 2004; Hardy & Raffaelli, 2003; Pearce, Jones, Schwab-Stone & Ruchkin, 2003; Regnerus, 2003); decreased conflict in families (Mahoney, 2005; Pearce & Axinn, 1998); and higher levels of education (Caputo). The relationship between religiosity (either parent’s or child’s) and improved outcomes has been shown to mitigate some of the negative effects faced by disadvantaged youth, which include exposure to crime, exposure to violence, neighborhood disorder, stress and other psychological problems (Cook, 2000; Hill, Burdette, Regnerus & Angel, 2008; Office of Health Policy, 2009; Johnson, Li, Larson & McCullough, 2000; Pearce, et al., 2003; Sullivan, 2008). Since foster youth share many of these poor outcomes and disadvantaged contexts, these studies are particularly relevant. Since the goal of child welfare is to protect children and strengthen families we must be more attentive to impact that religiosity has on impacting negative outcomes.

Finally, religious issues need to be studied in child welfare, because although there are generally positive effects of religiosity on adolescent well-being, some types of religiously motivated behaviors have been damaging to youth. In extreme cases this can include religiously based maltreatment, religious rationalization of maltreatment, or violations of human rights such as forced marriage (Kvarfordt, 2010). Cultural discontinuity can occur when religious issues are ignored in placement decisions, such as placing a Muslim child in a Christian foster home.
Recently, issues related to some religious child welfare institutions discriminating against Lesbian, Gay, Bisexual and Transgendered (LGBT) youth and caregivers have been prevalent in news in a variety of states including Illinois and Virginia (Erbentraut, 2009; Wetzstein, 2011).

The lack of research on the role of religion in child welfare occurs in a broader context of pervasive and persistent religious beliefs and practices in the United States. Americans are religious; 92% report that they believe in the existence of God and nearly 40% report that they go to a religious service at least once a week (Pew Forum on Religion and Public Life, 2008). For some populations, including women, minorities, and the elderly, the percentages are even higher. The American context remains predominantly Christian (including 51.3 % Protestant and 23.9 % Catholic). Five percent of Americans are affiliated with other faiths, including the 1.7% of Americans who are Jewish. Although 16.1% of Americans are unaffiliated with any religion, 70% of the unaffiliated say they believe in God, and over 40% of the unaffiliated say that religion is at least somewhat important in their lives. However, religion and spirituality are less central and important to psychologists, social workers and other health-related researchers than to the public as a whole (Bergin, 1991; Sheridan, Bullis, Adcock, Berlin & Miller, 1992). This disparity is, perhaps, one reason that there has been less research on understanding the role of religion in social issues.

Religion was an important factor in the history and development of child welfare, and although its importance has been obscured over time it remains an influence today. The Social Gospel movement provided theological support for caring for youth during the Progressive Era and the child welfare institutions established during this time, including orphanages were religiously based. Many of these institutions evolved into private agencies that are currently subcontractors for public child welfare services (e.g. Lutheran Social Services and Jewish Social
Services). Religious influences extend beyond these faith-based institutions, because religious values and motivations occur at the individual level for workers and clients, even in secular child welfare settings. The importance of religious values and the conflicts that can result from different perspectives on religious and secular values is evident in the legal system. Recent court decisions that address foster families’ and foster children’s religious rights and responsibilities, help clarify the complex relationship between government, families and religion. These legal issues are explored in Chapter 2.

In spite of the centrality of religion for many people and institutions, the effects of religion are rarely included in child welfare research, even though other cultural factors are central (such as race, language or ethnicity). The failure to address religion in child welfare has implications at both the system level (policy) around issues such as placement decisions and the practice level such as how to support a child who is grieving. This dissertation begins to fill in this large gap in the literature by addressing two related issues, the effects of maltreatment on religious socialization of adolescents and the influence of caregiver and adolescent religiosity on delinquency.

Religious socialization is defined as the influence of social agents (including parents) on an individual’s religious beliefs and understandings. The first focus of this dissertation is on the effects of maltreatment on religious socialization. Maltreated youth may be less likely to share the religious perspective of their parents due to poor parent child relationships. Youth in foster care have experienced disruption along with maltreatment which may add another negative impact on their religious socialization. The second focus of the dissertation is on the impact of religiosity on adolescent outcomes, specifically delinquency. Previous research has shown that religiosity is particularly helpful mediating the negative outcomes for disadvantaged youth;
however, the positive effects of religion are negated when parents and youth have dissimilar religion. There are several related but often unconnected strands of research that need to be considered in concert in order to adequately frame the issue: 1) adolescence as a developmental period and the effects of maltreatment during this stage of development, 2) the effect of maltreatment on religious socialization, 3) the effect of maltreatment on delinquency, 4) the effect of both parental and youth religiosity on delinquency, and finally, 5) the effect of maltreated youth religiosity on delinquency. I will present each of these briefly here in the introduction and revisit them in more detail in the literature section.

Adolescence

The focus of this study is maltreated adolescents because adolescence is a critical time for both religious socialization and for delinquent behaviors. Adolescence is the transitional period between the onset of puberty and adulthood (which occurs legally at age 18 in the United States). Risk-taking and reward-seeking both increase at the onset of puberty, primarily due to changes in the limbic system. This occurs before the development of the prefrontal cortex- the center of their decision making, judgment, and impulse control systems. During adolescence, there appears to be substantial “remodeling” of the brain, particularly in the prefrontal cortex (Steinberg, 2008). Before this fully develops, adolescents rely more on the limbic system, which controls emotions (Jim Casey Youth Opportunities Initiative, 2011b). This may explain why adolescence is a period when youth crave novelty, reward and stimulation leading them to increased experimentation with risky behaviors. During this time of shifting biological influences, adolescents have several developmental tasks including establishing an identity, emotional and psychological independence, and vocational goals, as well as learning to manage
sexuality and sexual identity, adopting a personal value system and developing impulse control and behavioral maturity (Jim Casey Youth Opportunities Initiative, 2011b).

Spirituality and religiosity can be helpful sources of identity formation and development for adolescents (King, 2003). Religious supports, including faith communities and personal spirituality can be supports to adolescents during this intense period of ideological seeking, striving for meaning and desire for relationships and connectedness (Jeong & Canda, 2010). Adolescence is also a prime time for religious or spiritual change and development as a result of the confluence of these dramatic biological, psychological, social, and economic changes (Pearce & Denton, 2011, Regnerus & Uecker, 2006).

When family and community supports are inconsistent, neglectful, or abusive it negatively impacts adolescent development. Adolescents may experience the lingering effects of maltreatment that occurred to them in childhood, maltreatment that began in adolescence, or maltreatment that began in childhood and continued into adolescence. Whether a child experiences brief or chronic maltreatment, there can be both immediate and long term effects on brain development, especially in the areas of social, psychological and cognitive development (Jim Casey Youth Opportunities Initiative, 2011b). Maltreatment has also been found to negatively affect other domains of competence including physical, behavioral, and emotional (Afifi & MacMillan, 2011). Walker and colleagues (2009) did a review of the literature on adult survivors of child abuse and reported that the majority of studies found that experiencing maltreatment also negatively impacted religious development.

The effect of experiencing maltreatment on religious socialization

Parents are strongly influential of their child’s religious development (Myers, 1996; Smith & Denton, 2005). Religious socialization has been tied to parental religiosity (Regnerus,
Smith, & Smith, 2004), strong parent/child relationship (Smith & Denton, 2005), and high family satisfaction (Regnerus et al., 2004). Although many social scientists have been studying adolescent religiosity (e.g. Pearce & Denton, 2011; Pearce & Thorton, 2007; Regnerus, et al., 2004; Regnerus & Uecker, 2006; Smith & Denton, 2005; Smith & Snell, 2009) only a few have looked at the religiosity of maltreated adolescents (Kim, 2008; Kim, McCullough, Cicchetti, 2009; Scott, Munson, McMillen, & Ollie, 2006).

Two factors may influence the religious socialization of foster youth: the actual experience of being maltreated by a parent and the displacement that comes from moving from one home to another. Youth who are removed from their families experience relationship and community disruptions, possibly including religious connections, which could also affect their religious development. While removing children from biological homes will decrease the biological parents’ impact on their child’s religious development, foster parents provide a new source of religious influence. Of course, the strength of the foster parents’ influence on the religiosity of the child could depend on a variety of factors, such as the age of the child when they were placed in foster care, the length of time in care, and how much religious congruence there is between the foster family’s faith and the biological family’s faith. These types of factors are worthy of being explored in future research.

**The effect of experiencing maltreatment on delinquency**

Decades of research show that many factors including types of abuse, the developmental stage or stages, persistence of maltreatment, the youth’s characteristics and their environment all affect whether adolescents develop behavior problems, including delinquency, substance use, and interpersonal violence. Many studies have shown a consistent relationship between maltreatment and delinquency (Bender, Postlethwait, Thompson, & Springer, 2011; Kim, 2008;
Smith & Thornberry, 1995; Trickett, Negriff, Ji, & Peckins, 2011; Yun, Ball, & Lim, 2010). For example, Ryan and Testa (2005) found that delinquency rates were 47% greater for children with substantiated maltreatment. Specific types of abuse have been found to be correlated with maltreatment. For example, Widom (1989) found that physical abuse is related to later violence guided by the understanding of “the cycle of violence.” Other researchers have found that neglect and sexual abuse are related to delinquency (Smith & Thornberry, 1995; Yun, et al., 2010). Conversely, other researchers have not found specific types of maltreatment to be correlated with delinquency (e.g. Ryan & Testa, 2005). Another measure of maltreatment is substantiation, sometimes called indication, which assesses that there was sufficient evidence to conclude that the child has been maltreated (signaling harm or risk of harm and evidence of abuse or neglect). Ryan and Testa (2005) found that children whose maltreatment has been substantiated averaged 47% higher delinquency rates relative to children who did not have substantiated reports of neglect. When appraising research on maltreatment it is important to remember that victims of maltreatment are more likely to experience social problems such as poverty, family violence and substance issues, which are also correlated with negative outcomes. In addition, not all maltreated youth exhibit delinquent behavior and youth without a history of maltreatment are delinquent, suggesting a more complex mechanism and possible moderating factors.

Several factors have been found to affect the impact that maltreatment has on delinquency. First, placement in foster care and particularly instability in placement increases a child’s risk for delinquency (Ryan & Testa, 2005). Second, males have been more likely to be delinquent in the general population (Yun et al., 2010); although it appears that the gender effect is less prominent in a child welfare population. Ryan and Testa, (2005) found delinquency rates
were different for maltreated youth based on gender, but other researchers did not find these gender differences (Postlethwait, Barth, & Guo, 2010). Third, an interaction between race and placement has been found to be related to adolescent delinquency. White and black males in kinship foster homes have a higher rate of delinquency when compared to youth in traditional foster homes, whereas there is a decrease of delinquency for Hispanic males and females in kinship foster homes (Ryan, Hong, Herz, & Hernandez, 2010). Fourth, internalizing symptoms mediate the effects that maltreatment has on delinquency (Bender, et al., 2011). Finally, other factors have also mediated or moderated the effect of maltreatment including antisocial peers, family relationships and school climate (Trickett, et. al, 2011).

**The effect of parent and youth religiosity on delinquency**

Several meta-analyses have found a small but reliable inverse relationship between religiosity and destructive and delinquent behavior among adolescents (Baier & Wright, 2001; Cheung & Yeung, 2011; Johnson et al., 2000). Although specific studies have not found religious influences on delinquency (e.g. Cretacci, 2003) the majority of studies have found that increased religiosity decreases delinquency. For example, Johnson and colleagues (2000) found that adolescent religiosity was negatively correlated with their association with delinquent peers and their engagement in delinquent behaviors after controlling for sociodemographic backgrounds. In addition, when youth experience risk factors such as exposure to violence, some studies have found that religiosity moderates the negative effect of these risk factors to improve outcomes like conduct disorders (Pearce, et al., 2003).

Parent and family religiosity has also been found to influence youth delinquency because it shapes family ideologies (Pearce & Thorton, 2007). Smith (2003b) suggests that parental religious participation increases parental moral expectations and supervision of youth which
decreases youth delinquency. It is also possible that parent religiosity affects youth outcomes indirectly. For example, Regnerus (2003) found the influence of parent religious attendance on youths’ delinquency was mediated by the youths’ religious attendance.

The effect of religious heteronomy between parent and youth on youth delinquency has been explored in a few studies. Pearce and Haynie (2004) reported that if a child is very religious and his/her parent is not, or a parent is religious and the child is not, there will also be opportunity for disagreement and that will lessen the protective power of religiosity on the child’s delinquency. “Given the centrality of child rearing to many religious orientations, clashes between parents and children may take on additional meaning when either party refuses to accept religiously based guidelines” (Mahoney, 2005, p. 699).

Several theories have been used to explain the effect of religion on delinquency. The classical theorists of religion (Durkheim, 1951; Weber, 1958) stressed the social control function of religion. Social control theory states that in order to overcome the intrinsic desire to be delinquent, youth must be socialized to societal standards using attachment, commitment, involvement and belief (Wiatrowski, Griswold, & Roberts, 1981). It is one of the most tested theories in criminological inquiry (Greenberg, 1999). General strain theory explains delinquency as a response to stresses in life to which youth respond with delinquent acts, sometimes mediated by strong negative emotions such as anger (Agnew, Brezina, Wright, & Cullen, 2002). Religious involvement and salience provide social and coping skills that help reduce, avoid and/or overcome strain. Recent research has included additional theories. McCullough and Willoughby (2009) suggest that religiosity is inversely correlated with delinquency because religious activities and participation increase self-control, goals (selection, pursuit, and management), and
possibly *self-monitoring*. They describe the effect of religious rituals and the effect of performing these rituals on brain development tied to self-regulation.

**Maltreated youth religiosity and delinquency**

Religious socialization may decrease for children who have been maltreated by their biological parents, and foster parents may add a new source of religious influence. There have been no nationally representative studies of the religious participation of youth, biological parents and foster parents. Consequently, documenting religious participation for these groups is important. The second goal of this study is to look at the religious socialization of maltreated youth. Does the religious attendance of maltreating parents’ impact the religious attendance of foster youth? Does foster parent religious attendance impact the youth in their care? Are there differences in the influences between the religious influences of these two groups of caregivers?

As the literature reviewed earlier in this chapter shows, maltreated youth are more likely to be delinquent and religious youth are less likely to be delinquent. What is the effect of religiosity on maltreated youth’s delinquency? Caregivers’ religiosity also affects youth delinquency in the general population. Does the religious participation of caregivers (either biological or foster) correlate with maltreated youths’ delinquency and if so, is that relationship mediated by youth religiosity? Finally is religious similarity between youth and caregiver correlated with delinquency?

Concerns about religious socialization and the impact of youth, caregiver and matching religiosity are the focus of this dissertation. This can be summarized in two research questions:

1. Religious socialization: Does caregiver religious attendance impact maltreated youth religiosity (religious attendance and religious importance)?
2. Religious Impact: Does caregiver and/or youth religiosity or religious matching impact maltreated adolescents’ delinquency?

Organization of the dissertation

Having introduced the problems to be addressed by this study in this chapter, in Chapter 2, I will describe the construct of religion. First, I will define some of the main terms used in religious research including religion and spirituality, two broad and overlapping concepts that have been defined differently in different silos of the academy. Since I attempt to bridge social work, religious studies, and the sociology of religion, it is imperative to start with clear definitions of these terms. The next section of the chapter will address how religion is operationalized and measured in quantitative research. Theories of religious socialization will be presented. I will address legal and system issues about the role of religion in child welfare and finally address professional and ethical issues for social workers and child welfare workers about issues of religion.

In Chapter 3, I present the empirical research that supports this study. First, I explore the literature about religious socialization. I will then review the literature using a framework that I have developed which lays out how youth religiosity, parent religiosity and youth and parent matching religiosity have influenced youth outcomes, especially delinquency in the general population. A second framework adds the experiences of youth maltreatment and addition of foster parent influences. The limited literature around the religious effects of religiosity on maltreated youth will be reviewed and organized around this framework.

In Chapter 4, I describe the methods employed in this study. This research is secondary analysis of NSCAW II, the second round of the National Survey of Child and Adolescent Wellbeing. I present the sample and participant selection process and describe the missing data. I
include a description of the assessments and measures that were used for the demographic, religious, and delinquency measures. I also include a detailed description of three scales that I proposed as potential mediators: the deviant peer scale, the parental monitoring scale, and the parent child relationship scale. I conclude with a description of the analyses that includes bivariate, multiple logistic regression, and longitudinal methods.

In Chapter 5, I present the results of the study. First I show the demographic variances of the subjects included in the analyses. The next section focuses on religious socialization. It includes bivariate analysis, logistic regression and longitudinal analysis. The results conclude with religious and demographic influences on delinquency, including bivariate relationships and logistic regression. In the logistic regression several mediator scales are included.

In Chapter 6, I include a discussion of the results and conclusions that can be drawn from them. Implications for policy, practice, and education are also explored. The limitations of this study are explained and future research is proposed. This chapter is followed by a list of references. Appendix A is a glossary of terms used in this dissertation. This glossary is to help the readers from different disciplines be able to access concepts that may be unfamiliar.
CHAPTER 2: THE CONSTRUCT OF RELIGION

Religion is a complex and multilayered construct and since it has been addressed rarely in child welfare literature, it is important to take the time to clarify some of the common issues that are central to the role of religion in child welfare. In the first part of this chapter I will describe religion and spirituality and the relationship between them. Then I will present methods that have been used to measure and operationalize religion. There are several important theories of religion that are presented in the next section. In order to address religion in child welfare settings it is important to understand the legal impact of religiosity in government settings and at the end of this chapter, I will briefly address legal issues.

Religion and spirituality

Along with the rise of secularism in the latter half of the 20th century, there was also a growing disillusionment with religious institutions in western society (Hill, et al. 2000). As issues of religion became less connected to culture and norms, religion became an increasingly private facet of people’s lives, consistent with the individualistic values of our culture. Initially there was little separation between the spiritual and religious. The evolution and severing of meanings of the terms religious and spiritual has a surprisingly short history (Sheldrake, 1992).

Definitions of religion and spirituality as separate constructs. Defining religion and spirituality remain challenging and elusive, because although they are commonly used terms, they are multilevel constructs crossing biological, mental and social levels of analysis. In addition, operative definitions of religiousness and spirituality differ across disciplines and between researchers (Hall, Meador, Koenig, 2008). In social work a lot of attention has focused on differentiating spirituality and religion; the separation of the two concepts has been comprehensively discussed previously (Hill & Pargament, 2003; Hill, et al., 2000). Canda and
Furman have been leaders in the discussion of religion and spirituality in social work. In their first edition of *Spiritual Diversity in Social Work Practice* (1999) they state that *spirituality* involves “the search for meaning, purpose and morally fulfilling relations with self, other people, the encompassing universe and ultimate reality, however a person understands it” (p. 316), whereas *religion* is “an organized, structured set of beliefs and practices shared by a community, related to spirituality” (p. 316). The concepts are related but not congruent. People can be religious, spiritual, both, or neither. These definitions are consistent with the emerging understanding that spirituality is associated with an individual, personal quest for meaning, happiness and wisdom (Hill et al., 2000). Religion is more associated with a sociocultural-historical system (King & Roeser, 2009; Zinnbauer & Pargament, 2005). Koenig, a leader in research on the connections between religion (including spirituality) and health, has another way to conceptualize the relationship (Koenig, McCullough, & Larson, 2001). He claims that the some types of spiritualties are “moored’ (tied to a formal religious tradition) and others are “unmoored.” For example, humanist spirituality would be unmoored.

Social scientists have focused on spirituality partially as a response to the increases in cultural, ethnic and religious diversity in America. Spirituality is often used as an inclusive term that spans the wide range of religious and nonreligious but spiritual perspectives. In this framework, spirituality is presented as an overarching umbrella that covers all types of perspectives, whereas religious perspectives are often perceived as exclusivist or particular. Another motivation to focus on spirituality is to avoid the negative stereotypes of organized religion that are dominant in some social science literature (Hill & Pargament, 2003). An additional benefit to focusing on spirituality is that it is associated with an individual quest
consistent with the individualistic values of our culture. For these reasons social workers often focus on spirituality rather than religious constructs.

Other social workers argue against the evolving definitions and bifurcations, which set up a dichotomy that religion is bad and spirituality is good (Hill et. al, 2000; Pargament, 1999; Hill & Pargament, 2003). The rejection of social works’ focus on spirituality (rather than religion) has been presented most strongly by Wong and Vinsky, who suggest that there is invisible Euro-Christian ethnocentrism and individualism which underlies the focus on unmoored spirituality. They destabilize the assumption that spirituality is non-sectarian and inclusive and go on to call it ‘colonial othering and further marginalization of racialized ethnic groups who are more often represented as ‘religious’” (Wong & Vinsky, 2009).

