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The influence of parental religiosity on emerging adults' symptoms of depression

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ABSTRACT

THE INFLUENCE OF PARENTAL RELIGIOSITY ON EMERGING ADULTS' SYMPTOMS OF DEPRESSION

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The purpose of this study was to investigate the influence of early parental religiosity on emerging adults' symptoms of depression. Using nationally representative data of emerging adults ($n = 8,984$), results suggest that early parental religious attendance during childhood and adolescence might have a positive influence on emerging adults' symptoms of depression. Implications for clinicians and future research are discussed.

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THE INFLUENCE OF PARENTAL RELIGIOSITY ON EMERGING ADULTS'
SYMPTOMS OF DEPRESSION

BY

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CHAPTER 1

INTRODUCTION

Background and Rationale

Emerging adulthood, a period of approximately between the ages of eighteen to twenty-five, represents a time of greater identity development and personal exploration (Arnett, 2000). Arnett (2007) proposed that as the emerging adults focus on choosing their academic or career path, developing social connections, including romantic relationships, and managing other adult responsibilities, it is also a period of confusion, learning, and development. During emerging adulthood, individuals begin to connect childhood values and teachings to adulthood application, and decide whether to hold on to or reject these ideations as instilled by their parental figures. Learning to accept consequences of own behaviors and decreasing reliance on parents are some of the common experiences among emerging adults across multiple ethnicities and races (Arnett, 1997; Arnett, 2003).

While there are major life choices associated with this time period, it is often stressful, difficult, and unpredictable (Arnett, 2000). Despite emerging adulthood being an opportunity for exploration and discovery, this time period is often also fraught with difficulties. As each emerging adult seeks to find his or her purpose in life, they often uncover several dislikes, disappointments, and disparagements (Ruberman, 2014). Some may lack the experience and skill to assist them in making healthy decisions. Though it is a time for obtaining new

experiences on this discovery path, wrong choices can lead to negative consequences as well as discouragement (Jones, 2014).

Emerging adulthood is a critical time period where young people need to make choices and prepare for the future as they embark on career paths, engage in romantic relationships, and begin their own family (Arnett, 1997; Dennett & Azar, 2011; Smith, Saison, & Segal, 2015). The stresses of this time period can increase feelings of uncertainty and depression (Kuwabara et al., 2007; Ruberman, 2014). Indeed, depression and anxiety have been found to be the most prevalent mental health illnesses among college students (Hooper, Qu, Crusto, & Huffman, 2012). In a study across the United States, 8% of individuals age eighteen to twenty-two had experienced a major depressive episode (National Survey on Drug Use and Health, 2012); this number is higher than 6.9% of all U.S. adults age 18 or older who were estimated to have had at least one major depressive episode in 2012 (Substance Abuse and Mental Health Services Administration, 2013). For many emerging adults going off to college represents their first time being away for an extended time from family, which can lead to worry and stress. They lack support, miss home, and feel alone (Beck, Taylor, & Robbins, 2003). However, even when potential support is available such as counselors, friends, and family members, emerging adults may not perceive they have support in these areas nor take advantage of them (Chao, 2012). Undesirable experiences such as a failed class, a broken heart, or natural disaster can lead to negative coping habits, and such habits developed during this identity formation period may become permanent life alterations (White et. al., 2014). Although, experiencing depression during any life phase or period is difficult, depression during emerging adulthood can be

especially detrimental due to its long-lasting effects (Salmela-Auro, Aunola, & Nurmi, 2008; Vujeva & Furman, 2011).