**Benefits of combining religion and spirituality conceptually.** Although there is distinctiveness between the concepts of religion and spirituality, failure to integrate the two constructs may inaccurately reflect each (Good & Willoughby, 2007). Pargament (1999) states that 1) virtually all religions are interested in matters spiritual and, 2) every form of religiousness and spirituality occurs in some type of social context. In addition, a wide range of empirical research supports the large amount of overlap between spirituality and religion. For example, Hill and Pargament (2003) found that most Americans view the terms as interchangeable and practice spirituality in the context of organized religion. Zinnbauer and colleagues (1997) surveyed a wide range of religiously and non-religiously affiliated adults and found that 74% identified as both religious and spiritual. The majority of religious professionals (83%) thought that there was overlap between the concepts of religion and spirituality with 17% (mostly Imams) stating that the concepts overlapped completely (Hyman & Handal, 2006).
Both religion and spirituality are focused on the search for the sacred. This search for the sacred is also what distinguishes them from other phenomena. Based on this common focus, several recent articles have suggested a combination rather than disassociation between spirituality and religion. Mahoney (2010) stated that “spirituality is a unique objective of both personal and institutional forms of religion” (p. 810), but only religious institutions promote spirituality as a central goal. In another example, DeHaan and colleagues (2011) propose an encompassing conceptualization of spirituality/religion (S/R), “that S/R is an active personal devotion and passionate quest largely within the self-acknowledged framework of sacred theological community” (p. 193). In both of the frameworks religion include both these search for sacred and the search for relationships.

Because of the benefits listed above I will combine the concepts of religion and spirituality in this dissertation. I will use the term religion, not in opposition to spiritual but as an overarching term that is inclusive of both concepts. I have chosen to use the language of religiousness and religion over the less clear S/R or cumbersome religious/spiritual. I have strong reasons for choosing the use of the term religion over spirituality. According to the Pew Forum on Religion and the Public Life (2008) the majority of Americans (84%) self-identify as religious people, and only a minority of people identify as spiritual but not religious. Even those who do not affiliate with a specific faith tradition often have religious perspectives (e.g. 70% of the unaffiliated believe in God). In addition, reviews of research on a large sample of American adolescents find that not-religious spirituality is quite rare (Smith, 2003). Dilorenzo and Nix-Early (2004) found that foster adolescents describe traditional religion (mostly Christian) as part of their spirituality. In addition, research has shown mental health workers are more likely to self-identify as ‘spiritual but not religious” than the general population (Zinnbauer et al, 1997)
whereas their clients, who are more likely to be poor, minorities, women, and the elderly, are more likely self-identify as religious.

The study of religion in the social sciences depends on “whether it is possible to formulate good theories from which scientists derive clear and scientifically tractable definitions of what religion and spirituality are substantively, and what they do functionally” (King & Roeser, 2009). In order to understand what religion does and is we need to operationalize the construct and accurately measure it.

**Operationalizing and measuring religion**

It is a challenge to quantify aspects of human experience as broad and diffuse as religiousness (Hall, et al., 2008). Religiosity is a multifaceted concept that includes a variety of dimensions such as participation, practice, coping, commitment, and salience, (Cotton, Zebracki, Rosenthal, Tsevat, & Drotar, 2006; George, Ellison, & Larson, 2002). These dimensions are related both theoretically and empirically. Not only is religion multidimensional it is also multilevel. The study of religiosity can occur at many levels, including cultural, faith tradition, denomination, congregation, family and individual level. This wide variety of dimensions and levels are studied from a variety of academic disciplines (theologians, religious studies, historians, sociologists, psychologists). In addition, some scholars and mystics claim that the most distinctive features of religion are irreducible and ineffable, that is, beyond description (Canda & Furman, 2010).

Quantitative research requires that religion be expressed, observed, measured. The earliest tools to measure religiosity for scientific research were developed in the mid-1900s (Allport, 1950; Allport & Ross, 1967; Hood, 1975). However, many early tools were influenced by cultural assumptions that religion was either irrelevant or pathological. In 1984, Gorsuch
argued that the common paradigm in the American approach to the psychology of religion was ‘measurement itself’ and the operationalism of variables. In 1999, Hill and Hood edited a book that contained over a 100 scales used to measure theoretically operationalized religiosity. More recent measures of religious issues derive from empirical approaches, (using tools such as factor analysis in order to determine dimensions of religiousness). “It is now widely accepted that religiousness is a multi-dimensional concept, and although there remains considerable variety in the number and nature of those dimensions … there is significant consensus on some” (Hall et al., 2008, p. 137). External measures include public religious involvement such as religious attendance, as well as religious practices or religious behaviors (frequency of prayer, meditation, reading holy text, and rituals). Internal measures of religiosity include religious salience, religious coping, or religious beliefs.

In order to adequately address religious issues, researchers need to be clear on the level of analysis and the religious construct that is under investigation. In this dissertation, I will focus on individual and family level religiosity and commonly used global indices of religious attendance and importance. Religious attendance and importance are the most common measures of external and internal religiosity. Although some researchers have included denominational or religious identity measures, there were no denominational measures available in the survey that I have chosen.

There is a long tradition of using global indices to indicate religiosity. The majority (77%) of quantitative studies on religion in families published between 1999 and 2000 used only one or two survey items to measure religiousness. Of course, there are limitations to studying religiosity from survey data (Pearce &Denton, 2011, p.18). Using such narrow measures of religiosity precludes the ability to makes clear interpretation of the underlying spiritual or non-
spiritual mechanisms that explain why religion influences outcomes (Mahoney, 2010). Although these concerns are valid, common forms or patterns can be useful to provide an initial broad picture of the direction of influence. I will do a brief summary of the two religious primary indices that are used in this study.

**Religious attendance.** Religious attendance is the most common measure of external religiosity or outward religious practice (Hall, et al., 2008). Religious attendance is typically a single item measure and, for reasons not completely understood, it tends to have stronger associations with outcomes than more sophisticated measures of religiousness (Hall, et al., 2008). “Religious attendance appears to measure something unique, independent and real but it remains difficult to interpret” (Hall, et al., 2008, p141); religious attendance is a very robust measure of religiosity.

Several demographic variables are correlated with religious attendance; women, minorities, rural, southern region of the US and elderly attend more. In addition, participation rates vary by denominational affiliation (Pew Forum on Religion and the Public Life, 2008). Mormons and Jehovah’s Witnesses have the highest rates of weekly attendance (75-82%) and Jews and Buddhists having the lowest percentages of weekly attenders (16-17%). For adults religious attendance has dropped from 40% attending weekly in 1970 to 30% attending weekly in 2008 (Putnam & Campbell, 2010).

There have been multiple studies about Americans over reporting religious attendance (e.g. Brenner, 2011, Chaves & Cavendish, 1994). Similar to other self-report measures tied to identity, respondents often give idealized responses about religious attendance. Although this type of over reporting may signify factual inaccuracy about behavior, some researchers suggest
that it is a good measure of religious identity which in itself is a good indicator of religiosity (e.g. Brenner, 2011).

**Religious importance.** Self-rated religious importance is another frequently used measure of religiosity; sometimes this index is called religious salience. High religious importance suggests that people prioritize religious values and/or those whose religious identity is fully integrated with their other identities. Similar to religious attendance, religious importance decreases with age in adolescence and is correlated with gender and ethnicity (girls and African Americans are more likely to have high religious importance). In the last 10 years about 50-60\% of American adolescents self-identify as strongly religious (King & Roeser, 2009, Smith & Denton, 2005).

**Religious attendance and importance together.** Yonker and colleagues (2012) did a meta-analysis of the association of between religion/spirituality (R/S) as a combined concept, and adolescent psychological outcomes using articles published between 1990 and 2010. After reviewing the literature they recommended when R/S is used as an independent variable that church attendance would be the best measure of the psychosocial construct of religious behavior. They further go on to say that adding a measure of religious salience would include the internal psychological aspects of R/S while still providing parsimony. Religious importance has been found to load on a separate but correlated factor to religious attendance in an empirical study of the effects of religiosity on substance use (Walker, Ainette, Wills, & Mendoza, 2007). Yonker and colleagues (2012) found that a combination of church attendance and salience accounted for most of the moderating effects of religiosity on outcome variables for adolescents. This is in line with other researchers who include both an institutional and personal form of connection with the sacred (Good, Willoughby & Busseri, 2011).
Theoretical frameworks

**Religious development.** Religiosity is often described as a developmental process rather than something you have or don’t have. Similar to other classical developmental theorists such as Piaget, Kolhberg, or Erikson, Fowler (1981) developed a comprehensive stage-structure theory of religious development. Fowler contends that there are recognizable patterns or stages of development. In adolescence, Fowler postulates that adolescents are in a **synthetic-conventional** stage based on their ability to think abstractly, reflect upon their own thinking, and do perspective taking. This leads to a personal and relational transcendent understanding of religion.

King claims spirituality and religiosity are helpful sources in identity formation and development (King, 2003). King (2003) identified three ways in which a religious tradition might foster positive development in adolescents: (a) religious beliefs may affirm and celebrate the uniqueness of an individual, (b) religious practices can connect youth to the ‘past present and future body of believers or practitioners;’ and (c) a religious tradition gives a sense of being part of something greater than themselves, such as part of a naturally created order.

Adolescence is a prime time for religious or spiritual change and development as a result of the confluence of dramatic biological, psychological, social, and economic changes (Pearce & Denton, 2011, Regnerus & Uecker, 2006). Consequently, adolescence is an intense period of ideological seeking, striving for meaning and desire for relationships and connectedness (Jeong & Canda, 2010). The relationship between adolescent religiosity and outcomes will be explored further in Chapter 3.

**Social learning theory.** In social learning theory, youth learn through observing models and systems of reinforcement within a social context (Webb & Whitmer, 2003). Two related sub-theories include **spiritual modeling** and **spiritual social capital**. Spiritual modeling occurs when
Youth imitate their spiritual exemplars, which may be peers or adults. Spiritual social capital suggests that religious learning occurs through interaction rather than by example. These interactions may include attending services together, discussing scripture or other religious topics, or praying together. According to social learning theory, parental religious attendance would provide spiritual modeling, and attending services with parents may provide spiritual social capital. Social learning may be negatively affected by having multiple sources of religious influence. Research has shown that parents who have dissimilar religious perspective or different levels of religiosity are less likely to transmit their religiosity to their offspring (Myers, 1996).

**Religious coping.** Youth who have experienced maltreatment may turn to religion as a way of coping with the trauma they have experienced. Religious coping can lead to either posttraumatic growth or decline for adolescents (Bryant-Davis, Burke-Maynard, Moon, Counts, & Anderson, 2012). Positive religious coping results when religions promote beliefs (e.g., forgiveness, divine providence) and practices (e.g. prayer, cleaning rituals, meditation, and confession) that help believers cope with life stress or process difficult emotions or relationships. For example, David, who suffered horrendous abuse at the hand of his father reported that one night, when he was in his room he saw Jesus at the foot of his bed. The vision brought David peace, “I had a sense that someone loved me. I knew I was going to survive after that.” (Heimlich, 2011, 23-24). Religious coping is often one of the factors associated with resiliency for high-risk or maltreated children (Gall, Basque, Damasceno-Scott, & Vardy, 2007; Kim, 2008). Gall and colleagues (2007) report that church attendance and a relationship with a benevolent God or higher power is related to the resolution of abuse, including less depression. Nicole, a former foster youth stated, “My church is my biggest and most reliable support net. They’ve been there through thick and thin. Through my most shameful moments to my most
resilient and exciting bounds in my life, they stuck it out and are still here with me and tell me all
the time how proud they all are of me. They are part of my ‘family.’” (Jim Casey Youth
Opportunities Initiative, 2011a).

Negative religious coping results when mental health is encumbered by or intertwined
with unhealthy forms of religion and spirituality (Pargament, 1997). “When predominantly
shaming, rigid, and narrow belief systems are adopted, it can result in anxiety, guilt and shame’
(Bryant-Davis, et al., 2012, p. 307). Trauma that is connected to spiritual practices or religious
institutions can greatly increase the severity of the mental health conditions of people (Sullivan,
2009). This type of coping is evident in the following quote of a woman who had been abused by
her father who was a fundamentalist Christian preacher.

My father’s hell was a certain and terrible place; sins such as polishing my shoes on the
Sabbath Day could send me there forever if I died or if Christ returned in the Rapture
before I had a chance to repent. He so convinced me that I was a sinner who deserved to
spend eternity in hell that, although I know now that I am a good person, the feeling that I
am evil sometimes still returns (Heimlich, 2011, 137).

**Attachment theory.** Religiosity may function differently for maltreated children, who
experience damaged parental attachment than for children in the general population. Granqvist
and colleagues (2007) found that children who were insecurely attached to biological parents
found a relationship with God to function in a *compensatory* manner, where God is seen as a sort
of ‘surrogate parent.’ These youth were more likely to have dramatic religious conversions or
become spiritual but not religious; whereas, children with ‘loving parents’ were more likely to
follow their parents’ religiosity and have gradual religious changes, a finding which the authors
called *correspondence* theory. Since maltreatment negatively affects attachment (Egeland &
Sroufe, 1981), it is possible that maltreating parents would have minimal influence on the religiosity of the youth in their care.

**Religiously based theories.** Researchers often maintain a reductionist approach that describes religion only as “an expression of something else, such as class, race, gender, and region, or to explain its trends and patterns with reference to demography, organization, leadership styles and theories of rational choice” (Wuthnow, 2005, p. xiii). Social scientists often assume that what appears to be religious, sacred, or spiritual is really about something unrelated to religion (e.g., social support or cultural capital). However, there is a second approach to studies of religion that assumes “there is something particularly . . . [important about] religion which is not reducible to nonreligious explanations” (Smith, 2003c, p. 20). Research about religion should include subjects’ theological interpretations.

There are distinctly religious or theological understandings that could explain why religion would influence adolescent outcomes. For example, sanctification is a uniquely religious concept that has no direct secular comparison. Sanctification is the act or process of being made holy or being set apart by God. Sanctification provides both sources of conflict and resources for resolving conflict. Other relevant theological concepts include the role of suffering, the concept of forgiveness (both from humans and from God), teleology (understanding the ultimate cause), and salvation. The religious orientation is evident when you talk to some caregivers. For example, the following quote from a foster mother whose foster child had severe medical challenges shows her religious interpretations of her foster child’s role in the family.

*Childlike characteristics, not childish behavior, are the characteristics God wants us to have to enter His kingdom. David (the foster child) had . . . characteristics that kept in my
heart the reason that he was here. . . . To me, his smile was God’s smile; God, through

David, has shown me unconditional acceptance of others” (Weaver, 1999, p. 146).

It is clear that this foster mother’s understanding of her foster son is theologically grounded.

Although she may receive social or material support from her religious community, there is more
to why her religious connections sustain and empower her. It seems likely that her framing of her
medically needy child as God will influence her provision of care.

Some religious beliefs are damaging or harmful; there is a wide array of religiously based
abuse, including using harsh physical punishment based on beliefs of “Spare the rod and spoil
the child”, withholding medical care for religious reasons, rejecting children based on theological
understanding of sexual orientation, or Satanic ritual abuse. In addition, some well-intended
religious teachings are misused and either scare youth or put unrealistic demands on them
including teachings about sin or unworthiness. However, in some contexts even typically
supportive beliefs add distress. An older adolescent male explained his experience:

I went to CCD [Catholic catechism classes] when I was little. I had a lot of pain and
family problems, and I blamed it on God because they told me I was God’s little child,
and if I was good, everything would be taken care of. Things weren’t taken care of, and it
just left me in the dark (Wilson, 2004, p. 30).

Clearly this youth’s religious beliefs did not provide him support or help, even if he had social or
other types of support from his religious community.

Along with theological beliefs varying between denominations, Weber (1922/1964)
claims that theological interpretations may depend on social class. He states that the upper
classes have an immanent conception of the divine and seek salvation through mystical channels,
whereas people with lower SES stress a ‘theodicy of escape’ retreating into communities of like-
minded believers with an otherworldly emphasis. Stark (1972) adds that upper classes are more affiliated with public, organized worship, whereas private devotionalism is more common for people with lower social class.

**Religion in child welfare: Legal and system issues**

The U.S. Constitution’s First Amendment contains two clauses critical to the understanding of the role of religion in child welfare. The Free Exercise Clause protects private religious exercise, including parental rights to determine the religion of their children. “Because a parent’s right to influence her or his child’s religious upbringing is defined as fundamental, courts have determined that it survives separation and even diminution of overall authority over a child” (Browning & Miller-McLemore, 2009, p. 221). The Establishment Clause limits the government’s participation in religion: the government cannot support any religion or show preferences for one religion over another. The Establishment Clause is the basis for the much publicized issues surrounding public displays of religion or expression of religion in the public schools.

“The First Amendment establishes the right of individuals to exercise their religious beliefs without undue government interference, and the Supreme Court has affirmed that this right extends to parents with regard to decisions about their children’s religious upbringing” (Corkran, 2005, p. 325). However, the question of religious upbringing is complicated when a child is placed in foster care. The religious rights of the legal parents are truncated when a child is removed from their care by child welfare services. The religious rights of a child are also limited because of their lack of maturity. The foster parents do not have the parental rights to determine the religious upbringing of their wards. Additionally, the state is constitutionally prohibited from having religious preferences regarding a foster child’s upbringing. For example,
what happens if a 15 year-old child who recently converted to Buddhism has practicing Jewish foster parents and Catholic biological parents? Whose religious free exercise rights should prevail? Although there are no laws clarifying the First Amendment and its role in foster care, there have been precedents set by litigation.

_Wilder v. Bernstein_, was a landmark case that lasted decades and combined issues of race and religion. Marcia Lowry brought a case against the state of New York’s foster care system in 1973 on behalf of Shirley Wilder. At that time the New York foster system primarily relied on private (but publically funded) Jewish and Catholic agencies who prioritized “their own” religious clients, which left the Protestant (which also meant black) clients predominantly in a substandard system. Lowry claimed that the reliance on religious agencies violated the First Amendment’s separation of church and state and the Fourteenth Amendment’s guarantee to equal protection and due process. The case lasted for 26 years and three generations of Wilders. In spite of the case’s initial focus on religion, the conflation of religion and race is evident by the final verdict. By the end of the case, the critics argued that since nearly all children in the foster system were black, that discrimination could not be proved.

Nina Bernstein, an investigative journalist, who carefully and thoroughly documented the case in her book, _The Lost Children of Wilder_, declared, “The child welfare system….is] a political battleground for abiding national conflicts over race, religion, gender and inequality” (Bernstein, 2001, p. xii). The case exemplifies the “contradictions between policies that punish the ‘undeserving poor’ and pledge to help all needy children.” She quotes Robert Little, the brother of Malcolm X and the head of the Child Welfare Administration in 1990, who saw “the traditional foster-care agencies much as Catholics of the nineteenth century had perceived the Protestant child savers, across a divide of political and class conflict” (Bernstein, p. 374).
In the Second Circuit’s decision in Wilder case, it noted that the Establishment Clause prohibits “excessive government entanglement with religion; [however], it recognized that it would be impossible for the state to be uninvolved in the religious upbringing of children in its custody” (Corkran, 2005, p. 328). Consequently, religious matching in foster care placement is permissible, but not required by the First Amendment. The court determined that the state is required to make “reasonable efforts” to accommodate both legal parents and foster children’s religious preferences regarding placement. However, “neither Wilder nor existing scholarship addresses the religious activity that occurs in foster homes after a child’s placement” (Corkran, 2005, p. 329).

There have been two district court cases that illustrate post-placement religious conflict, *Walker v Johnson* and *Pfoltzer v County of Fairfax*. In both cases it was deemed that the foster parents made “reasonable efforts” to accommodate the legal mother’s religious beliefs and therefore her free exercise claim was denied. Additionally, in both cases the foster children’s preferences were considered (even though one was a 4-year-old). “Both a rights perspective and a child welfare perspective indicate that when a child is capable of holding legitimate religious beliefs and reasonable articulating a religious preference, her religious interests should take precedence over those of her legal parents” (Corkran, 2005, p. 348).

In the Walker case the children were placed in a Christian home but the biological mother converted to Judaism after she lost custody of the children. She sued to have the children either raised with Jewish teachings or moved to a new home. The court emphasized the best interest of the child and cited a social worker’s testimony that claimed that preventing the Walker children from attending church with their foster family would segregate them and makes them feel
excluded from the foster family. The court also rejected a request that the children be moved to a Jewish foster home, claiming that it would be a disruption in their lives.

The big question here is what constitutes a “reasonable effort”? Is it reasonable to ask a foster parent to take their wards to religious services monthly? Weekly? Daily? Additionally, the religious rights of the foster family need to be considered. “Prohibiting foster parents from displaying religious icons, praying before meals, or leaving children in Sunday school while they attend religious services could constitute a severe restriction of their religious exercise” (Corkran, 2005, p. 349-350).

The First Amendment only prohibits the government from interfering in the exercise of religion (it does not prohibit private parties from interfering). Since numerous appellate and district courts have determined that foster parents are not state actors, they cannot be held civilly liable for violating the constitutional rights of the children in their care. However, the state (as represented by state agencies or employees of the state) can violate the rights of a foster child, if the state fails to ensure that a child is able to exercise her constitutionally protected rights while in foster care.

In the context of religious exercise claims, this means that once a legal parent or a foster child informs the state (or foster care agency) that the child is unable to freely exercise her religious beliefs due to action or nonaction by the foster parents, the state becomes responsible for ensuring that she is able to engage in religious exercises to the extent required by the First Amendment. (Corkran, 2005, p. 331).

In summary, child welfare agencies are responsible for meeting the religious needs of their wards if those needs are not being met by the foster parents.
Foster youth’s religious rights are legally complicated, as are foster parents’ religious rights. Child welfare workers also have legal restrictions and responsibilities in their dual roles of agent of the state and legal guardian of the foster youth. Although the Constitution sets national standards for religious freedoms how child welfare systems address religious issues is determined by state policies.

**State policies**

Religious affiliation is important in decisions about foster care placement. “Many states have ‘religious matching’ statutes that require foster care agencies to make reasonable efforts to place children with foster families of the same religious affiliation as their parents” (Corkran, 2005, p. 327). However, not all states have policies about matching, and where they exist, how they are implemented varies. In Illinois, for example, although religious affiliation is included in intake forms, religious affiliation of the youth or the foster parents is not part of the placement equation (which is currently based on criteria for performance-based contracting, language matching, and physical proximity to home). Religious matching only comes into play if a biological parent complains about a placement after the child is in a home.

Parents have made their concerns about the religions of their children’s’ foster parents public in some cases. The *Columbus Dispatch* in Ohio and the *Press and Guide* in Michigan have both reported stories about Muslim parents who fought the state systems for the right of their children to be in Muslim foster homes rather than Christian homes (Pepper, 2011; Price, 2011). In Michigan these concerns about religious matching led to a recent law, the Amer Bill. The law stipulates that if a child cannot be placed with relatives, there should be special consideration for placement into a family of the same religion as the child’s immediate family (especially in cases of adoption).
In this chapter I defined religion and how religion can be operationalized and the theories of religious socialization. I also presented issues specific to the role of religion in child welfare including professional and ethical issues for social workers and child welfare workers, legal issues, and system issues. In the next chapter I will explore the variety of empirically based studies that have been done both with the general population as well as the relevant child welfare studies.
CHAPTER 3: LITERATURE REVIEW

This chapter presents the relevant literature about religious socialization and the impact of religiosity on adolescent outcomes. The literature on religious socialization is based on adolescents in the general population and how parents impart religious beliefs and understandings. The review of literature about religious impact on outcomes uses a framework that I have developed which lays out how adolescent religiosity, parent religiosity, and adolescent and parent matching religiosity have influenced adolescents’ outcomes, especially delinquency in the general population. A second framework for maltreated adolescents is modification of the first and includes the addition of foster parents. The limited literature around the religious effects of religiosity on maltreated adolescents will be reviewed and presented in this framework. As mentioned in the previous section, some studies focus on spirituality and others focus on religion. Even though I perceive the concepts to be primarily overlapping and have chosen to use the term religion, when presenting the literature, I will use the terms as the authors use them.

Religious socialization of adolescents

Two key characteristics of family life shape religiosity: the religious characteristics of parents and the stability of the home environment. In the general population there are strong and consistent relationships between the religiosity of parents and their children (Pearce & Thorton, 2007). Adolescents with highly religious parents are likely also to be religious, and adolescents are less likely to be religious if their parents are not religious (Smith & Denton, 2005). The influence of parental religion has been shown to be a long term: A mother’s religious attendance
and affiliation at the time of her child’s birth is related to her child’s religious affiliation and attitudes toward religion in young adulthood (Pearce & Thorton, 2007).

A number of family social factors affect religious socialization. Married couples and their offspring are more likely to be religiously engaged than single adults and their children (Wilcox & Wolfinger, 2008). It has been suggested that two parent families are more able to support religious practices such as religious service attendance. However, religious socialization is decreased if the two parents have dissimilar religious affiliation (Regnerus, et al., 2004; Regnerus & Uecker, 2006), or if parents get divorced (Zhai, Ellison, Glenn, & Marquardt, 2008). Denton (2012) found bidirectional change in adolescents’ religious participation after their parents’ divorce: There was a decrease in religious engagement for adolescents who had highly religious profiles before their parents’ divorce, and an increase in religious engagement for adolescents who were marginally tied to a religion before the divorce. These studies on family composition and divorce provide possible similarities for adolescents who have experienced family displacement resulting from child welfare involvement.

**Religious socialization of maltreated adolescents**

Maltreated adolescents need to achieve the normative tasks of achieving autonomy, establishing self-efficacy, solidifying identity, and making meaning, however the experience of maltreatment adds challenges to their development, including their religious/spiritual development (Weaver, 1999). The religiosity of maltreated adolescents may be directly tied to poor religious socialization by their parents. Kim and colleagues (2009) found that maltreated children had weaker interdependence between parent and child religiosity. They also found that there were less shared religious practices between parents and children in families who experienced maltreatment. In addition, the experience of maltreatment can disrupt spiritual trust.
and fear of abuse may make it difficult for adolescents to maintain their beliefs (Walker, Reese, Hughes, & Troskie, 2010). Nierenberg and Sheldon (2005) suggest that high stress and discomfort resulting from abuse may result from two opposite reactions. Experiencing abuse may encourage adolescents to search for a higher meaning in life and therefore develop spiritually or conversely, may cause their spiritual development to cease at the time of abuse. In addition to experiencing maltreatment, adolescents who are removed from their families also experience relationship and community disruptions, possibly including religious connections, which could also affect their religious development.

Parental transmission of religion to offspring is decreased by poor quality family relationships and non-traditional family structure (Myers, 1996). Walker and colleagues (2009) did a review of the literature about the impact of child abuse on religiosity and spirituality, which consisted of retrospective studies of adult survivors of abuse. The majority of the studies found that experiencing maltreatment negatively impacted religious development. It is possible that decreased religious socialization for maltreated youth is due to lack of parental religious participation for maltreating parents. Brown and colleagues (1998) found that young children whose parents rarely attended religious services were more than twice as likely to be physically abused than children who whose parents attended regularly.

**The religiosity of foster adolescents.** While removing adolescents from biological homes will decrease the biological parents’ impact on their child’s religious development, foster parents provide a new source of religious influence. Previous qualitative research with foster parents shows that foster parents value religion. Both kin and non-kin foster care parents claim that faith is a very important factor for successful fostering. Coakley and colleagues (2007) asked both kin and non-kin foster parents thirteen questions in a semi-structured interview. There were
two questions about beliefs: “What personal beliefs or parenting beliefs do you have that make fostering easier?” and “What personal beliefs or parenting beliefs do you have that make fostering more difficult?” Even though no question directly addressed religion or spirituality, “faith or moral values” was the second-highest category of factors supporting successful fostering cited by non-kin parents (19 of 22 included it) and the third-highest cited by kin parents (6 of 9). Similarly, in an interview of 22 foster mothers by Buehler et al. (2003), the most frequent response regarding successful foster parenting was deep concern or love for the children (86.4%), closely followed by faith/church (81.8%).

Foster adolescents are very religious and claim that religion is very important to them. Jackson and colleagues (2010) interviewed 188 foster adolescents, ages 14 to 17. The vast majority (93%) reported having a spiritual goal, 86% reported that spirituality was a source of joy, and 77% said that they frequently or always felt loved by God. When asked about what they do “when something bad or tragic happens,” 59% reported that they pray. Roller White and colleagues (2007) analyzed the same sample and reported that 94.6% believe in God, a Creator, or a Higher Power. Forty-three percent of the adolescents reported attending services at least weekly, and more than half of those attended more than once a week.

**Effect of religiosity on adolescent outcomes in the general population**

The literature on religiosity focuses primarily on three pathways of religious influence on adolescent outcomes: 1) adolescents’ own religiosity, 2) their parents’ religiosity, and 3) the relationship of the parents’ religion to the adolescents’ religion (whether the parents’ religion matches or does not match the adolescent’s). All three have been reported to affect outcomes (see Figure 1). All three of these pathways have had mechanisms of change (i.e. mediators) proposed. In Figure 1, mediators in bold have been empirically tested in published research.

1 Presumably not maltreated
Adolescent religiosity. Many recent studies report a relationship between increased adolescent religiosity and positive outcomes (e.g. improved school performance), while other studies report an inverse relationship between adolescent religiosity and negative outcomes (e.g. delinquency, depression, and substance use). The improved outcomes are due to religious adolescents being “resource rich” and “risk poor” (Wagener, Furrow, King, Leffert, & Benson, 2003). There have been recent meta-analyses of the relationship between adolescent religiosity and improved outcomes in psychopathology (Dew et al., 2008), health (Cotton et al., 2006), and crime (Johnson et al., 2000). In addition, religiously active adolescents report higher levels of
social capital resources, and social capital resources mediates the effect of adolescent religiosity on moral outcomes such as altruism and empathy (King & Furrow, 2004).

Religion is a source of resiliency, buffering the negative effects of poverty for teens exposed to poor neighborhoods or to violence. Joshi, Hardy, and Hawkins reported “that religiosity is a significant moderating factor between risk factors and negative life events” in their review of literature around the role of religiosity for low-income adolescents (Office of Health Policy ASPE, 2009, pp. 4–10). Cook (2000) interviewed churched and un-churched inner city adolescents and found that churched adolescents were less stressed and had fewer psychological problems. Having a worldview (like a religion) provides an individual a buffer that “shields the individual from existential anxiety and enables the individual to achieve self-esteem and life satisfaction through the knowledge that one is a valuable member of a meaningful universe” (Hackney & Sanders, 2003, p. 51).

Studies have also shown that religious effects are moderated by socioeconomic status, neighborhood, and exposure to violence. For example, Johnson and colleagues (2000) reported that adolescents who lived in disordered neighborhoods, which they defined as the lack of appearance of order and control (measured by increased vandalism, abandoned houses, and burglaries) increased crime rates for adolescents. They found that religious involvement mitigated the effect of living in a disordered neighborhood. However, the decrease of criminal involvement for religious “black youth is more pronounced in neighborhoods with higher levels of disorder” (p. 489). Jang and Johnson (2001) reported independent effects of neighborhood disorder and religiosity on drug use (there were also indirect effects mediated by social bonding and social learning). The authors also found that religiosity buffers the effects of neighborhood and that the effect gets stronger throughout adolescence. It has been hypothesized that religious
and social organizations make up for the loss of social capital for disadvantaged adolescents by providing a variety of social services and a network of social contacts (Dehjia, DeLeire, Luttmer, & Mitchell, 2009).

Parent religiosity. Research with adolescents suggests that increased parental religiosity is associated with improved health, higher levels of education, and lower levels of substance use by adolescents (Caputo, 2004). Pearce and colleagues (2003) reported that, even after controlling for risk factors (low socioeconomic status, minority status, and exposure to violence), parental religious involvement mitigated the development of conduct problems for high-risk urban adolescents (except under the condition of highest violence). Youth’s internalizing and externalizing symptomology, as reported by teachers, was related to parents’ church attendance (Bartowski, Xu, & Levin, 2008; Kim, McCullough & Cicchetti, 2009). This effect may vary depending on gender. Regnerus (2003) found that parental religious devotion protects girls more than boys and in fact may increase delinquency among boys, when controlling for autonomy and family satisfaction (although for the subgroup of conservative Protestant parents, religion was protective for both boys and girls).

Mahoney, Pargament, Tarakeshwar, and Swank (2001) reviewed the literature on religion in the home. The authors analyzed 48 (including 35 quantitative) studies on parenting as well as 51 studies on the marital relationship, all published in the late 1980s or 1990s. Overall, they reported that greater maternal, paternal, or family religiousness was linked to positive adolescent outcomes (less externalizing and internalizing behavior problems, greater prosocial traits, decreased substance use, decreased depression, and less serious antisocial behavior). They also reported that “greater parental religiousness has yet to be documented to lead to undesirable child outcomes through more strict or punitive parenting practices” (Mahoney et al., p. 584).
Religious matching between parents and adolescents: Heteronomy and homogamy.

Research suggests that the religiosity of both adolescents and their parents affects adolescent outcomes and that these two relationships are correlated. There are strong and consistent relationships between the religiosity of parents and of their children (Pearce & Thornton, 2007). However, a portion of adolescents do not have religious congruence with their parents, because parents are not the only people who influence adolescents’ religious development. One reason for incongruence is peers: “irreligious adolescents who happen to join a network of devout friends or attend a school with high levels of general religiosity may . . . be at higher ‘risk’ of becoming more devout themselves” (Regnerus, Smith, & Smith, 2004). Additionally, adolescents’ religious ideas are not solely transmitted from other people; adolescents have intuitive belief systems and are active in their own faith development (Boyatzis, Dollhite, & Marks, 2006).

When religious parents and their children have religious congruence, it is a source of support for families. Parents and adolescents spend time together in family-affirming environments, often in activities that promote positive family relationships (Regnerus and Burdette, 2006). Adolescents are channeled into groups and settings that reinforce the parents’ efforts at religious socialization (Martin, White & Perlman, 2003). Mahoney and colleagues suggest that religion may provide a cultural resource to reduce conflicts and increase cohesion (2001). Higher religious involvement leads to more network closure, especially if the caregiver and the adolescents participate in religious services together (Smith, 2003a). Pearce and Axinn (1998) measured the mother’s religiosity from her child’s birth until her child’s adulthood and report that mother–child congruence in both religious participation and importance are correlated with higher quality affective relationships between adolescents and their parents (as reported by
both the adolescents and their mothers). Increased religiosity improves family relationships, and improved family relationships increase religiosity, suggesting bidirectional influence. I have found no studies that report negative effects of religious Homogamy, but findings from the literature do indicate a negative effect associated with religious heteronomy (Pearce & Haynie, 2004; Petts & Knoester, 2007; Caputo, 2004, however, did not find this effect).

Pearce and Haynie (2004) reported that “if a child is very religious and his/her parent is not, there will also be opportunity for disagreement and a lack of closure that will lessen the protective power of that child’s own religiosity on his/her delinquency” (p. 1557). Petts and Knoester (2007) claimed the greater the religious distance, the worse the outcomes. They defined religious distance as the magnitude of difference between the religions, so a Lutheran, for example, would have less religious distance from a Baptist than from a Buddhist or even a Pentecostal. “Given the centrality of child rearing to many religious orientations, clashes between parents and children may take on additional meaning when either party refuses to accept religiously based guidelines” (Mahoney, 2005, p. 699).

In summary, there are three pathways through which religiosity affects adolescent outcomes: 1) an adolescent’s own religion, 2) the parents’ religion, and 3) whether or not the adolescent’s and parents’ religions match. Since religion has been found to be correlated to outcomes for adolescents in the general population, would it also influence the outcomes of adolescents who are maltreated? In the next section I present the limited research on the role of religion for maltreated adolescents (including those in foster care), maltreating parents, and foster parents.
The effect of religiosity on outcomes for adolescents in child welfare

Since adolescents who are maltreated experience trauma, new mediators have been proposed for why religiosity would affect their outcomes. Maltreated adolescents’ religiosity influence retains some mediators from the previous framework (e.g., coping). However, several new mediators are proposed, including religion as a source of resiliency or the buffering effect of religiosity.

Although religiosity has been shown to be a positive influence for adolescents in the general population, it may function differently for maltreated adolescents. For example, Granqvist, Ivarsson, Broberg, and Hagekull (2007) reported that children with “loving parents” were more likely to follow their parents’ religiosity than insecurely attached children. There have few studies that have looked at the impact of religiosity on maltreated children

New Framework. Maltreated adolescents may remain with their biological parent or they may be placed in foster care. Since foster parents may add a new source of religious influence, the experience of being in foster care requires modification to the previous framework.
For foster adolescents there are now three paths of direct influence: the maltreated adolescent’s religiosity, the biological parent’s religiosity, and the foster parent’s religiosity. Parental transmission of religion to offspring also is decreased by poor quality of the family relationship and a nontraditional family structure (Myers, 1996). There is less influence of parental religiosity on child outcomes when the child is removed from the home. Consequently, religious matching between adolescents and biological parent is less significant after an adolescent is removed from the home.

However, for foster adolescents, foster parent religiosity and religious matching between adolescents and foster parent become new factors. Foster parents who are religious may have added sources of social support or particular moral expectations that might reduce burnout and/or
improve coping, factors that could influence their effectiveness as foster parents. 

Heteronomy/Homogamy between foster parents and foster adolescents could also affect outcomes. There are two methods of achieving religious homogamy in foster care. If a foster adolescent is placed with a family with very similar religious values, the Homogamy is present from the start, and the child’s own religiosity would be supported. However, Homogamy could also evolve if the foster parents influenced the religiosity of the child, a process that would depend on a variety of factors, including the age of the child upon entering care and the length of time in care. I will focus next on these three paths of influence and the literature that has addressed them.

**Maltreating parents’ religiosity.** There has been a plethora of studies on the relationship between religiosity and corporal punishment/child physical abuse (Bottoms, Nielsen, Murray, Filipas, 2003; Bottoms, Shaver, Goodman, & Qin, 1995; Capps, 1992; Socolar, Cabinum-Foeller & Sinal, 2008). In the presidential address to the Society for the Scientific Study of Religion in 1991, Donald Capps summarized, “I have argued here that religion and child abuse are ‘perfect together,’ that they seem made for one another and are mutually attractive.” This address followed the 1991 publication of Philip Greven’s book, *Spare the child: The religious roots of punishment and the psychological impact of physical abuse*. However, nearly all of this research is focused on theologically conservative Christian parents and how their beliefs impact physical abuse. There is minimal research on other religious perspectives or even mainline and other types of Christianity. There has been some research on religiously based abuse. For example, Kvarfordt (2010) interviewed clinical social workers and ascertained several types of
religiously based abuse, including withholding medical care for religious reasons\(^2\), abusive and tortuous attempts to rid a child of evil, or abuse of a child by a religious authority.

Jackson and colleagues (1999) published a study based on 1,000 nationally representative parents about which factors predict abuse-prone parental attitudes and behaviors. They found that religion and ideology predicted abuse proneness in complex ways. Parents that had attitudes that endorsed physical discipline were more conservative ideologically but less likely to report that religion was important to them. However, two other factors that correlated with abuse-proneness (attitudes that devalue children and parents using verbal abuse) were more likely to report that religion was important to them.

Three studies have looked at the benefits of religion and spirituality for maltreating parents. Lietz and Hodge (2011) found that the majority of maltreating parents (12 out of 15) identified faith as an important narrative element in their stories of successful reunification (at least a year). These families discussed how spirituality influenced their change process, via three paths: prayer, beliefs, and social support from their faith communities. At least one study has stressed the importance of spirituality in working with substance abusing parents of maltreated children (DiLorenzo, Johnson and Bussey, 2001). They suggest that in order to ensure the safety of children with addicted parents, the treatment must be holistic, including body, mind and spirit. Stewart and Mezzich (2006) found that different types of beliefs influenced neglect in divergent manners. Beliefs which focused on love of self and others and achieving harmony with the world were associated with less neglect, whereas beliefs that focused on religious practice for the sake of practice or external motivations were risk factors for neglect.

\(^2\) However, it is important to note that all 50 states grant an exemption within their definition of medical neglect for parents who refuse to secure conventional medical treatment for their children for religious reasons (Browning & Miller-McLemore, 2009, p. 213).
Maltreated adolescents’ religiosity. There have been few studies that have looked at the impact of religiosity on maltreated children in general or maltreated children who remain with their families after investigations. In one, Kim (2008) found that importance of faith was related to lower levels of internalizing symptomatology for maltreated girls, but not for boys.

Maltreated adolescents who are removed from their families of origin will have additional issues of separation and loss which adds an additional challenge to their religious/spiritual development (Weaver, 1999). DiLorenzo and Nix-Early (2004) gathered information from focus groups with 149 foster care adolescents (ages 14 to 22) and concluded that “the spiritual lives of these young people are inexorably connected to their need and desire for a permanent family which is often lost after they enter the child welfare system” (p. 7). Foster adolescents attend religious services at a rate similar to that of adolescents in the general population, with 37% attending religious services at least once a week and 24% never attending (Scott et al., 2006). However, the frequency of religious attendance among foster adolescents can depend on the type of placement. Scott and colleagues reported that white adolescents in non-kin foster homes attended religious services more than white adolescents in kin foster homes; however, they found no difference across foster placement types for African American adolescents. “The relative stability of service attendance and religious practices among African American adolescents regardless of their placement type again bespeaks the crucial importance of religiousness in the Black community” (Scott et al., p. 233).

Foster parent religiosity and religious matching in foster care. Foster parents attend religious services more regularly than people in the general population (Schreiber, 2009). An average of 65% of non-kin foster parents attend religious services weekly, compared with a national average of 39% for the general population (Pew Forum on Religion and Public Life,
Two reasons are suggested for higher religiosity among non-kin foster parents than among the general population: they are motivated by faith to become foster parents, and recruitment of foster parents often occurs in churches (Howell-Moroney, 2009).

The religiosity of foster parents could affect the outcomes of the adolescents in their care through several mediators. It is possible that religiosity provides social support for foster parents. Both social support and coping mechanisms that come from religiosity might decrease foster parent burnout, which could improve placement stability. There have been no quantitative studies that directly studied foster parents’ religiosity, but in qualitative studies, both kin and non-kin foster parents have claimed that faith is a very important factor for successful fostering (Buehler et al., 2003; Coakley et al., 2007).

Religious Homogamy could also affect adolescent outcomes. However, since religion can “sanctify” (or lend religious import to) family life, it typically offers purposes and processes that have no direct equivalent with secular systems of meaning and motivation (Regnerus & Burdette, 2006, p. 78). For example, if a parent feels a traditional family structure is religiously ordained, it adds an additional level of stress if their child identifies as lesbian or gay or if a parent feels that their role is divinely inspired they may be able to withstand higher levels of stress. When dissimilar religious perspectives exist within families or foster families, religiousness could exacerbate conflicts.

This review of the literature about religious socialization and the impact of adolescent religiosity, caregiver religiosity and religious matching suggest that there are large gaps in our understanding of the religious socialization of maltreated youth and the impact that religiosity has on their outcomes. In order to begin to fill this gap several specific research questions and hypotheses are proposed.
Research Questions and Hypotheses

1. Religious socialization: Does caregiver religious attendance impact maltreated adolescents’ religious attendance and importance?
   a. Hypothesis 1: Higher parental religious attendance at wave 1 is associated with adolescent’s higher religious attendance at wave 1.
   b. Hypothesis 2: Higher parental and adolescents’ religious attendance at wave 1 are associated with adolescent’s higher religious importance at wave 1.
   c. Hypothesis 3: Increasing adolescent attendance from wave 1 to wave 2 is predicted by younger age, white race, and change in family.
   d. Hypothesis 4: Decreasing adolescent attendance from wave 1 to wave 2 is predicted by change in family.

2. Religious Impact: Does caregiver and/or adolescents’ religiosity or religious matching impact maltreated adolescents’ delinquency?
   a. Hypothesis 5: Increased caregiver religious attendance, adolescent religious attendance, adolescent religious importance, and religious matching will all be inversely associated with adolescent delinquency.

A. Is the effect on delinquency mediated by deviant peers?
   a. Hypothesis 6: The relationship of both adolescent religious variables (attendance and importance) on delinquency is mediated by fewer deviant peers.

B. Is the effect of matching religious attendance mediated by improved parent–child relationship?
a. Hypothesis 7: The relationship of religious matching (as measured by similar levels of attendance or reports of attending with parents in the last month) on delinquency is mediated by improved parent child relationships.

C. Is the effect of parental attendance mediated by parental monitoring?

   a. Hypothesis 8: The relationship of religious matching (as measured by similar levels of attendance or reports of attending with parents in the last month) on delinquency is mediated by improved parent child relationships.
CHAPTER 4: METHODS

Sample and Participant Selection

**NSCAW II.** This dissertation analyzes the restricted data set of the second round of the National Study of Child and Adolescent Well-Being (NSCAW II). NSCAW II is a longitudinal study of a nationally representative sample of children involved in child protective service (CPS) investigations from February 2008 through April 2009, including 5,873 children and youth ages 0 to 17.5 at the time of the initial sampling. Data was collected between March 2008 and May 2009 for wave 1 (4 months after the CPS investigation) and between October 2009 and December 2010 for wave 2 (18 months after the close of the investigation).

The 5,873 children were randomly selected from Primary Sampling Units (PSUs) in 83 counties in 31 states. The sample of investigated/assessed cases included both cases that received on-going services and cases that did not receive services, either because they were not substantiated or because it was determined that services were not required. In the second stage, children within the child welfare agencies were stratified by domains of interest defined by the child’s age, primary type of abuse, whether the child received services from the child welfare agency and whether the child was in out of home care. This sample design required oversampling of infants (to ensure there would be enough cases going through to permanency planning), sexual abuse cases (to ensure there would be power to analyze this kind of abuse alone), and cases receiving ongoing services after investigation (to ensure adequate power to understand the process of services). Participants were contacted via personalized letters followed by telephone and or home visits to schedule appointments with the NSCAW field representatives.
Data for NSCAW was collected using in-person, Computer-Assisted Interviewing (CAI) with children, caregivers, caseworkers and teachers. CAI insures higher accuracy for the administration of complex questions and skip patterns (Dowd et al., 2007). To facilitate increased reporting on sensitive topics (substance abuse, domestic violence, delinquency), interviews also included Audio Computer-Assisted Self-Interview in which respondents wore head phones and typed answers into the computer.

If the child remained in the home following an investigation, the child’s parent was interviewed. If the child had been removed from the home and was in kinship (relative) or traditional foster care, the foster or kin parent was interviewed. The cohort includes both substantiated and unsubstantiated investigations and families that did and did not receive services following investigation. Infants and children in substitute care (out-of home placements) were oversampled to ensure adequate representation of high-risk groups. To compensate for the oversampling, probability weights were applied to all analyses to facilitate generalizing findings from the sample to the population. The study is sponsored by the Office of Planning, Research and Evaluation, Administration for Children and Families (ACF), U.S. Department of Health and Human Services (DHHS). More explanation about the sampling procedures is described elsewhere (NSCAW Research Group, 2002).

**Sample.** In NSCAW II, only the children who were 11 and older (n=1,054) answered questions about religious attendance and religious importance; therefore children under the age of 11 were excluded from this analysis. Youth were classified into 3 groups based on caregiver type: biological parents\(^3\) (BIO, n=675, 71%), kinship foster parents (KIN, n=147, 15%), and traditional foster parent (TFC, n=130, 14%). Since religious influence of parents was a primary

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\(^3\) These were primarily biological parents, although a few were adoptive parents. This group included both families who received child welfare services and those who did not.
focus of this study, other types of placements (group homes, step parents, residential facilities etc.) were excluded from the analysis (n=102).

**Human Subjects.** This research involved the secondary data analysis of previously collected data for the purpose of contribution to the professional knowledge base and understanding of child maltreatment. Since maltreated children are especially vulnerable to social stigmatization if details of their experiences become public, release of these data to the research community are more restrictive than in most federally funded studies involving human subjects. The data used for the current study came from the restricted release version of NSCAW, described by the Introduction to the Wave 1 General and Restricted Use Releases (GUF and RUF):

The restricted release data are …complete and have been only minimally altered through suppression and recoding….To obtain a licensing agreement for the restricted release, a researcher must complete an application and provide her/his institution’s Institutional Review Board (IRB) committee’s approval for the proposed research, a signed licensing agreement, a data security plan, signed confidentiality affidavits by research staff who will have access to the data, and payment of a fee to cover administrative costs and a site visit to monitor compliance with the data security plan.

Researchers at the Children and Family Research Center have acquired approval from both National Data Archive on Child Abuse and Neglect and the University of Illinois IRB for secondary analysis of this data set. The author is included as one of the approved researchers on these approvals.
Assessments and Measures

Religious measures. The global indices of religious attendance and importance are frequently used to measure religiosity. Public religiosity is typically measured by religious attendance, and subjective religiosity (personal religious salience) is measured by religious importance (Regnerus & Burdette, 2006). NSCAW II data include both of these religious measures. Both youth and caregivers are asked about their religious attendance with the question “In the last 12 months, how often have you attended religious services at a church, mosque, temple or synagogue?” The ordinal responses were never, rarely, once or twice a month, or at least once a week. Only the youth were asked about religious importance with the question “How important is religion or spirituality to you?” with ordinal responses not important at all, only a little important, somewhat important, or very important. Finally there was an additional religious question about whether youth attended religious services with their caregiver: “In the past 4 weeks have you gone to a religious service or church-related event with your caregiver?” which had a binary response.

Many studies have treated the typical Likert religious attendance item as an interval scale. Yet it is unlikely that the differences between the levels of the scale are equal. In other words, it is likely that the difference between attending weekly and attending once or twice a month are not the same as the difference between attending once or twice a month and rarely, or the difference between rarely and never. Although religious attendance is theoretically an ordinal variable, doing so showed significant differences in the proportional odds assumption showing that it needed to be treated as a nominal variable. Bivariate and preliminary analysis used these four level Likert scales. For the final analysis religious attendance and importance measures were
dichotomized; for religious attendance measures, the division was between weekly versus less than weekly and for religious importance, very important versus less than very important.

**Delinquency measure.** A modified version of the self-reported delinquency (SRD) measure was used (Elliot & Ageton, 1980). Youth were asked if in the last 6 months they had participated in 36 different acts and how often they had committed that act during those 6 months. The severity of act was categorized as *Minor, Moderate, or Serious* by three independent raters (See Table 1). Youth were initially assigned the category of their most severe act or as *None* (if they did not report any acts).

Youth who were frequent offenders of minor or moderate acts were re-categorized using the following formula. The frequency (1=1 time, 2=2 times…5= 5 or more times) of each act was multiplied by the severity weight (1= minor, 2=moderate, 3= serious) and these were summed to determine a delinquency score (theoretical range would be from 0-380). Youth with 1-4 points (all minor acts) remained in the minor category, youth with 5-14 points (minor or moderate acts) were moved to the moderate category, and youth with 14 or more points were moved to the severe category. Previous research has found this method of scoring delinquency to be highly correlated (r = .91 to .97) with three other major delinquency classifications (Postlewaith et. al, 2010).

Table 1: List of Delinquent Acts and Categories of Severity

<table>
<thead>
<tr>
<th>Variable</th>
<th>Item</th>
<th>NSCAW Category</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>YDE3A</td>
<td>Skipped Classes or school without an excuse</td>
<td>Status</td>
<td>Minor</td>
</tr>
<tr>
<td>YDE6A</td>
<td>Lied about age to get into some place or to buy something, e.g., lying about age to get into a movie or to buy alcohol</td>
<td>Status</td>
<td>Minor</td>
</tr>
<tr>
<td>YDE11A</td>
<td>Loud, rowdy, or unruly in a public place so that people complained about it or you got in trouble</td>
<td>Public Disorder</td>
<td>Minor</td>
</tr>
<tr>
<td>YDE13A</td>
<td>Begged for money or things from strangers</td>
<td>Public Disorder</td>
<td>Minor</td>
</tr>
<tr>
<td>YDE21A</td>
<td>Avoided paying for things such as movies, bus, or</td>
<td></td>
<td>Minor</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
<td>Category</td>
<td>Status</td>
</tr>
<tr>
<td>--------</td>
<td>------------------------------------------------------------------------------</td>
<td>----------------</td>
<td>----------</td>
</tr>
<tr>
<td>YDE25A</td>
<td>Stolen or tried to steal things worth $5 or less</td>
<td>Minor Theft</td>
<td>Minor</td>
</tr>
<tr>
<td>YDE33A</td>
<td>Taken something from a store without paying for it</td>
<td>Minor Theft</td>
<td>Minor</td>
</tr>
<tr>
<td>YDE1A</td>
<td>Ran away from home</td>
<td>Status</td>
<td>Moderate</td>
</tr>
<tr>
<td>YDE7A</td>
<td>Hitchhiked where it was illegal to do so</td>
<td>Public Disorder</td>
<td>Moderate</td>
</tr>
<tr>
<td>YDE15A</td>
<td>Drunk in a public place</td>
<td>Public Disorder</td>
<td>Moderate</td>
</tr>
<tr>
<td>YDE17A</td>
<td>Purposely damaged or destroyed property that did not belong to you, e.g.,</td>
<td>Damaged Property</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>painting, breaking, cutting, or marking up something</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YDE19A</td>
<td>Purposely set fire to a house, building, car, or other property or tried to</td>
<td></td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>do so</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YDE27A</td>
<td>Stolen or tried to steal things worth between $5 and $50</td>
<td>Minor Theft</td>
<td>Moderate</td>
</tr>
<tr>
<td>YDE29A</td>
<td>Stolen or tried to steal things worth between $50 and $100</td>
<td>Felony Theft</td>
<td>Moderate</td>
</tr>
<tr>
<td>YDE37A</td>
<td>Took something from a car that did not belong to you</td>
<td></td>
<td>Moderate</td>
</tr>
<tr>
<td>YDE39A</td>
<td>Bought, sold, or held stolen goods or tried to do any of these things</td>
<td>Felony Theft</td>
<td>Moderate</td>
</tr>
<tr>
<td>YDE41A</td>
<td>Joyriding, that is, taken a motor vehicle, such as a car or motorcycle, for</td>
<td>Minor Theft</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>a ride or drive without the owner’s permission</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YDE45A</td>
<td>Used checks illegally or used a slug or fake money to pay for something</td>
<td>Fraud</td>
<td>Moderate</td>
</tr>
<tr>
<td>YDE47A</td>
<td>Used or tried to use credit cards or bank cards</td>
<td>Fraud</td>
<td>Moderate</td>
</tr>
<tr>
<td>YDE49A</td>
<td>Tried to cheat someone by selling them something that was worthless or not</td>
<td>Fraud</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>what you said it was</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YDE53A</td>
<td>Hit someone with the idea of hurting- other than the events you just</td>
<td></td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>mentioned</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YDE57A</td>
<td>Thrown objects such as rocks or bottles at people other than the events you</td>
<td></td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>already mentioned</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YDE61A</td>
<td>Paid for having illegal sexual relations with someone</td>
<td>Illegal Services</td>
<td>Moderate</td>
</tr>
<tr>
<td>YDE67A</td>
<td>Sold marijuana or hashish (pot, grass, hash)</td>
<td>Illegal Services</td>
<td>Moderate</td>
</tr>
<tr>
<td>YDE71A</td>
<td>Arrested or picked up by police for something other than a minor traffic</td>
<td>Arrest</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>offense</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YDE9A</td>
<td>Carried a hidden weapon</td>
<td></td>
<td>Serious</td>
</tr>
<tr>
<td>YDE23A</td>
<td>Gone or tried to go into a building to steal something</td>
<td>Felony Theft</td>
<td>Serious</td>
</tr>
<tr>
<td>YDE31A</td>
<td>Stolen or tried to steal something worth $100 or more</td>
<td>Felony Theft</td>
<td>Serious</td>
</tr>
<tr>
<td>YDE35A</td>
<td>Snatched someone’s purse or wallet or picked someone’s pocket</td>
<td></td>
<td>Serious</td>
</tr>
<tr>
<td>YDE43A</td>
<td>Stolen or tried to steal a motor vehicle such as a car or motorcycle</td>
<td>Felony Theft</td>
<td>Serious</td>
</tr>
<tr>
<td>YDE51A</td>
<td>Attacked someone with a weapon or with the idea of seriously hurting or</td>
<td>Felony</td>
<td>Serious</td>
</tr>
<tr>
<td></td>
<td>killing them</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YDE55A</td>
<td>Used a weapon, force, or strong-arm methods like</td>
<td>Robbery</td>
<td>Serious</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
<td>Offense</td>
<td>Severity</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------------------------------------------------------------</td>
<td>-----------------------</td>
<td>----------</td>
</tr>
<tr>
<td>YDE59A</td>
<td>Involved in gang fight</td>
<td>Felony Assault</td>
<td>Serious</td>
</tr>
<tr>
<td>YDE63A</td>
<td>Physically hurt or threatened to hurt someone to get them to have sex with you</td>
<td>Sexual Assault</td>
<td>Serious</td>
</tr>
<tr>
<td>YDE65A</td>
<td>Had or tried to have sexual relations with someone against their will</td>
<td>Felony Assault</td>
<td>Serious</td>
</tr>
<tr>
<td>YDE69A</td>
<td>Sold hard drugs such as heroin, cocaine, or crack</td>
<td>Illegal Services</td>
<td>Serious</td>
</tr>
</tbody>
</table>

**Proposed Mediating Variables**

Three scales were hypothesized to function as mediators for religious variables in models for delinquency; Child-Caregiver Relationship, Deviant Peer Affiliation, and Parental Monitoring. A mediator variable accounts for the relation between the focal predictor (independent variable) and the dependent variable. For example, the influence of religious matching on delinquency may be mediated by and improvement in the parent-child relationship.

**Child-caregiver relationship.** This scale measures a youth’s perception of his/her relationship with both their primary and secondary (when appropriate) caregivers. Children were asked to respond to a variety of statements. Questions centered around 1) Parental Emotional Security (e.g. “when I am with ‘caregiver name,’ I feel good”), 2) Involvement, (e.g. “‘caregiver name’ enjoys spending time with me.”), 3) Autonomy/Support, (e.g. “My ‘caregiver’ trusts me.”) and 4) Structure (e.g. “My ‘caregiver’ is fair with me.”). Children answered how true each statement was (1 = not at all true, 2 = not very true, 3 = sort of true, and 4 = very true). This is a shortened version of the Relatedness scale from the Research Assessment Package for Schools-Self Report Instrument, RAP-SI (Connell & Wellborn, 1991; Lynch & Cicchetti, 1998).

A mean rather than a summed Relatedness score was created to account for the fact that not all children answered the same number of questions (children with only one caregiver were not asked about a secondary caregiver). NSCAW Appendix 3 reports that internal consistency for the overall Relatedness score was high (alpha=.88).
**Deviant peer affiliation.** This scale, based on a scale by Capaldi and Patterson (1989), contained 6 items about peer behavior; “During the last year how many of your friends… cheated on school tests, damaged something on purpose that wasn’t theirs, stole something worth less than five dollars, stole something worth more than 5 dollars, hit or threatened someone without any real reason, and suggested that you do something against the law?” Each question has scaled responses from 1=none, 2= very few, 3=some, 4= most of them, 5= all of them. The scores of the six items were totaled with higher numbers signifying higher peer deviation. These items yielded alphas of .89 for wave 1 and .90 for wave 2; these high correlations are consistent with previous research (Dishion, Patterson, Stoolmiller & Skinner, 1991).

**Parental monitoring.** Parental monitoring is defined as the extent to which the caregiver tracks the child’s activities (knows what the child is doing and with whom). The *Supervision Scale - Child* is an 18-item measure developed to assess facets of parenting supervision and involvement. The questionnaire is a revised version of the Supervision/Involvement Scale of the Pittsburgh Youth Study (Conduct Problems Prevention Research Group, 1994) that was based on the scale of supervision/involvement created by Loeber, Farrington, Stouthamer-Loeber & van Kammen (1998). The scale includes 10 likert scaled questions about supervision (e.g. If you did not come home by the time that you were supposed to be in, how often would your caregiver know?), communication (e.g. How often did your caregiver talk to you about how things were going at school?) and curfew (How often do you have a set time to be home on school nights?). Eight questions were not included because either they had categorical answers or were skipped for a portion of the youth (based on answers to previous questions). Items were recoded for consistency (either reverse coded or rescaled from 0-4 to 1-5).
Higher scores indicate more parental monitoring. The 10 items that were included yielded alphas of .71 for wave 1 and .66 for wave 2.

**Demographic variables.**

Several demographic variables have been correlated with religious attendance and/or delinquency in previous research. Considering these variables is especially important because they may also be correlated with child welfare involvement. For example, males and older youth are more likely to be delinquent and less likely to attend church than females or younger adolescents.

There are several youth factors that were included. Age was a continuous variable and was measured in years. Gender was a dichotomous variable. Race was categorized into 4 groups, Black (non-Hispanic), White (non-Hispanic), Hispanic, and other. The types of abuse were determined by the caseworker and cases with multiple types of abuse were coded by the most serious type of abuse: 1) physical abuse, 2) sexual abuse, 3) emotional abuse, 4) neglect-failure to provide, 5) neglect-failure to supervise, 6) other, 7) domestic violence, 8) substance abusing parent. A large portion of youth did not have an abuse type and those were categorized into a group with the label ‘missing’ so that they could be retained in the analysis. Three types of placement, were also included; Biological parents, Kinship foster parents, and Traditional Foster parents.

Five caregiver controls were also included. Age was categorized into 4 groups, <35 years, 35-44 years, 45-54 years and >54 years. Gender was a dichotomous variable. Gender and race for caregivers were operationalized in the same manner as they had been for youth. Caregiver education level was a dichotomous measure of having graduated from high school or not. Percent poverty rate for the child’s family based on the 2009 US Department of Health and
Human Services poverty guidelines. Poverty was categorized into 4 groups with group 1) <50%, 2) 50-100%, 3) 100-200%, and 4) >200% of the guideline. Although poverty was not included in the analysis (since there was a high portion of families missing this variable) the low rates of income are worth reporting as part of the demographics. For distributions of all of these variables see Table 2 in the results.

**Analyses**

There are two primary concerns when analyzing complex survey data: 1) nonindependence (homogeneity) that is created by the nonsimple random sample and 2) unequal selection probabilities since samples are disproportionate. To address these issues, data were analyzed with PROC SURVEYFREQ, PROCSURVEYMEANS and PROC SURVEYLOGISTIC in SAS 9.3. These programs are designed to accurately estimate standard errors by accounting for NSCAW II’s design complexity, including unequal weighting, stratification, and clustering of observations. The NSCAW Statistics Manual (Biemer & Christ, 2005) provides guideline for which wave-specific analysis weights to use for each analysis. Since the weights compensate for unequal probability sampling, the results will be unbiased and generalize to the population of youth investigated for maltreatment in the United States in 2008 and 2009. In all analyses weighted data and unweighted sample sizes are presented.

**Question 1: How does caregiver attendance relate to youth religious attendance?**

First, logistic regression was used to develop a model for adolescent weekly religious attendance at wave 1. Initially weekly attendance was included as a nominal variable but preliminary analysis suggested that the primary differences were between weekly and other levels of attendance so the variable was dichotomized. An advantage of treating religious attendance as a dichotomous variable was that it increased interpretative clarity and improved the ability to study
non-linear effects, interaction effects and multiple risk factors. Previous research has found that
dichotomization doesn’t necessarily cause a decrease in measured strength of association
(Farrington & Loeber, 2002).

Independent variables were based on factors that have been found to be correlated with
youth attendance in the literature. Potential explanatory variables were added to the model in
batches with order (youth demographics, religious measures, interactions with religious
measures, child maltreatment variables, and caregiver demographic variables). After each batch
variables that were significant or close to significant in predicting weekly attendance were
retained and variables from the next batch were added to them.

A second set of regression models tested change in weekly attendance between wave one
and wave 2. Previous research (Regnerus & Uecker, 2006) has found that predictors of increase
in religious attendance differ from predictors of decrease, so two different logistic regression
models were tested; the probability of youth attending weekly at wave 2 for youth who did not
attend weekly at wave 1 (increase), and the probability of not attending weekly at wave 2 for
youth who had attended weekly at wave 1 (decrease).

While completion rates for the NSCAW II are generally high, there are missing data for
some items. Cases were excluded from the analysis if they had missing data for any of the
variables in the final model for youth weekly attendance, comprising less than 7% of the targeted
sample. To determine whether the 63 excluded cases varied systematically with any of the
variables of interest, I estimated logistic regression models for each variable with a binary
indicator of whether the case would be excluded in the main analysis. The exclusion indicator
was not a significant predictor of any of the variables, except caregiver race: White caregivers
were about twice as likely to be excluded as caregivers with race ‘other.’ There was no evidence
that the excluded white and ‘other’ caregivers and their youth were more or less likely to attend religious services weekly than included caregivers and youth. Moreover, the number of excluded white and ‘other’ caregivers was very small (n=15, <5% of all white and ‘other’ cases, <2% of the total sample), suggesting that any bias induced by excluding more white than ‘other’ cases would be very minimal. When cases with missing variables were dropped, the final sample for this analysis included 889 youth whose placements included: 633 biological homes, 137 kinship foster homes, and 119 traditional foster homes.

**Question 2: How does caregiver and youth religiosity impact adolescent delinquency?** Logistic regression was used to model for adolescent delinquency at wave 1. Preliminary models included all four categories of delinquency but the estimates for Never and Minor categories were very similar and were grouped together as were the Moderate and Severe. Conceptually it is logical to collapse youth who have a few minor “normal teenage misbehaviors” with those who have none, called normal. Youth who had moderate or severe acts or youth with 5 or more minor acts were grouped into the delinquent category. Previous research with this delinquency scale using NSCAW 1 also dichotomized this outcome in a similar manner (Postlewaith et. al, 2010).

Variables were added sequentially, starting with Youth Attendance, adding other demographic youth and caregiver variables, and finally including the proposed mediator scales. To further test the mediators effects, mediation scales were treated as dependent variables and models that tested the religious variables effects on each scale were included.

Cases were excluded from if they had missing data for any of the variables included in the model for delinquency, comprising less than 10% of the targeted sample. See Appendix 1 for table of patterns of missing variables. After refining the model, 7 subjects were added back into
the sample since they had complete data for all variables included in the final model. The final sample for this analysis included 873 youth. There were 49 youth (<7%) who were excluded from the analysis.
CHAPTER 5: RESULTS

Demographics

Adolescents in the sample ranged from 11-17 years at wave 1, with a mean age of 13.6 (se 1.2); they were 59% female, 20% black (non-Hispanic), 44% white (non-Hispanic), 27% Hispanic, and 9% other race. The majority (86%) of adolescents resided with their biological parents, whereas 11% lived with kinship foster parents and 4% were living with traditional foster parents. They had a range of types of abuse: 26% physical abuse, 19% neglect (failure to supervise), 11% sexual abuse, 8% substance abusing parents, 6% emotional abuse, 6% domestic violence, 6% neglect (failure to provide), and 16% of less common types of abuse combined into the category of ‘other.’ A substantial portion of the adolescents (n=116, 12%) were missing a type of abuse and were included in the analysis by creating a category of ‘abuse missing’ (Table 2- note for all analyses Ns are raw data and percentages are weighted).

The majority (90%) of interviewed caregivers were female; 29% were under 35 years of age, 47% age 35-44, 17% age 45-54, and 7% over the age of 54 (these are predominantly foster parents, often grandparents who are providing kinship care). White caregivers comprised 51% of the sample, 18% were black, 24% were Hispanic and 8% in the category of ‘other race’ (5.5% Native American and 2.5% Asian). Thirty six percent had achieved a high school degree, 34% had achieved more than high school and 30% had not achieved a high school degree. The majority of caregivers were poor, with 52% below the poverty level and 19% less than half of the poverty level. Only 20% of the sample had incomes that were 200% of the poverty level or more.

---

4 Cases with multiple types of abuse were coded by the most serious type of abuse.
Table 2: Demographics of Sample at Wave 1 (includes all cases)

<table>
<thead>
<tr>
<th></th>
<th>Total Wave 1</th>
<th>Bio Parents</th>
<th>Kinship Foster</th>
<th>Traditional Foster</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=952</td>
<td>n=675</td>
<td>n=147</td>
<td>n=130</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>se</td>
<td>N</td>
</tr>
<tr>
<td>Adolescent age mean=13.62(1.2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>125</td>
<td>19%</td>
<td>2.4</td>
<td>23</td>
</tr>
<tr>
<td>12</td>
<td>105</td>
<td>17%</td>
<td>2.7</td>
<td>23</td>
</tr>
<tr>
<td>13</td>
<td>108</td>
<td>17%</td>
<td>2.3</td>
<td>21</td>
</tr>
<tr>
<td>14</td>
<td>113</td>
<td>16%</td>
<td>2.4</td>
<td>22</td>
</tr>
<tr>
<td>15</td>
<td>99</td>
<td>14%</td>
<td>2.1</td>
<td>20</td>
</tr>
<tr>
<td>16</td>
<td>90</td>
<td>12%</td>
<td>1.9</td>
<td>31</td>
</tr>
<tr>
<td>17</td>
<td>7</td>
<td>6%</td>
<td>1.5</td>
<td>7</td>
</tr>
<tr>
<td>Adolescent gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>538</td>
<td>59%</td>
<td>2.6</td>
<td>389</td>
</tr>
<tr>
<td>Male</td>
<td>414</td>
<td>41%</td>
<td>2.6</td>
<td>286</td>
</tr>
<tr>
<td>Adolescent race</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>248</td>
<td>20%</td>
<td>2.9</td>
<td>146</td>
</tr>
<tr>
<td>white</td>
<td>369</td>
<td>44%</td>
<td>4.4</td>
<td>285</td>
</tr>
<tr>
<td>Hispanic</td>
<td>229</td>
<td>27%</td>
<td>3.8</td>
<td>166</td>
</tr>
<tr>
<td>other</td>
<td>103</td>
<td>9%</td>
<td>1.6</td>
<td>76</td>
</tr>
<tr>
<td>Type of abuse</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>physical abuse</td>
<td>198</td>
<td>26%</td>
<td>2.4</td>
<td>154</td>
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<tr>
<td>sexual abuse</td>
<td>106</td>
<td>11%</td>
<td>1.7</td>
<td>68</td>
</tr>
<tr>
<td>emotional abuse</td>
<td>49</td>
<td>6%</td>
<td>1.9</td>
<td>34</td>
</tr>
<tr>
<td>neglect-failure to provide</td>
<td>63</td>
<td>6%</td>
<td>1.4</td>
<td>44</td>
</tr>
<tr>
<td>neglect-failure to provide</td>
<td>130</td>
<td>19%</td>
<td>2</td>
<td>94</td>
</tr>
</tbody>
</table>
supervise
other  147  16%  1.8  101  12%  1.6  29  30%  7.7  17  9%  2.3
domestic violence  58  6%  1.4  53  6%  1.4  5  1%  0.5  0  .  .
substance abusing parent  61  8%  1.9  40  7%  1.8  16  9%  3.4  5  3%  1.8
missing  116  14%  3.1  87  14%  3.4  19  5%  2.4  34  28%  8.0

**Caregiver age**

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
<th>%</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;35 years</td>
<td>260</td>
<td>29%</td>
<td>2.2</td>
</tr>
<tr>
<td>35-44 years</td>
<td>381</td>
<td>47%</td>
<td>2.8</td>
</tr>
<tr>
<td>45-54 years</td>
<td>185</td>
<td>17%</td>
<td>1.7</td>
</tr>
<tr>
<td>&gt;54 years</td>
<td>104</td>
<td>7%</td>
<td>1.3</td>
</tr>
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</table>

**Caregiver gender**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Count</th>
<th>%</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>female</td>
<td>830</td>
<td>90%</td>
<td>1.6</td>
</tr>
<tr>
<td>male</td>
<td>100</td>
<td>10%</td>
<td>1.6</td>
</tr>
</tbody>
</table>

**Caregiver race**

<table>
<thead>
<tr>
<th>Race</th>
<th>Count</th>
<th>%</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>black</td>
<td>241</td>
<td>18%</td>
<td>2.6</td>
</tr>
<tr>
<td>white</td>
<td>430</td>
<td>51%</td>
<td>4.5</td>
</tr>
<tr>
<td>Hispanic</td>
<td>191</td>
<td>24%</td>
<td>3.6</td>
</tr>
<tr>
<td>other</td>
<td>67</td>
<td>8%</td>
<td>1.8</td>
</tr>
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</table>

**Caregiver education**

<table>
<thead>
<tr>
<th>Education</th>
<th>Count</th>
<th>%</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than high school</td>
<td>221</td>
<td>30%</td>
<td>2.6</td>
</tr>
<tr>
<td>High school</td>
<td>365</td>
<td>36%</td>
<td>2.5</td>
</tr>
<tr>
<td>more than high school</td>
<td>343</td>
<td>34%</td>
<td>2.7</td>
</tr>
</tbody>
</table>

1Not all respondents in the sample answered this question.
2Since a large portion of the adolescents were missing type of abuse, missing was included as a category in order to retain those cases
3Cases with multiple types of abuse were coded by the most serious type of abuse.
Table 3: Patterns of Missing Variables for youth who have Delinquency (SRD1)

<table>
<thead>
<tr>
<th>Group</th>
<th>SRD1</th>
<th>yrace</th>
<th>yage1</th>
<th>ymale</th>
<th>abuse</th>
<th>place</th>
<th>weekly</th>
<th>pweekly</th>
<th>AWP</th>
<th>yImp</th>
<th>matching</th>
<th>prace</th>
<th>pmale</th>
<th>page</th>
<th>ped</th>
<th>dpeer</th>
<th>rel</th>
<th>monitor</th>
<th>N</th>
<th>Percent</th>
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<tbody>
<tr>
<td>1</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>866</td>
<td></td>
<td>93.93</td>
</tr>
<tr>
<td>2</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>.</td>
<td></td>
<td>1</td>
<td></td>
<td>0.11</td>
</tr>
<tr>
<td>3</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td>X</td>
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<td></td>
<td>.</td>
<td></td>
<td>8</td>
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<td>0.87</td>
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<td>.</td>
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<td>1.01</td>
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<td></td>
<td>1</td>
<td></td>
<td>0.11</td>
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<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>.</td>
<td></td>
<td>14</td>
<td></td>
<td>1.52</td>
</tr>
<tr>
<td>7</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td></td>
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<td>X</td>
<td>X</td>
<td>X</td>
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<td>X</td>
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<td>3</td>
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<td>0.33</td>
</tr>
<tr>
<td>8</td>
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<td>X</td>
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<td>1</td>
<td></td>
<td>0.11</td>
</tr>
<tr>
<td>9</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
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<td>X</td>
<td>X</td>
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<td>14</td>
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<tr>
<td>10</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>.</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>7</td>
<td></td>
<td>0.76</td>
</tr>
<tr>
<td>11</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>.</td>
<td>X</td>
<td>.</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>1</td>
<td></td>
<td>0.11</td>
</tr>
<tr>
<td>12</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>.</td>
<td>X</td>
<td>.</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>1</td>
<td></td>
<td>0.11</td>
</tr>
<tr>
<td>13</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>.</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>.</td>
<td></td>
<td>2</td>
<td></td>
<td>0.22</td>
</tr>
<tr>
<td>14</td>
<td>X</td>
<td>.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>1</td>
<td></td>
<td>0.11</td>
</tr>
<tr>
<td>15</td>
<td>X</td>
<td>.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>.</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>.</td>
<td></td>
<td>1</td>
<td></td>
<td>0.11</td>
</tr>
</tbody>
</table>

Total 922 920 922 922 922 911 905 918 906 922 904 905 904 914 921 920 922 100.03
**Missing cases.** In order to determine if there were patterns in missing data, a chart was created that included all different types of missing variable patterns (See Table 3). No concerning patterns of missing data were apparent. There were relatively few demographic variables missing from the analysis. Only 3 adolescents were missing race and all other adolescent variables were complete. Two percent of caregivers were missing demographic variables (22 were missing education, gender and age, and 23 were missing race). Since a higher portion was missing the poverty measure, it was not included in the analysis.

For all logistic regression, preliminary models included only cases that were not missing any of the variables tested to provide a stable analytic sample for model comparison. After a final model was determined additional subjects could be reintroduced (those that were only missing data on variables that were not included in the final model). For the wave one logistic regression analysis for both religious attendance and religious importance, the final sample size was 889. The dropped cases were less than 7% of the sample (n= 63). For the longitudinal analysis for religious attendance the final sample was 660 (this was mostly due to attrition at wave 2). For the logistic regression cross sectional analysis for wave 1 delinquency n=866.

**Religious measures from wave 1 and wave 2.**

**Adolescents’ religious attendance.** Thirty nine percent of the maltreated adolescents attended weekly and 16% of them never attended at wave 1. This dropped slightly at wave 2, with 34% attending weekly (Table 4). Forty percent of adolescents attended services with their caregiver in the past month. Since 45% of adolescents claimed to attend either weekly or once or twice month, it is likely that some adolescents attended services without their current caregiver since caregivers report attending less frequently.

**Religious Importance.** Maltreated adolescents found religion and spirituality to be very important, with 48% claiming that religion and spirituality was ‘very important’ to them and an
additional 35% claiming that it was ‘somewhat important’ in wave 1 (Table 4). The percentage of adolescents who claimed that religion was very important dropped slightly at wave 2.

Table 4: Religious Measures at Wave 1 and Wave 2

<table>
<thead>
<tr>
<th></th>
<th>Wave 1</th>
<th>Wave 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>weighted %</td>
</tr>
<tr>
<td><strong>Adolescent religious attendance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>never</td>
<td>138</td>
<td>16%</td>
</tr>
<tr>
<td>rarely</td>
<td>288</td>
<td>30%</td>
</tr>
<tr>
<td>1 or 2/month</td>
<td>149</td>
<td>16%</td>
</tr>
<tr>
<td>weekly</td>
<td>363</td>
<td>39%</td>
</tr>
<tr>
<td><strong>Adolescent religious importance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>not important at all</td>
<td>77</td>
<td>8%</td>
</tr>
<tr>
<td>only a little important</td>
<td>104</td>
<td>9%</td>
</tr>
<tr>
<td>somewhat important</td>
<td>305</td>
<td>35%</td>
</tr>
<tr>
<td>very important</td>
<td>444</td>
<td>48%</td>
</tr>
<tr>
<td><strong>Attend religious service with caregivers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no</td>
<td>550</td>
<td>60%</td>
</tr>
<tr>
<td>yes</td>
<td>381</td>
<td>40%</td>
</tr>
<tr>
<td><strong>Caregiver religious attendance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>never</td>
<td>212</td>
<td>25%</td>
</tr>
<tr>
<td>rarely</td>
<td>238</td>
<td>25%</td>
</tr>
<tr>
<td>1 or 2/month</td>
<td>216</td>
<td>26%</td>
</tr>
<tr>
<td>weekly</td>
<td>264</td>
<td>24%</td>
</tr>
</tbody>
</table>

1Caregivers were not asked about religious attendance at Wave 2.

**Caregivers’ religious attendance.** Caregiver religious attendance was only measured at wave one and was equally distributed into the 4 levels. However, when caregivers are broken into categories by placement settings, attendance rates vary dramatically. As shown in Figure 3, a greater percentage of traditional foster parents attended religious services weekly (61%) than kinship foster parents (34%) and biological parents (22%). Similarly, a smaller percentage of traditional foster parents never attended religious services.
**Relationship between adolescents and caregiver attendance.** Adolescent attendance co-varied with caregiver attendance (Fig. 4). While 74% of the adolescents whose caregiver attends weekly also attend weekly, only 18% of adolescents whose caregiver never attends nevertheless attend weekly.
Nearly half of the adolescents (n=414, 42% weighted) reported the same level of religious attendance that their caregiver reported. The highest portion of these was adolescents and parents who both attended weekly, with 17% of the total adolescents (or 43% of matching adolescents) both reporting weekly attendance.

Most religious variables were significantly associated, based on Wald tests of independence in two way contingency tables\(^5\) (Thomas & Rao, 1984). Adolescent attendance co-varied with caregiver attendance (Fig. 4), \(F(9,64) = 5.17, p < .0001\), with adolescents importance \(F(9,64) = 5.41, p < .0001\) and with attend with parents in the last month \(F(3,69) = 15.80, p < .0001\). Adolescent importance co-varied with attend with parents in the last month \(F(3,69) = 10.15, p < .0001\), but not with parental attendance.

**Delinquency measures**

The vast majority of the adolescents (890) answered all 36 questions on the Self-Report Delinquency scale in wave 1. Thirty adolescents (3%) did not respond to any questions on the delinquency scale. Of the 32 who were missing items, 19 were missing only one or two. All adolescents who answered at least one question were included in the analysis.

In wave 1, slightly over half of the adolescents (n=488) did not report any delinquent acts. The most commonly reported acts were skipping school and running away. The 36 questions about delinquency were broken into 9 subscales listed in Table 5. Subscales included between 1-4 questions. The most common types of delinquent acts (the acts that the most adolescents performed) were status offenses, public disorder and minor theft. The highest frequency acts (the acts that youth were likely to engage in the most frequently) were illegal services and felony theft.

---

\(^5\) Thomas and Rao (1984) found that the adjusted Wald \(F\) statistic provides a more stable test than the chi-square statistic when using complex samples.
Table 5: Wave 1 Delinquency Subscales

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Number of questions</th>
<th>N*</th>
<th>Total Frequency Range</th>
<th>Mean Number of Acts**</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>36</td>
<td>464***</td>
<td>1 to 106</td>
<td>3.66</td>
<td>0.28</td>
</tr>
<tr>
<td>Felony theft</td>
<td>4</td>
<td>65</td>
<td>1 to 19</td>
<td>3.78</td>
<td>0.49</td>
</tr>
<tr>
<td>Robbery</td>
<td>1</td>
<td>12</td>
<td>1 to 5</td>
<td>1.44</td>
<td>0.31</td>
</tr>
<tr>
<td>Fraud</td>
<td>3</td>
<td>34</td>
<td>1 to 10</td>
<td>2.25</td>
<td>0.27</td>
</tr>
<tr>
<td>Minor theft</td>
<td>3</td>
<td>110</td>
<td>1 to 15</td>
<td>3.12</td>
<td>0.38</td>
</tr>
<tr>
<td>Illegal Services</td>
<td>3</td>
<td>41</td>
<td>1 to 13</td>
<td>4.81</td>
<td>0.67</td>
</tr>
<tr>
<td>Damage Property</td>
<td>1</td>
<td>70</td>
<td>1 to 5</td>
<td>2.23</td>
<td>0.28</td>
</tr>
<tr>
<td>Public Disorder</td>
<td>4</td>
<td>179</td>
<td>1 to 11</td>
<td>3.31</td>
<td>0.27</td>
</tr>
<tr>
<td>Status Offenses</td>
<td>3</td>
<td>248</td>
<td>1 to 14</td>
<td>3.19</td>
<td>0.21</td>
</tr>
</tbody>
</table>

* of people who scored at least one on a question in subscale, note adolescents were included in more than one subscale

** Note- Ns are not weighted but means are weighted.

*** This total includes adolescents who scored at least one on any item.

Delinquency was dichotomized into two groups (See Methods sections for details). The adolescents with no delinquency (n=484) were combined with the 89 adolescents who had minor delinquency (<4 minor acts) into a group called normative. The 177 adolescents with moderate levels of delinquency were combined with 172 adolescents with severe delinquency (See Table 6). The delinquent category would include adolescents with either 5 or more minor acts, a moderate act, or a severe act.

Table 6: Wave 1 and Wave 2 Delinquency Categories

<table>
<thead>
<tr>
<th>Range</th>
<th>N</th>
<th>Wave 1 weighted %</th>
<th>se</th>
<th>Wave 2 weighted %</th>
<th>se</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>484</td>
<td>52%</td>
<td>3.5</td>
<td>433</td>
<td>59%</td>
</tr>
<tr>
<td>Minor</td>
<td>89</td>
<td>9%</td>
<td>1.4</td>
<td>70</td>
<td>8%</td>
</tr>
<tr>
<td>Moderate</td>
<td>177</td>
<td>21%</td>
<td>3.0</td>
<td>148</td>
<td>20%</td>
</tr>
<tr>
<td>Severe</td>
<td>172</td>
<td>18%</td>
<td>2.2</td>
<td>114</td>
<td>12%</td>
</tr>
<tr>
<td>Total</td>
<td>922</td>
<td></td>
<td>765</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
There was a significant association between w1 and w2 delinquency $F(9,71) = 5.47, p < .0001$ (see Figure 5). The majority of adolescents (53%) did not move categories from wave 1 to wave 2.

Figure 5: Delinquency Categories at Wave 2 Conditional on Delinquency Categories at Wave 1

As in previous literature, delinquency for this sample was strongly associated with age.

As figure 6 shows, only 11% of 11 year-old adolescents were delinquent; but by age 17, 67% of the adolescents were delinquent.

Figure 6: Percent of Adolescents Who Were Delinquent Conditional on Age
Mediators.

**Parent-Child relationship.** The parent-child relationship scale includes two sets of 12 questions, one set for each caregiver. Many adolescents reported information about only one caregiver. To address the issue of missing data, the mean response rather than total scores were calculated because youth who did not answer all the questions would still have a mean score for the questions they did answer. The mean included information about both caregivers for youth who responded to questions about a second caregiver. Eight adolescents did not answer any questions and 933 out of 952 (98%) answered at least 7 of the 12 questions for caregiver 1.

Most adolescents had high parent-child relationship scores (suggesting better parent child relationships), with 61% of the adolescents having mean scores over 3.25 out of 4 in wave 1, and 66% having over 3.25 in wave 2 (see Table 7). Note that although scores are collapsed into categories here, the relationship scores were treated as continuous variables in analysis.

**Table 7: Mean Scores on Parent-Child Relationship Scale**

<table>
<thead>
<tr>
<th></th>
<th>W1</th>
<th></th>
<th>W2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Percent</td>
<td>SE</td>
</tr>
<tr>
<td>1 - 1.74</td>
<td>6</td>
<td>1%</td>
<td>0.5</td>
</tr>
<tr>
<td>1.75 - 2.24</td>
<td>29</td>
<td>3%</td>
<td>0.9</td>
</tr>
<tr>
<td>2.25 - 2.74</td>
<td>92</td>
<td>13%</td>
<td>2.5</td>
</tr>
<tr>
<td>2.75 - 3.24</td>
<td>215</td>
<td>22%</td>
<td>2.2</td>
</tr>
<tr>
<td>3.25 - 3.74</td>
<td>332</td>
<td>35%</td>
<td>2.8</td>
</tr>
<tr>
<td>3.75 - 4</td>
<td>270</td>
<td>26%</td>
<td>2.4</td>
</tr>
<tr>
<td>Total</td>
<td>944</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Deviant Peer Affiliation.** Only 36 of the 952 adolescents (4% weighted) did not answer any question on this scale, and 886 adolescents answered all 6 questions (94%). Many adolescents (n=323, 35%) had the minimum score on the deviant peer affiliation measure (answering 1 on all six questions) suggesting they had no deviant peers. The percentage of adolescents decreased as score increased (see Figure 7). To account for missing data, mean
scores were calculated (See table 8) so that any child who answered at least one question was included in the study. Note that although mean scores are collapsed into categories in the table, the mean scores were treated as continuous in analysis.

Figure 7: Wave 1 Weighted Percentage of Deviant Peer Score

Table 8: Mean Scores on Deviant Peer Affiliation Scale

<table>
<thead>
<tr>
<th></th>
<th>Wave 1</th>
<th></th>
<th>Wave 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>SE</td>
<td>N</td>
</tr>
<tr>
<td>1-1.24</td>
<td>459</td>
<td>51%</td>
<td>2.8</td>
<td>381</td>
</tr>
<tr>
<td>1.25-1.74</td>
<td>215</td>
<td>25%</td>
<td>2.4</td>
<td>143</td>
</tr>
<tr>
<td>1.75-2.24</td>
<td>101</td>
<td>13%</td>
<td>2.0</td>
<td>85</td>
</tr>
<tr>
<td>2.25-2.74</td>
<td>62</td>
<td>4%</td>
<td>0.9</td>
<td>42</td>
</tr>
<tr>
<td>2.75-3.24</td>
<td>41</td>
<td>3%</td>
<td>0.7</td>
<td>17</td>
</tr>
<tr>
<td>3.25-3.74</td>
<td>15</td>
<td>1%</td>
<td>0.5</td>
<td>6</td>
</tr>
<tr>
<td>3.75-4.24</td>
<td>14</td>
<td>2%</td>
<td>0.7</td>
<td>6</td>
</tr>
<tr>
<td>4.25-4.74</td>
<td>2</td>
<td>0%</td>
<td>0.0</td>
<td>4</td>
</tr>
<tr>
<td>4.75-5</td>
<td>7</td>
<td>1%</td>
<td>0.4</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>916</td>
<td></td>
<td>0.4</td>
<td>688</td>
</tr>
</tbody>
</table>

**Parental Monitoring.** In wave 1, only 6 adolescents did not answer any questions on the parental monitoring scale, 800 (86%) answered all the questions, and 114 (12%) were missing only one item. The mean of the 13 questions (range 1-5) is included in table 9. Note that
although scores are collapsed into categories in the table, the mean score variable was treated as continuous in the analysis. Note higher score suggests more parental monitoring.

Table 9: The Mean Scores on the Parental Monitoring Scale

<table>
<thead>
<tr>
<th>mean score</th>
<th>W1</th>
<th></th>
<th></th>
<th></th>
<th>W2</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>percent</td>
<td>se</td>
<td>n</td>
<td>percent</td>
<td>se</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;1.74</td>
<td>3</td>
<td>0%</td>
<td>0.2</td>
<td>1</td>
<td>0%</td>
<td>0.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.75-2.24</td>
<td>16</td>
<td>2%</td>
<td>0.7</td>
<td>16</td>
<td>2%</td>
<td>0.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.25-2.74</td>
<td>47</td>
<td>4%</td>
<td>0.8</td>
<td>31</td>
<td>5%</td>
<td>1.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.75-3.24</td>
<td>104</td>
<td>11%</td>
<td>1.7</td>
<td>89</td>
<td>15%</td>
<td>2.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.25-3.74</td>
<td>173</td>
<td>19%</td>
<td>1.5</td>
<td>172</td>
<td>29%</td>
<td>3.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.75-4.24</td>
<td>269</td>
<td>30%</td>
<td>2.1</td>
<td>206</td>
<td>24%</td>
<td>2.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.25-4.74</td>
<td>249</td>
<td>24%</td>
<td>2.6</td>
<td>163</td>
<td>21%</td>
<td>2.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.75-5</td>
<td>85</td>
<td>9%</td>
<td>1.7</td>
<td>22</td>
<td>4%</td>
<td>1.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>946</td>
<td></td>
<td></td>
<td>700</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Question 1a: Does caregiver religious attendance impact adolescent attendance? (H:1,3,4)

This analysis was done with the sample of adolescents (n=889) whose placements included: 633 biological homes, 137 kinship foster homes, and 119 traditional foster homes, as described earlier in this chapter.

Logistic regression modeling of with Wave 1 Data. Logistic regression was used to model adolescent weekly religious attendance and estimate odds ratios for adolescent and caregiver characteristics that explained adolescents’ weekly attendance (Table 10). Parental religious attendance explained adolescents’ attendance most strongly: The odds of attending weekly were more than four times the odds for adolescents whose caregiver also attended weekly (cf. Table 10). Moreover, the odds are 2.7 those otherwise if the adolescents reported attending with their caregiver in the last month. The odds of attending weekly were 2–6 times higher for adolescents who indicate religion was ‘very important’ than for adolescents who indicated religion was less important. Adolescents with black or white caregivers were much more likely to attend weekly than adolescents with caregivers of ‘other’ race. Several other factors were
included in preliminary analysis, namely the type of abuse adolescents experienced, whether the abuse was substantiated, adolescent age, adolescent race, caregiver poverty, caregiver education level, and caregiver age. However, these variables were not found to be significant predictors of adolescents’ weekly attendance after controlling for the variables mentioned above and were dropped for the final model. This model exhibited good model fit with 77.9 percent of predicted probabilities concordant with observed responses, only 20.1 percent were discordant, and 1.9% were tied.

Based on previous bivariate analysis and this logistic regression there is evidence to support Hypothesis 1: Higher parental religious attendance at wave 1 is associated with adolescent’s higher religious attendance at wave 1.

Table 10: Predictors of Adolescent Weekly Religious Attendance

<table>
<thead>
<tr>
<th>Effect</th>
<th>Odds Ratio</th>
<th>95% Wald Confidence Limits For Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Point</td>
<td>Estimate</td>
</tr>
<tr>
<td>BIO vs. TFC</td>
<td>0.72</td>
<td>0.39 - 1.35</td>
</tr>
<tr>
<td>BIO vs. KIN</td>
<td>4.32*</td>
<td>0.25 - 0.96</td>
</tr>
<tr>
<td>KIN vs. TFC</td>
<td>1.48</td>
<td>0.74 - 2.99</td>
</tr>
<tr>
<td>Caregiver weekly</td>
<td>4.86***</td>
<td>2.72 - 8.68</td>
</tr>
<tr>
<td>Y. attend with cg in past month</td>
<td>2.68***</td>
<td>1.54 - 4.64</td>
</tr>
<tr>
<td>Cg. black vs. white</td>
<td>1.53</td>
<td>0.80 - 2.91</td>
</tr>
<tr>
<td>Cg. black vs. Hispanic</td>
<td>2.32</td>
<td>0.86 - 6.26</td>
</tr>
<tr>
<td>Cg. black vs. other</td>
<td>5.17**</td>
<td>1.64 - 16.29</td>
</tr>
<tr>
<td>Cg. white vs. Hispanic</td>
<td>1.52</td>
<td>0.57 - 4.03</td>
</tr>
<tr>
<td>Cg. white vs. other</td>
<td>3.38**</td>
<td>1.42 - 8.05</td>
</tr>
<tr>
<td>Cg. Hispanic vs. other</td>
<td>2.23</td>
<td>0.57 - 8.71</td>
</tr>
<tr>
<td>Y importance 4 vs 3</td>
<td>2.66**</td>
<td>1.43 - 4.94</td>
</tr>
<tr>
<td>Y importance 4 vs 2</td>
<td>2.80**</td>
<td>1.44 - 5.46</td>
</tr>
<tr>
<td>Y importance 4 vs 1</td>
<td>6.71***</td>
<td>2.419 - 18.61</td>
</tr>
<tr>
<td>Y importance 3 vs 2</td>
<td>1.05</td>
<td>0.43 - 2.58</td>
</tr>
<tr>
<td>Y importance 3 vs 1</td>
<td>2.52</td>
<td>0.86 - 7.44</td>
</tr>
<tr>
<td>Y importance 2 vs 1</td>
<td>2.40</td>
<td>0.73 - 7.85</td>
</tr>
</tbody>
</table>

*** p < .001, **p < .01, * p = .038
**Longitudinal Analysis.** Wave 2 data collection occurred 18 months after the initial investigation and there was some attrition. Of the 889 cases included in the logistic regression analysis, 660 had complete data for variables included in the longitudinal analysis. Wave 2 survey weights were included in this analysis.

The majority of adolescents (75%) did not change their weekly religious attendance from wave 1 to wave 2, but 38% of adolescents who attended weekly at wave 1 stopped attending weekly, and 16% of adolescents who did not attend weekly at wave 1 started attending weekly (Table 11). A Wald test of independence in a two way contingency table showed that wave one weekly attendance was associated with wave two weekly attendance $F(1,72) = 36.5, p < .0001$.

Table 11: Change in Weekly Attendance between Wave 1 and Wave 2

<table>
<thead>
<tr>
<th>Wave 1</th>
<th>Wave 2</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Weekly</td>
<td>Less than Weekly</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Weekly</td>
<td>24% (n=162)</td>
<td>15% (n=101)</td>
<td>39%</td>
<td></td>
</tr>
<tr>
<td>Less than Weekly</td>
<td>10% (n=68)</td>
<td>51% (n=329)</td>
<td>61%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>34%</td>
<td>66%</td>
<td>N=660</td>
<td></td>
</tr>
</tbody>
</table>

Because youth involved in the child welfare system often change homes, it is difficult to track parental influences; adolescents who are not removed after the first investigation may be removed from home following a second investigation, some foster adolescents return to their parents, and others move to new foster homes. To test the effect of moving on religious attendance, a 5-level categorical variable was created comparing placement at wave 1 and placement at wave 2. Due to low numbers, kinship and traditional foster placements were combined into a broad ‘foster’ category. There were three types of moves: 1) from biological
families to foster families, 2) from foster families to reunify with their biological parents and 3) from one foster home to another foster home. There were two categories of not moving, (biological and foster); most adolescents remained with the same caregiver at both waves.

Change in weekly attendance at wave 2 varied by movement type (Fig. 3), with a high proportion of adolescents who remained in foster homes (either the same home or a new foster home) maintaining high weekly attendance (50-60% at both waves for both groups). Adolescents who stayed with their biological parents had a slight drop in attendance rate (from 36% to 33%). Decreasing religious attendance is typical for adolescents as they age. Adolescents who started in foster placements and moved to biological homes had the highest weekly attendance at wave 1 and the lowest weekly attendance at wave 2, dropping from 73% (SE 12.8) to 19% (SE 4.8). Adolescents who were with biological parents at wave 1 and moved into a foster placement by wave 2 also experienced a drop in attendance (dropping from 47% to 22%).

Although the sample of adolescents who were with biological parents at wave 1 and foster parents at wave 2 was small (n=41), the drop in attendance for these adolescents was surprising since biological parents attend services at a lower rate than foster parents and parental attendance is associated with youth attendance. Therefore an increase rather than decrease in religious attendance was expected and the drop in religious attendance warranted further exploration. Possible explanations might include increased kinship placements or specific types of abuse. I reviewed the demographic characteristics of this group compared to the rest of the sample, but saw nothing that could explain the differences.
Adolescence is the peak age for religious transformation, which can include both growth and decline. Because previous research (Regnerus & Uecker, 2006) has found that predictors of increase in religious attendance differ from predictors of decrease, two different logistic regression models were tested. The first modeled the increase in attendance from not weekly to weekly. Although Regnerus and Uecker (2006) found that adolescent religious growth in religious attendance is tied to demographic factors, none of the factors we tested (move, adolescents age, and adolescents race) significantly predicted increases in religious attendance in our sample. Regnerus and Uecker (2006) also found that it was more difficult to predict religious increases than religious declines.

The second model analyzed the decrease in attendance from weekly to not weekly. As in the increase model, none of the adolescent demographic variables significantly predicted a decrease in attendance; however, adolescents who moved between biological parents and the foster system were significantly more likely to experience a decrease in religious attendance than

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6 Unfortunately NSCAW II did not ask caregivers questions about their religious attendance at wave 2.
those who stayed in the same home or remained in the foster system (Table 12). The confidence intervals are very large so there is no reliable estimate of effect size, but for the confidence intervals that don’t contain 1, there is strong statistical evidence for the effect.

Table 12: Odds Ratios for Decreases in Attendance by Movement Type

<table>
<thead>
<tr>
<th>Movement Type</th>
<th>Foster-Bio</th>
<th>Bio-Foster</th>
<th>Bio-Bio</th>
<th>Foster-same</th>
<th>Foster-change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foster-Bio</td>
<td>1</td>
<td>1.8</td>
<td>3.1</td>
<td>18.0***</td>
<td>23.3**</td>
</tr>
<tr>
<td>n=21</td>
<td></td>
<td>(0.62,5.21)</td>
<td>(2.35,13.1)</td>
<td>(4.89, 66.3)</td>
<td>(3.3,164.8)</td>
</tr>
<tr>
<td>Bio-Foster</td>
<td></td>
<td>1</td>
<td>5.6***</td>
<td>10.1***</td>
<td>13.0*</td>
</tr>
<tr>
<td>n= 20</td>
<td></td>
<td></td>
<td>(2.35,13.1)</td>
<td>(2.10, 48.2)</td>
<td>(1.7,97.6)</td>
</tr>
<tr>
<td>Bio-Bio</td>
<td></td>
<td></td>
<td>3.1</td>
<td>3.2</td>
<td>4.2</td>
</tr>
<tr>
<td>n=159</td>
<td></td>
<td></td>
<td></td>
<td>(0.90,10.65)</td>
<td>(0.82, 21.6)</td>
</tr>
<tr>
<td>Foster-same</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>n=50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.93,11.4)</td>
</tr>
<tr>
<td>Foster-change</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>n=13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>*** p &lt; 0.001, ** p &lt; 0.01, * p =0.013</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number in parentheses is the 95% confidence interval.

Based on these longitudinal analyses there is not sufficient evidence to support Hypothesis 3: Increasing adolescent attendance from wave 1 to wave 2 is predicted by demographic factors (age, race and gender) and change in family. However, there is evidence to support Hypothesis 4: Decreasing adolescent attendance from wave 1 to wave 2 is predicted by change between foster and biological family.

**Question 1b: Does caregiver religious attendance impact adolescents’ importance? (H:2)**

This analysis was done with the same sample (n=889) used in the logistic regression wave one analysis for religious attendance. This sample included cases that were not missing
data for any of the variables in the final logistic regression analysis model for adolescents’ importance at wave 1. The dropped cases were less than 7% of the targeted sample.

**Logistic regression analysis with Wave 1 data.** A logistic regression was used to model adolescent ‘high religious importance’ versus ‘high religious importance’ (or in other words the combined category of the other three responses, somewhat important, only a little important or not important) and to compute odds ratios for adolescent and caregiver characteristics that explained adolescents’ ‘high importance’ (Table 13). Two caregiver factors provided the largest odds of adolescents’ saying religion was very important. The odds of high importance were about 3 times that for adolescents whose caregivers were black than those who were white or other race and increased about 4 times higher for adolescents who had caregivers less than 54 years of age. Attending religious services regularly also explained adolescents’ religious importance: the odds of adolescents saying religion was very important were more than 3 times the odds for adolescents who attended weekly (similar to importance predicting attendance in the previous section). Moreover, the odds changed by an additional factor of 2.4 if the adolescents reported attending with their caregiver in the last month. Several other factors were included in preliminary analysis, namely the type of abuse an adolescent experienced, whether the abuse was substantiated, adolescents age, adolescents race, caregiver poverty, caregiver education level, and placement type. However, these variables were found to be non-significant predictors of adolescents’ high importance after controlling for the variables mentioned above. This model was a fair representation of the data with 68.3% of predicted probabilities concordant with observed responses, 28.7% discordant, and 3.0% tied.
Based on the logistic regression analyses there is sufficient evidence to support Hypothesis 2: Higher parental and adolescents’ religious attendances at wave 1 are associated with adolescent’s higher religious importance at wave 1.

**Change in religious importance from W1 to W2.** The majority of adolescents (55%) reported the same level of religious importance at W1 and W2. Some adolescents decreased in religious importance (27%) with the preponderance only dropping one level (20% of the total). Some adolescents increased in religious importance between wave 1 and wave 2 (18%) and most increased by one level (13% of the total). Changes in religious importance also were associated with moving homes. Adolescents who moved between foster and bio homes had the highest decrease in the proportion saying religion was very important (24%-25% drop). Adolescents who stayed in the same foster home had the highest increases with 13% more saying religion was
very important at wave 2 this moves them from the lowest percentage at wave one to close to the highest.

Figure 9: Proportion of Adolescents with Very High Religious Importance at Wave 1 and Wave 2 Conditional on Movement Type

Question 2: Does caregiver and adolescents religiosity impact adolescent delinquency? (Hypotheses: 5,6,7,8)

This analysis was done with a slightly smaller sample (n=866) due to different patterns of missing data for the variables included in this model. The sample for this analysis included cases that were not missing data for any of the variables included in the logistic regression analysis model for delinquency at wave 1. The dropped cases were less than 10% of the targeted sample. There were no detectable patterns of missing data.

Bivariate analysis with wave 1 data. As defined in the methods section, delinquency was categorized into 4 groups based on severity and frequency of delinquent behaviors. Wald tests of independence in a two way contingency tables showed that adolescents religious attendance is not associated with delinquency $F(9,63) = 1.48, p = .17$, but that adolescent
importance is related to delinquency $F(9,63) = 3.00, p < .01$ (See Figure 10). None of the other religious variables (caregiver attendance, attend with caregivers in the last month, or matching religious levels) are significantly related to the 4 level categorical delinquency measure.

Figure 10: Category of Delinquency Conditional on Religious Importance

![Figure 10: Category of Delinquency Conditional on Religious Importance](image)

**Logistic regression analysis with wave 1 data.** A logistic regression was used to model adolescent delinquency (dichotomized into two groups, the adolescents with no delinquent acts were combined with youth who had 4 or fewer minor acts of delinquency, and youth with 5 or more minor acts, a moderate act, or a serious act were grouped together into a delinquent category). Odds ratios were computed for adolescent and caregiver characteristics that explained delinquency (Table 14). Preliminary analysis eliminated several variables that have been found to be related to delinquency in previous research (adolescent race, adolescent and caregiver gender, adolescent weekly religious attendance, attending religious services with parents in past month, placement, and parent education level). In this sample, these variables were not significantly related to delinquency after controlling for the variables included in the model below. Several potential interactions were also tested and found to be nonsignificant, including:
adolescent attendance by placement, adolescent age by adolescent attendance, and adolescent age by caregiver attendance.

The age of caregivers was initially a 4 level categorical variable. However, in preliminary analyses the oldest category of caregivers (over age 54) was significantly different than all three younger categories of caregivers for predicting adolescents’ delinquency (and there were no significant differences between the younger three groups). So this variable was recoded into a dichotomous variable with caregivers under 54 in one group and those over 54 in the other. The older group of caregivers was predominantly (76%) grandparents, with by far the largest portion of them being maternal grandmothers (49% of older group).

**Unmediated model.** As can be seen in Table 14, three religious variables were associated with decreased odds of delinquency. The odds of being delinquent when attendance is matched are 58% of the odds when attendance is not (or conversely the odds were 1.7 times greater for adolescents whose attendance matched their parents to be not-delinquent). These odds of being delinquent when caregivers attend weekly is 49% of the odds of when caregivers do not attend weekly and the odds of delinquency for adolescents who said religion/spirituality was very important was 52% the odds of youth who did not say that religion/spirituality was very important (or in other words, high importance and caregivers attending religious services both approximately doubled the odds of being non-delinquent).
<table>
<thead>
<tr>
<th>Effect</th>
<th>Unmediated Model</th>
<th>3 Scale Mediated</th>
<th>Final Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Odds Ratio</td>
<td>95% Wald Limits</td>
<td>Odds Ratio</td>
</tr>
<tr>
<td>Religious variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matching attendance</td>
<td>0.58*</td>
<td>0.36 0.58</td>
<td>0.59</td>
</tr>
<tr>
<td>Cg. weekly attendance</td>
<td>0.49*</td>
<td>0.28 0.49</td>
<td>0.46**</td>
</tr>
<tr>
<td>Adolescents importance</td>
<td>0.52**</td>
<td>0.33 0.52</td>
<td>0.65</td>
</tr>
<tr>
<td>Demographic variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adolescents Age</td>
<td>1.47***</td>
<td>1.27 1.47</td>
<td>1.38***</td>
</tr>
<tr>
<td>Caregiver race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Black</td>
<td>1.68</td>
<td>0.94 3.03</td>
<td>1.54</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1.76</td>
<td>0.86 3.60</td>
<td>1.61</td>
</tr>
<tr>
<td>Other</td>
<td>6.62**</td>
<td>2.35 18.7</td>
<td>6.496**</td>
</tr>
<tr>
<td>Old caregiver</td>
<td>4.07***</td>
<td>2.07 4.07</td>
<td>4.42***</td>
</tr>
<tr>
<td>Type of abuse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Abuse</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Sexual Abuse</td>
<td>1.04</td>
<td>0.41 1.04</td>
<td>1.21</td>
</tr>
<tr>
<td>Emotional abuse</td>
<td>0.93</td>
<td>0.23 0.93</td>
<td>0.93</td>
</tr>
<tr>
<td>Neglect- failure to provide</td>
<td>0.11***</td>
<td>0.04 0.11</td>
<td>0.18**</td>
</tr>
<tr>
<td>Neglect- failure to supervise</td>
<td>0.49*</td>
<td>0.25 0.49</td>
<td>0.62</td>
</tr>
<tr>
<td>Other type of maltreatment</td>
<td>0.44</td>
<td>0.19 0.44</td>
<td>0.54</td>
</tr>
<tr>
<td>Domestic Violence</td>
<td>0.21**</td>
<td>0.07 0.21</td>
<td>0.31*</td>
</tr>
<tr>
<td>Cg. Substance use</td>
<td>0.63</td>
<td>0.26 0.63</td>
<td>0.84</td>
</tr>
<tr>
<td>Missing abuse type</td>
<td>0.6</td>
<td>0.25 0.6</td>
<td>0.63</td>
</tr>
<tr>
<td>Mediating Scales</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental Monitoring</td>
<td>0.79</td>
<td>0.56 1.10</td>
<td></td>
</tr>
<tr>
<td>Deviant Peers</td>
<td>1.83*</td>
<td>1.22 2.76</td>
<td>1.86**</td>
</tr>
<tr>
<td>Parent Child Relationship</td>
<td>0.41***</td>
<td>0.28 0.61</td>
<td>0.37***</td>
</tr>
</tbody>
</table>

*** p < .001, **p < .01, * p < .05
There were several demographic variables that also were related to adolescents being delinquent when controlling for the variables mentioned above. The odds that adolescents were delinquent were 1.5 for each year older the adolescent was. In addition the odds of adolescents being delinquent were 4 times that for adolescents whose caregivers were over the age of 54. Conversely, adolescents who had caregivers with other race (mostly Asian and Native American) were 15-27% the odds of delinquency for adolescents who had White, Black or Hispanic caregivers.

There was also variation in the types of abuse that affected the odds of being delinquent. Adolescents who experienced both sexual and physical abuse had higher odds of being delinquent than adolescents who experienced several other types of abuse (both types of neglect and exposure to domestic violence) when controlling for the other variables in the model. Adolescents who experienced failure to provide had odds significantly different from all other types of abuse except for domestic violence. For example adolescents who experienced neglect/failure to provide were 9 times those of adolescents who had experienced physical abuse. This final model was a fair representation of the data with 68.4% of predicted probabilities concordant with the observed delinquency measure, only 31.3% discordant, and only .3% was tied.

Based on the unmediated model, there is sufficient evidence to support part of Hypothesis 5: Increased caregiver religious attendance, adolescent religious importance, and religious matching were all inversely associated with adolescent delinquency. However, adolescent religious attendance was not associated with delinquency status.

**Model including mediators.** To try to better understand the causal mechanisms underlying the religious influences, three potential mediators of the effect of religious importance on delinquency were tested (Baron & Kenny, 1986). In the Baron and Kenny (1986)
framework, an argument for mediation takes three steps (Figure 11): First, religious importance must have a direct effect on delinquency without considering the mediating variables (path A without B and C in figure 11). Second, religious importance must have an effect on the mediating variables (path B in figure 11). Finally, if the size of the direct effect of religious importance on delinquency (A in figure 11) decreases when the effect of the mediator on delinquency is included (C in figure 11), it is concluded that mediation occurs.

As described previously, religious importance has a statistically significant effect on delinquency (p < 0.01, Table 14, left) after controlling for other variables. Adolescent religious importance also had a statistically significant effect on parental monitoring $F(1,72) = 9.41, p < .01$ deviant peers $F(1,71) = 5.12, p < .0001$, and parent-child relationship $F(1,71) = 7.40, p < .01$ according to F-tests with Type III sums of squares, even after controlling for caregiver attendance and matching attendance. When all three mediators were added to the model for delinquency (Table 14, middle), deviant peers (p < 0.01) and parent-child relationship (p < 0.001) were significant predictors of delinquency (parental monitoring was not, p = .16), and adolescent religious importance was no longer a statistically significant predictor of delinquency (p = .09), suggesting that deviant peers and parent-child relationship mediate the effect of adolescent religious importance on delinquency.

Previous literature suggests that gender may moderate these effects. Boys are more likely to be negatively influenced by deviant peers (Dishion, Patterson, Stoolmiller, & Skinner, 1991), and girls have had more positive influence by good parent child relationships. However in this study, interactions between gender and each of the potential mediators were not significant in predicting delinquency.
Figure 11: Mediation Relationship

Final Model for Delinquency. As can be seen in Table 14, after including the mediators of deviant peers and parent child relationships in the final model, the majority of the variables continued to decrease the odds of delinquency at a rate very similar to the unmediated model, with the exception of religious importance. The final model was a good representation of the data with 76.8% of predicted probabilities concordant with the observed delinquency measure, only 23.0% were discordant and .2% tied. Adding the mediators to them model increased the percent concordant by 8.4%.

The demographic variables that were significant in the unmediated model remained significant in the final model. Additional analyses were done to compare all types of caregiver races (See table 15) and ‘other race’ were 15-24% was significantly less likely to be delinquent than adolescents who had White, Black or Hispanic caregivers but there were no other significant differences in caregiver race. Additional analysis was also included to compare the variety of maltreatment types related to delinquency (see Table 16). Adolescents whose most serious type of abuse was Neglect (failure to provide) had lower odds of being delinquent than adolescents who experiences physical, sexual, other type of abuse, neglect- failure to supervise or those with missing abuse types. Kids exposed to domestic violence had lower odds of being
delinquent than adolescents who were physically or sexually abused. There were no other
significant differences between abuse types.

Table 15: Odds Ratio for Delinquency for Caregiver Race

<table>
<thead>
<tr>
<th></th>
<th>Black</th>
<th>White</th>
<th>Hispanic</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>1.51</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.93</td>
<td>0.62</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>0.23**</td>
<td>0.15***</td>
<td>.25*</td>
<td>1.00</td>
</tr>
</tbody>
</table>

*** p < .001, **p < .01, * p < .05

There was sufficient evidence to support part of Hypothesis 6: The relationship of
adolescent religious importance on delinquency is mediated by fewer deviant peers. However
adolescent religious attendance was not significant so it was not mediated. There was
insufficient evidence to support Hypothesis 7: The relationship of religious matching on
delinquency is mediated by improved parent child relationships. Instead it was found that parent-
child relationship was a second mediator for youth religious importance. There was insufficient
evidence to support Hypothesis 8: The relationship of religious matching (as measured by
similar levels of attendance or reports of attending with parents in the last month) on delinquency
is mediated by improved parent child relationships.
Table 16: Odds Ratio for Delinquency with All Types of Abuse Contrasted

<table>
<thead>
<tr>
<th>Missing abuse type</th>
<th>Physical Abuse</th>
<th>Sexual Abuse</th>
<th>Emotional abuse</th>
<th>Neglect-failure to provide</th>
<th>Neglect-failure to supervise</th>
<th>Other type of maltreatment</th>
<th>Domestic Violence</th>
<th>Cg. Substance use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missing abuse type</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Abuse</td>
<td>1.63</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual Abuse</td>
<td>1.89</td>
<td>0.86</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional abuse</td>
<td>1.45</td>
<td>1.13</td>
<td>1.30</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neglect-failure to provide</td>
<td>0.30*</td>
<td>5.54**</td>
<td>6.41**</td>
<td>4.92</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neglect-failure to supervise</td>
<td>1.00</td>
<td>1.64</td>
<td>1.89</td>
<td>1.45</td>
<td>0.30*</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other type of maltreatment</td>
<td>0.88</td>
<td>1.86</td>
<td>2.15</td>
<td>1.65</td>
<td>0.34</td>
<td>1.14</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Domestic Violence</td>
<td>0.50</td>
<td>3.25*</td>
<td>3.76*</td>
<td>2.89</td>
<td>0.59</td>
<td>1.99</td>
<td>0.97</td>
<td>1.00</td>
</tr>
<tr>
<td>Cg. Substance use</td>
<td>1.28</td>
<td>1.28</td>
<td>1.48</td>
<td>1.14</td>
<td>0.23*</td>
<td>0.78</td>
<td>0.32</td>
<td>0.24</td>
</tr>
</tbody>
</table>

*** p < .001, ** p < .01, * p < .05
**Change in Delinquency from W1 to W2.** The majority (66%) of adolescents remained in the same delinquency category at both waves 1 and 2. Some adolescents (13%) who were not delinquent the six months preceding wave 1 were delinquent in the six months preceding wave 2 (Table 17). Conversely, and perhaps more surprising is that a portion of adolescents (21%) who were delinquent the six months preceding wave 1 were not delinquent in the six months preceding wave 2. Since delinquency was dichotomized into two categories it is possible that adolescents had major changes (either reductions or increases in delinquency) and remained in the same category at wave one and wave 2. It is also possible that a minor change in delinquent behavior was enough to move them over the threshold between delinquent and not delinquent. A Wald test of independence in a two way contingency table showed that wave one delinquency was associated with wave two delinquency $F(1,71) = 22.7, p < .0001$.

<table>
<thead>
<tr>
<th>Wave 1</th>
<th>Wave 2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not Delinquent</td>
<td>Delinquent</td>
<td>Total</td>
</tr>
<tr>
<td>Not Delinquent</td>
<td>47% (n=363)</td>
<td>13% (n=99)</td>
<td>60%</td>
</tr>
<tr>
<td>Delinquent</td>
<td>21% (n=129)</td>
<td>19% (n=156)</td>
<td>40%</td>
</tr>
<tr>
<td>Total</td>
<td>68%</td>
<td>32%</td>
<td>N=747</td>
</tr>
</tbody>
</table>

Table 17: Change in Delinquency between Wave 1 and Wave 2.
CHAPTER 6: DISCUSSION

This research extends previous research about adolescent religiosity by focusing on a particularly high risk population, maltreated youth. There were two areas of investigation of the role of religiosity for maltreated adolescents: religious socialization and influence of religiosity on delinquency. The first major finding is that caregivers are a primary influence in shaping their children’s religious attendance and importance even when their parents are investigated for maltreatment or when they are in temporary placements with foster parents. This is inconsistent with previous research which found that family disruption interfered with transmission of religion. Both the religious attendance of parents investigated for maltreatment and the religious attendance of foster caregivers substantially increased the odds of youth attending weekly. Youth with caregiver’s who were younger than 54 years old or were black and adolescents who attended services with the caregiver in the past month increased the odds of youth having high religious importance. The second major finding is that religiosity of both maltreated youth and their caregivers are related to a decrease in the odds that maltreated adolescents were delinquent. This finding replicated previous research with the general population, in which religious commitments have been found to protect youth from risk behaviors (Baier & Wright, 2001; Cheung & Yeung, 2011; Johnson et al., 2000; Pearce & Haynie, 2004; Smith & Denton, 2005).

Religious socialization

This research adds to the substantial research that shows caregivers are the primary influence in shaping their children’s religiosity. This research extends this concept to include both parents who were investigated for maltreatment and foster parents. Although previous research suggests that poor quality parent-child relationships interfere with transmission of religion, in the current study both the religious attendance of parents investigated for
maltreatment and the religious attendance of foster caregivers substantially increased the odds of youth attending weekly.

**Attendance.** Maltreated youth attended religious services at a rate similar to previous research with adolescents in the general population. Thirty-nine percent of maltreated adolescents attended weekly, whereas in the National Study of Youth and Religion, 41% of adolescents attended weekly (Smith & Denton, 2005). Fifteen percent of maltreated adolescents never attended, which is also similar to 19% of Smith and Denton’s sample who never attended. This is also consistent with previous research on smaller regional samples of foster youth (Jackson et al., 2010; Scott, et al., 2006).

Traditional foster parents have very high weekly service attendance rates (Fig. 1). Sixty one percent of non-kin foster parents attend religious services weekly,7 while the national average of weekly service attendance is only 39% (Pew Forum on Religion and Public Life, 2008). Two reasons are suggested for higher religiosity among non-kin foster parents: they may be motivated by faith to become foster parents and recruitment of foster parents often occurs in churches (Howell-Moroney, 2009). Additionally, some faith communities have taken on foster care as a ‘mission,’ and some organizations intentionally enable faith communities to provide concrete support for foster parents.8

Although youth in foster care are more likely to attend religious services weekly than youth who remain with their parents, after controlling for parental attendance, youth with traditional foster parents were no more likely to attend weekly than youth with other caregivers (Table 10). The lack of placement influence for traditional foster parents may be due to a ceiling

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7 Although this is based on a relatively small sample (unweighted n=119), it is similar to NSCAW I data, in which 65% of traditional foster parents attended weekly (Schreiber, 2009).

8 For example: Fostering Hope in Wisconsin and Colorado, The CALL in Arkansas, 4Kids of South Florida, and Project 1.27 of Colorado.
effect since the majority of traditional foster parents attend weekly. Youth placed with kinship foster parents were more likely to attend weekly than youth living with biological parents even after controlling for other predictors. Youth in kinship placement attend more than those who remain with their biological parents even when parental attendance is included in the analysis. This suggests that kinship foster youth are attending even when their parents are not attending. Future research should explore if kinship foster parents are more likely to use religious services as respite care.

Social learning theory suggests that youth develop religiously through observing and interacting with other religious individuals. As such, the theory predicts that youth with highly attending caregivers should be more likely to attend religious services and that youth who have attended with their caregivers recently are more likely to attend weekly. The results of this study support these predictions of social learning theory. The logistic regression of wave 1 data show that the odds of attending weekly for youth with a caregiver who also attends weekly are 5 times the odds of youth whose caregivers do not attend weekly, suggesting evidence of spiritual modeling. Additionally, the odds of attending weekly for youth who claim to have attended with their caregiver in the past month are 2.5 times the odds for youth who have not attended services with their caregiver, suggesting evidence of spiritual social capital. It appears that for youth investigated for maltreatment, religious participation occurs through interaction as well as by example.

Social learning may be a stronger influence than formerly believed. Previous research found that poor-quality parent-child relationships may reduce the transmission of religion (Bao, Whitbeck, Hoyt, & Conger, 1999). Kim and colleagues (2009) found that shared religious practices were stronger in non-maltreating families than in maltreating families. However, in the current study, the religious attendance of both parents investigated for maltreatment and foster parents was correlated with youth attendance, even though these relationships are assumed to be
weaker than for non-maltreating parents. The process may be as simple as expecting the youth to meet family norms. As one former foster parent explained, “Of course the kids are going if the parents are going. What are you supposed to do with them—leave them home alone?” (T. Manselle, personal communication, July 10, 2012).

Decreases in religious attendance were associated with family disruptions—moving homes between a biological family and a foster family was associated with decreases in religious attendance. This is consistent with research on other types of family disruptions. For example, Denton (2012) found family disruptions (e.g. parental break ups) to negatively affect adolescents religious engagement. It makes sense that youth who reunify with parents would experience religious decrease since biological parents are less likely to attend. It was surprising that youth who are removed from biological homes to be placed in foster care also had a decrease in religious attendance. Additional exploration into adolescents who moved from biological homes into foster homes found that this group was primarily (68%) age 13 and 14 at wave one. It is possible that religiosity decreases are more likely at this age group. It is also possible that there was less religious attendance by the foster caregivers in this group, but since caregiver attendance was not collected at wave 2, this cannot be assessed. Since this group had the highest religious attendance at wave 1, it is possible that this group came from highly conservative homes and that the youth are reacting to that type of religiosity; this theory is worthy of further investigation. It is interesting to note that moving from one foster family to another did not decrease religious attendance. This may reflect the overall high religiosity of foster families, so that even if youth switched homes, they were likely to stay in a highly religious family.

No factors that were tested were found to be related to increases in religious attendance. Previous research (Regnerus and Uecker, 2006) found that adolescent religious growth in
religious attendance is tied to demographic factors, but none of the factors tested (move, adolescents age, and adolescents race)\(^9\) significantly predicted increases in religious attendance in this sample. It is possible that there was a not sufficient sample size to detect the differences between groups.

Although religious attendance is a commonly used measure of religiosity and is a good behavioral measure, some youth may be attending services involuntarily. Parents and foster parents may require religious service attendance from youth. Consequently it is important to compliment this external measure of religiosity with an internal measure, which is based on the youth’s values.

**Religious importance.** The youth in this study had high rates of religious importance (48% claimed religion and spirituality to be very important, 35% claimed it was somewhat important, and only 16% stated it was a little or not important) than those reported by Smith and colleagues (2002), who analyzed ‘Monitoring the Future’ data and found that only 31% of 12\(^{th}\) graders stated that religion was ‘very important,’ 30% stated that religion was ‘pretty important,’ and 39% stated it was ‘a little’ or ‘not important.’ This may suggest that the experience of being maltreated impacts subjective religiosity or personal religious salience. This is inconsistent with previous research on a younger sample. Analyzing a sample of economically disadvantaged families, Kim and colleagues (2009) found maltreated children (age 6-12) had lower religious importance than non-maltreated poor children. However, Kim’s sample had a significantly higher proportion of non-whites in the non-maltreated group and minority race is correlated with religious importance. Additionally, high religious importance was found with previous samples of poor youth and adults. Schwadel (2008) found that poor teenagers have high levels of personal faith (including reading scriptures and praying) although they are unlikely to participate in

\(^9\) Unfortunately NSCAW II did not ask caregivers questions about their religious attendance at wave 2.
organized religious activities such as attend religious services. Sullivan (2011) found similar results for poor mothers.

NSCAW data does not measure religious importance for caregivers but several other caregiver factors increased the odds of youth saying that religion was very important. In fact, the largest increases in odds of having high importance were related to caregiver demographics. The odds of high religious importance were about 3 times greater for youth whose caregivers were black than those who were white or other race. This increased to about 4 times higher for youth who had caregivers less than 54 years of age compared to adolescents who had caregivers over 54. In addition, adolescent religious attendance and attending with caregiver in the past month increased the odds of youth having high religious importance.

Moving between biological and foster placements was correlated with about 25% drop in the percent of youths who report religion was very important to them. However, youth who remained in the same foster placement had 13% increase (the only category of move that showed an increase in religious importance). Although there is no previous research on the impact of changing placements on religious importance, Smith and Denton (2005) found decreases in religious importance for youth who had other types of family disruptions such as divorced or widowed parents.

**Religious heteronomy.** Children in foster care experience changes in their homes, neighborhoods, and often schools. Since youth’s religiosity is strongly associated with caregiver religiosity and traditional foster parents attend religious services much more than the national average, this study suggests that children in foster care may also experience religious change. There was no data collected on the biological families of the children in care, but their religious attendance is likely similar to the religious attendance of the investigated parents who retained
custody of their children. Since traditional foster parents are much more likely to attend religious services than biological parents who are investigated for maltreatment, many children who are entering foster care are likely to enter homes that are more religious than their family of origin.

Religious differences between youth and parents have been shown to negatively impact youth outcomes in the general population (Pearce & Haynie, 2004) and may be a source of conflict for foster families as well. Since religious orientations have central guidelines about family norms and appropriate child rearing, when family members do not share religiously based norms, the conflict may be more profound because it is imbued with sacred meaning for at least some of the family members. For the foster children who are socialized to the religion of their foster families, reunification with their parents will require them to change religious contexts again and this was evidenced in the decrease of religious attendance and importance for children who moved between biological and foster homes between wave 1 and wave 2.

**Religious effects on delinquency**

The current study adds to the burgeoning literature about the role of religiosity in decreasing adolescent delinquency. Although adolescent religious attendance did not decrease the odds that youth were delinquent, adolescents with high religious importance have decreased odds of being delinquent. This finding is consistent with a recent meta-analysis of the relationship between adolescent religiosity by Cheung and Yeung (2010) that found private religious involvement had a stronger inverse relationship with destructive behaviors than public religious involvement. In the current study, the effect of religious importance was indirect since it was mediated by two factors, fewer deviant peers and better parent-child relationships. Caregiver religious attendance also decreases the odds that a youth is delinquent. In addition to parent religious beliefs and practices influencing the religious socialization of their adolescents,
it is also possible that parent beliefs may influence outcomes by influencing parenting behaviors (Spilka, Hood, Hunsberger, & Gorsuch, 2003). In addition, matching religious attendance between caregivers and youth also significantly and directly decrease the odds that a youth is delinquent. Several demographic variables increased the odds of delinquency in the models that included religious factors, including adolescents who were older, caregivers who were over 55, caregivers who were other race, and some types of maltreatment.

**Parent religious attendance.** Parent religious attendance is an important factor for multiple reasons. Parent attendance is directly correlated with youth delinquency and it is predictive of youth religious importance which is correlated with decreased youth delinquency. This finding is consistent with research on adolescents in the general population. Regnerus (2003) found that parental religiosity had a minor direct influence but a significantly larger indirect influence (mediated by increased family satisfaction and decreased autonomy) on adolescent delinquency. Parent weekly attendance is a measure of commitment to religious practice but also may function as a proxy from more secure pathways to well-being such as social networks, health, belief structure, network closure, or search for meaning. For example there may be an association between religious attendance and health since only healthy people are able to get out and go to church (Hall, et al., 2008). Smith (2003b) found that increased parental religiosity led to higher moral expectations and increased supervision, and therefore proposed these as potential mediators the effect that religiosity has on youth outcomes. Another theorized explanation of how religious parents influence their children is social channeling; parents put their children into groups, activities and contexts that reinforce their efforts to influence their adolescents. This type of channeling could directly influence adolescents’ ability to connect with adult mentors as well as peers who share parents’ values.
Religious matching. There were two measures of religious matching in this study. First, youth responded directly to a question about whether they had attended services with their caregiver in the past month and second whether youth and caregivers attended services at the same rate. The odds of being delinquent for youth whose religious attendance matched their caregivers' were 57% of the odds for youth whose religious attendance didn't match their caregivers'. Matching religious attendance decreased the odds of youth delinquency by 57%. This is consistent with previous research by Pearce and Haynie (2004) that found that differences in religiosity between parents and youth will lessen the protective power of religiosity of either party, and lead to increases in delinquency. Although similar attendance rates is a rather limited measure of Homogamy, this finding warrants further exploration about the effect of religious matching on delinquency outcomes.

Another issue around religious matching is instability experienced by foster youth. Family instability (including educational instability) has been linked to poor outcomes (Ryan & Testa, 2005, Thornberry, Smith, Rivera, Huizinga, & Stouthamer-Loeber, 1999). It would be good to include religious instability in future research. As one foster youth stated, “Some families make you go to church, so if you have been in many foster families, you have been involved in many different religions” (Dilorenzo & Nix-Early, 2004).

Youth religious importance. Adolescent religious importance decreased the odds of youth delinquency in initial models; however the effect became insignificant when mediators (deviant peers and parent child relationship) were included. Other research has found that increased religiosity improved parent child relationships. For example, Larson and colleagues found that youth involved in faith-based youth programs were more likely to state that these activities improved their relationships with parent/guardians. Although there has not been much
research on maltreated youth religiosity and delinquency, research by Kim (2008) found that importance of faith was related to lower levels of internalizing symptomatology for maltreated girls. It is possible that other unexplored mechanisms could explain the effect. For example, Simons and colleagues (2004) found that the reason religious youth were more likely to have less deviant behavior is that they are more likely to view delinquent actions as morally unacceptable, or in other words, were more committed to traditional values.

**Deviant peers.** Similar to other studies on adolescent delinquency, having deviant peers increased the odds of adolescents being delinquent in this study. Although previous research found that the effect of deviant peers is stronger for males (Ryan et al., 2010), there were not interaction effects with this sample. The relationship between deviant peers and religiosity has been documented in previous research (Johnson et al. 2000). Peers have also been found to influence religious socialization via two mechanisms, selection effects -adolescents pick religiously similar peers, and socialization effects -peers shape each other (King & Furrow, 2004; King & Roeser, 2009; Smith & Denton, 2005). Schreck and colleagues (2007) found that one reason that religious involvement was a protective factor for adolescents was that it encouraged less contact with deviant peers and more contact with parents.

**Parent child relationship.** Increases in quality of parent child relationship also decreased the odds that adolescents in this study were delinquent. There are several possible reasons for this effect. King and Furrow (2004) found that religious youth have higher levels of social capital and network closure, including trust and shared values with parents. Mahoney (2010) suggests three different spiritual mechanisms that describe how family relationship may be influenced by religious beliefs. First, family members may rely on a relationship with the Divine. Second, the family relationship itself may be invested with spiritual properties. Finally, family members may
rely on relationships with spiritual communities. There may be adaptive or maladaptive beliefs about family based on religious values.

Implications

The findings have direct implications for child welfare practice and policy - including the support the youth and families religiosity and the importance of religious matching when making placement decisions.

Practice. Since many foster parents and youth are religious, child welfare practitioners need to understand and support this potential protective factor. Since adolescents’ religious importance is tied to improved parent child relationships, less deviants peers and decreased delinquency, workers should support activities that support the develop religious importance. Previous research has suggested a variety of practices that support the spiritual and religious well-being of children, including 1) helping children process fear of death, or frightening spiritual experiences or dreams, 2) cooperating with religiously based rites of passage, 3) supporting voluntary participation in familial or community events, feasts or festivals and 4) supporting the youth’s spiritual practices that develop his or her sense of meaning or connectedness (Jeong & Canda, 2010). The types of activities could cultivate youth’s internal religiousness, sense of meaning making and purpose, as well as their connection to communities and participation in religious services and activities. Strengthening maltreated adolescents’ spiritual development can “provide them with both an anchor to help keep them safe and stable during the storms they experience during and after foster care, as well as a compass to guide them towards a future characterized by stability, hope, and fulfillment of dreams” (DiLorenzo & Nix-Early, 2004, p. 9).
In order to appropriately support religious development of children and families, child welfare workers need a basic understanding of religion. However, 83% of social workers who worked with children have stated that religion was rarely or never addressed in their education (Kvarfordt & Sheridan, 2007), meaning that “relevant day-to-day practice remains largely dependent on individual views and attitudes” (Gilligan, 2009, p. 94). To provide culturally sensitive casework, child welfare workers need enough understanding of religious teachings that they can ask appropriate questions to learn about individual values. Specifically, Mahoney (2005) suggests that workers should be able to identify religiously based expectations about parenting and identify religious beliefs that support either adaptive or maladaptive conflict-resolution methods. Along with knowledge of faith traditions there needs to be training in skills building in how to conduct an assessment and appropriate use of religion in treatment with families who identify that religion would be helpful (Hodge & Bushfield, 2006).

Social workers need to adhere to ethical guidelines for spiritually sensitive practice, such as “respect for spiritual diversity; restraint from inappropriate proselytizing; assuring client’s and guardians’ interest, readiness and comfort; communicating with empathy and rapport; and establishing professional competency regarding any particular practices that are followed”. (Jeong & Canda, 2010, p. 125). Another ethical issue is the value of minority perspectives. Practitioners must do more than tolerate religions or cultures—they need to understand the strengths that various religious/spiritual worldviews offer. Lack of understanding of minority religions has had negative consequences for families and religious minorities have been unnecessarily targeted for child welfare services. For example, in an unpublished report in the mid-1990s, the Illinois Department of Children and Family Services (DCFS) found that one-third of protective custodies of Muslim children had been unnecessary. Jess McDonald, the head of
DCFS at the time, said “Let me tell you what [the report] says. It says we do really shitty work in the [Muslim community]” (Puckett, 2008, p. 133).

Religious matching in foster care placement. Research with the general population suggests that religious Homogamy is correlated with improved family relations as well as improved behavioral outcomes for adolescents. If those findings are consistent for the child welfare population, it would seem that religiosity ought to be one factor considered in placement decisions. Religious matching in foster care placement would promote cultural continuity. An additional benefit of religiously sensitive placement decisions would be the elimination of concerns about proselytizing. This policy stance would assume that a child would do better with foster parents who share his or her religious perspective: a conservative, evangelical child would be better served in an evangelical foster home, a child with an atheist or secular humanist perspective would find continuity in a nonreligious home, a Muslim child would fare best with Muslim foster parents. Preserving the culture of the child in foster care is one component of the Child and Family Service Review (CFSR), a federally organized system of monitoring safety, permanency, and well-being outcomes for states’ child welfare systems. Cultural continuity is included in the CFSR permanency section.

Religious matching may require extra effort in recruitment of a variety of religious perspectives. This need is being publicized in some areas of the country. For example, in December, 29 2012 an article in the Dallas Morning News stated “A lack of Muslim foster parents in North Texas means local Muslim children are almost always placed with families of other faiths, putting them in an unfamiliar cultural and religious environment and making a difficult process even harder” (Mervosh, 2012). Since a high proportion of Muslims are immigrants and come from cultures where foster care is uncommon, it will take extra effort to
educate some Muslim communities about how child protective services works in the United States.

Although maintaining a child’s connection with her or his culture is generally good, some religious situations are not in a child’s best interest. Many studies have looked at the effect of parental religiosity on maltreatment, including religiously based or justified maltreatment (Bottoms, Nielsen, Murray, & Filipas, 2003; Jackson et al., 1999; Rodriguez & Henderson, 2010; Socolar, Cabinum-Foller, & Sinal, 2008). If a child has been subject to religious abuse it would be inappropriate to place the child based on preserving their religiosity. Additionally, there should be special care for Lesbian, Gay, Bisexual, Transsexual and Questioning (LGBTQ) regarding religiosity, since some religions would be hostile to their identities, as is evident by recent lawsuits in Illinois. Future research should clarify the exceptions to religious matching, but in general maintaining religious connections would be important for personal, familial, and cultural reasons.

**Future research.** This study shows that religious factors are associated with delinquency for maltreated youth. Additional research on the impact of religiosity on other outcome measures is needed. In addition, it is possible that demographic factors that have been often studied in both child welfare and in delinquency (such as age, race and gender) may partially be a proxy for the religious measures that have been ignored in most child welfare studies, so that religious factors need to be included along with other types of demographic factors in child welfare and delinquency research.

**Limitations**

Challenges exist when using religiosity as a quantifiable construct. First, there may be un-measurable aspects of religious influence. Additionally, aspects of religion that can be
measured are often correlated. Drawing a causal connection between religiosity and behavioral outcomes “presents a number of methodological challenges, including reverse causality, selection bias and omitted variable bias” (Office of Health Policy, ASPE, pp. 1:5). These challenges are important to consider, but they are not unique to the construct of religiosity.

Similar to other studies of secondary data, we are also limited by the questions asked in NSCAW II. Although NSCAW II has a plethora of data on family structure, abuse background, and youth outcomes, its religious content is limited to only the standard measures of religious attendance and importance as well as a question about whether the youth has attended religious services with a caregiver. Since parental attendance was measured only at wave 1, the interpretation of the effects of moving households on youth religious attendance is conflated with changes in youths’ exposure to parental religiosity.

Using global indices as measures of religiosity precludes the ability to make clear interpretation of the underlying spiritual or non-spiritual mechanisms that explain why religion influences outcomes (Mahoney, 2010). Consequently, a limitation to my research is the lack of data about religious behaviors or religious beliefs. Several recent meta-analyses have also found that variation in religious measurement scales has affected results in studies in a variety of areas (religion and crime—Benda and Corwyn, 2001; religion and parenting and marriage—Mahoney et al., 2001; religion and mental health—Hackney & Sanders, 2003). Including a broader array of religious variables could clarify theories of religious influence.

Another limitation to this research is the lack of data about denominational affiliation. Denominational affiliation is an important variable when studying religion in child welfare because it is correlated with attendance and parenting styles. There has been no research on the religious affiliation of child welfare involved parents or foster parents, but it is possible and even
likely that religious affiliations may differ for biological and foster parents, which may account for some of the difference in religious attendance in the caregivers in these groups, since denominational affiliation is correlated with attendance. Conservative Protestant groups and African American churches have the highest attendance rates, mainline Protestant and Catholic churches have moderate rates, and minority religious groups, such as Jewish, Quaker, Buddhist, Hindu, Muslim, Unitarian, and Christian Scientist, have the lowest attendance (Smith, et al., 2002). Consequently, the more conservative religious groups are more likely to have higher attendance rates. Since conservative religious beliefs may be tied to well-being in a variety of ways this could confound any findings. In addition certain aspects of religion are also tied to demographic variables that have been found to influence outcomes. For example, denominational affiliation is also tied to poverty, with 34% of black Protestants in poverty whereas only 2% of Jewish people are at poverty level (Schwadel, 2008). Religious attendance varies by religious affiliation (Pew Forum on Religion and Public Life, 2008; Smith, et al., 2002). Additionally, religious beliefs are strongly related to parenting practices (Browning & Miller-McLemore, 2009). These beliefs, including whether or not physical punishment is appropriate, may also affect child welfare involvement. Future research with child welfare-involved families should include denominational measures.

There are additional limitations to the data. The age categories for NSCAW caregivers group all caregivers under 35 into one group. It is very likely that a caregiver who is less than twenty would be very different from one who is in their mid-thirties, in regards to income and religious attendance. In addition, younger caregivers are much more likely to be biological than foster parents. There are also limitations to determining causality since respondents are reporting
both delinquency and religious attendance retrospectively. It is possible that religious attendance preceded or followed delinquent behavior.

**Future directions**

There is a wide range of possibilities for future research on the role of religion for families involved in child welfare. This dissertation only begins to address a few of the important issues around religion socialization and how it can be a protective factor for delinquent behaviors. There are several specific issues that were uncovered in this research that are worthy of future research. For example, since caregiver attendance is associated with decreased youth delinquency and is also correlated with youth importance (which is also associated with youth delinquency), future research needs to explore what facets of caregiver religious attendance improve this outcome for youth. Theoretical areas worthy of exploring are moral expectations, improved parent child relationships, and network closure. Another area of exploration is religious matching. Since similar religious attendance levels were predictive on low delinquency, future research should also assess the impact of religious similarity between foster parents and adolescents on the adolescents’ outcomes.

In addition to these specific issues there needs to be more quantitative research focused on other outcome variables. NSCAW includes a wide array of outcome variables including substance use, school success, mental health measures as well as other measures of wellbeing. The next step in this research is to explore the impact of religion on other youth outcomes using regression, as well as path analysis. This research could also be expanded to include other data sets. For example, the Fragile Families and Child Well-being Study is another longitudinal large data set that targets at-risk (although not specifically child welfare involved) families and does include measures of denominational affiliation.
Qualitative research could help interpret the underlying spiritual or non-spiritual mechanisms that explain why religion influences outcomes for child welfare involved youth. Interviews with families could explore how aspects of religion impact their lives. For example, religion could provide either positive or negative coping mechanisms to address past traumas, religion could be a source of meaning making, religion could provide a sense of call or imbue the roles with a sense of sacredness, or religion could be a source of morality. Interviews should include youth and caregivers in order to assess each party’s religious experiences as well as the potential Homogamy or heteronomy between them.

The issues of religiosity also need to be explored in child welfare agencies. For example, the effects of religion may be different for families who have dominant religious perspectives than for those who are of a religious minority. My experience in the local child welfare context has found it to be blatantly Christocentric. Public child welfare meetings are often held in the community chapels at residential facilities where public displays, including large crosses are predominantly displayed. Religious references are often used but perhaps only apparent to listeners familiar with scripture. My informal conversations with child welfare workers have suggested that religion is a source of support and source of meaning and they are not reticent to share their religious interpretations to people assumed to be religious insiders (i.e. Christian). Consequently, future research should also explore religion as a diversity issue for child welfare workers and the cultural context of the child welfare agency.

**Conclusion**

Child maltreatment is one of the most profound risk factors that disrupt the course of normal development (Kim et al, 2009). They are also at risk for many types of negative outcomes, including increased risk taking, substance use or abuse, earlier onset of sexual
initiation or other high risk sexual behaviors, poor academic outcomes, and negative mental health or physical health. Adolescents involved in child welfare are more likely to engage in risk taking behaviors and offend at younger ages and are more likely to receive more serious dispositions (Ryan, et al., 2007). Although reducing risk factors for these adolescents are important from a theoretical perspective, risk factors may be difficult to modify or change. Another method of decreasing negative outcomes for child welfare involved adolescents is to increase the promotive factors, the factors that buffer or moderate the effect of risks; religion is one of the factors that has been found to function as a source of resiliency, by providing social and material support as well as coping mechanisms and meaning making systems. “Religion exerts pro-social influences in the lives of youth not by happenstance or generic social process, but precisely as an outcome of American religions’ particular theological, moral, and spiritual commitments” (Smith, 2003c, p. 20). There is a solid body of evidence that shows a negative relationship between religiosity and risk-taking behaviors for adolescents in the general population (Smith, 2003a; Smith, 2003b). Although religious youth do participate in risky behaviors, they do so to a lesser extent than non-religious youth (Bridges & Moore, 2002). There are strong theoretical reasons to explain why religion is protective for youth, including that religious involvement provides youth moral order, learned competencies and social capital or other resources that support and protect them (Smith, 2003c)

It is important to address religious issues in child welfare. Although it would be inappropriate to promote any specific religion, it is appropriate to monitor the effects of parental religiosity, youth religiosity or matching religiosity. It is important to assess religious or spiritual needs or strengths of adolescent, try to support religious and spiritual development, and increase religious stability and cultural continuity. It is also important to value religious diversity. A final
reason to address religiosity in child welfare is to recognize negative religious coping mechanisms and religious justifications for maltreatment.

Understanding of family and parenting has been, and continues to be, shaped by religious beliefs, both at individual and at national levels. Although religion was an important factor during the development of child welfare, in recent decades, religion’s role in child welfare has been overlooked by researchers and educators. Child welfare professionals and researchers need to support the best interests of youth, and religiosity is something that many foster youth and foster parents already experience.
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APPENDIX A: GLOSSARY

Congregation: An organized community associated with a religious such as a church, parish, or cathedral (Christian); synagogue (Jewish); mosque or masjid (Muslim); temple (Buddhist, Hindu, Jewish) or assembly (Bahia).

Disposition (Juvenile justice context): Similar to the sentencing hearing the adult criminal justice system. The judge decides what action or treatment plan to impose upon the adjudicated youth.

Disposition (Child welfare context): The determination of a CPS investigation / assessment. The investigation /assessment could be determined as substantiated, indicated or reason to suspect, unsubstantiated, closed-no finding, or other.

Foster Parent: An individual who is licensed to provide a home for orphaned, abused, neglected, delinquent or disabled children, usually with the approval of the government or a social service agency.

Kinship Foster Family Placement (Relative): A licensed or unlicensed home of the child’s relatives regarded by the state as a foster care living arrangement for the child.

Heterogamy: Individuals that differ in a certain criterion (in this paper religiosity), contrasted with homogamy.

Homogamy: Individuals who are, in some culturally important way (in this paper religiosity) similar to each other.

Instability: In child welfare, children who have multiple placements are considered unstable. When operationalizing stability researchers determine a number of placements per a time period as a marker of instability.

Investigation / Assessment: The gathering and assessment of objective information to determine if the child has been or is at-risk of being maltreated.

Maltreatment Type: A particular form of child maltreatment that is either alleged or substantiated, such as physical abuse, neglect or deprivation of necessities, sexual abuse, psychological or emotional maltreatment, and other forms included in state law.

Neglect: Alleged or substantiated negligent treatment or maltreatment, including failure to provide adequate food, clothing, shelter or care.

Oversample: To assign a probability of selection or sampling rate to members of a sampling strata that is higher than the probability that the members of the sampling strata would be selected from the complete sampling frame under simple random sampling (each member of the sampling frame has the same probability of being selected for the sample).
**Physical Abuse:** Alleged or substantiated physical abuse, injury, or maltreatment of the child by a person responsible for the child’s welfare.

**Psychological Or Emotional Maltreatment:** A type of maltreatment that refers to acts or omissions, other than physical abuse or sexual abuse, that caused, or could have caused, conduct, cognitive, affective, or other mental disorders; such as emotional neglect, psychological abuse, mental injury, etc.

**Religious Socialization:** The influence of social agents (including parents) on an individual’s religious beliefs and understandings.

**Residential Placement:** After a youth is adjudicated delinquent, the court can order placement in a residential facility. Such facilities can be secure and prison-like or have a more open setting, like group homes or foster care.

**Resilience:** The ability to overcome adverse condition and to function normally in the face of risk.

**Sexual Abuse:** Alleged or substantiated sexual abuse or exploitation of a child by a person who is responsible for the child's welfare. Sexual abuse is a type of maltreatment that refers to the involvement of the child in sexual activity to provide sexual gratification or financial benefit to the perpetrator, including contacts for sexual purposes, prostitution, pornography, exposure, or other sexually exploitative activities.

**Social Capital:** The value that is created by investing in relationships with others. Social capital reflects bonding between similar people and bridging between diverse people, with normal of trust and reciprocity.

**Status Offense:** An offense that would not be considered a crime for adults. Status offenses are offenses that are only illegal for people 18 years old or younger such as curfew violations, running away, truancy, and underage drinking.

**Substantiation:** A type of investigation / assessment disposition that determines that there is sufficient evidence to conclude or suspect that the child has been maltreated or is at-risk of being maltreated, signaling harm or risk of harm to the child.

**Traditional Foster Family Placement (Non-Relative):** A licensed foster family home regarded by the state as a foster care living arrangement.

**Unsubstantiated:** A type of investigation / assessment disposition that determines that there is not sufficient evidence under state law to conclude or suspect that the child has been maltreated or is at-risk of being maltreated.