Research findings suggest that parental religiosity can serve as a buffer for their young children living in the home, and the focus of parental religiosity and its influence on adolescent and children's mental health has received significant attention from researchers. For example, parents' religiosity (church attendance, belief in God or higher power, and daily incorporation of religious principles, ideations, and rituals) can decrease the likelihood of conduct problems from his or her adolescent child (Simons, Simons & Conger, 2004). Religion offers counsel regarding parenting and discipline practices, encouraging structure and love within family homes that can help prevent such behavioral issues (Vermeer, Janssen, & Scheepers, 2012). A correlation has also been found between religious parenting practices and child success in academics and enhanced physical and mental health (Schottenbauer, Spernak & Hellstrom, 2007). Furthermore, religion has been related to overall well-being (Green & Elliot, 2010). Many religions teach positive coping skills for dealing with the trials and burdens of life. Research studies have suggested that through use of scripture, church leaders, and other religious resources, religion provides a safe haven from the physical, spiritual, and emotional storms of life (Ellison & Levin, 1998; Powell, Shahabi, & Thoresen, 2003). In addition, religious ideas can offer ways to better resolve conflict and increase harmony, improve self control, promote healthy decision-making, and help decrease depressive symptoms (Josephson, 2007; McCullough & Willoughby, 2009). Religion offers social support through the association of other religious persons within the community (Brown & Gary, 1994).

A number of studies have demonstrated that parental religiosity can have a positive influence on young children living at home, helping them to cope and deal with the problems and stresses of life (Mahoney, Pargament, Tarakeshwar, & Swank, 2001; Voling, Mahoney, & Rauer, 2009; Wills, Yaeger, & Sandy, 2003). However, the long-term influence of parental religiosity on emerging adults' wellbeing is lacking in research and understanding. This study hopes to advance research by investigating the long-term influence that parent religiosity may have on their emerging adult child's mental health. Though studies have found correlations between parent's religiosity and mental health of their children when they are adolescents or younger, such has not been studied distally. Due to this lack of research, this study becomes of importance to provide greater understanding of the longstanding benefits, or lack thereof, of parental religiosity on improving and benefiting one's mental health. The stressors of life continue after one leaves his or her sanctuary with mom and/or dad. Therefore, this study strives to increase knowledge for whether religious parenting practices continue to support, buffer, and improve the quality of emerging adults' mental health.

Secondly, this study strives to understand the gender differences among the relationship between parental religiosity and emerging adult depressive symptoms. Some studies have found that females are more susceptible to depression than males (Child Trends Data Bank, 2012; Morris, McGrath, Goldman, & Rottenberg, 2014; National Alliance on Mental Health, 2015). Although this difference may be partly due to females having a tendency to report more symptoms of depression compared to males (Brenning, Bosmans, Braet, & Theuwis, 2012; Culbertson, 1997; Hankin, Mermelstein, & Roesch, 2007), females had been found to more likely use positive coping skills such as emotion-focused coping, to manage the depressive

symptoms compared to males (Brougham, Zail, Mendoza, & Miller, 2009). In terms of religiosity, several studies had found that females tend to report greater religiosity (Miller & Hoffman, 1995; Collett & Lizardo, 2009) and were often more likely to use religious coping strategies than males (Molock & Barksdale, 2013). Therefore, this particular study also seeks to understand how the relationship between parental religiosity and emerging adults' depressive symptoms may differ among males and females.

Lastly, this study also strives to understand the moderating influence of race/ethnicity on the relationship between parental religiosity and depressive symptoms in emerging adulthood. Research studies have found differences between ethnicities concerning the rate of depressive symptoms (Gomez, Miranda, & Polanco, 2011; Gonzalez, Tarraf, Whitfield, & Vega, 2011), including the earlier onset of depression among Caucasian and Mexican Americans (Riolo, Nguyen, Greden, & King, 2005). Other ethnicities, such as Asian Americans may consider seeking mental health services as culturally shameful (Leong & Lau, 2001; Fogel & Ford, 2005). As the integration of religious coping strategies may vary between ethnic groups (Assari, 2014), this study also seeks to understand whether the relationship between parental religiosity and emerging adults' depressive symptoms may differ among different races/ethnicities.

Statement of the Problem

The overall purpose of this study was to investigate the link between parental religiosity and the mental health of said parents' emerging adult child.

Hypothesis 1: Higher parental religiosity in adolescence would be associated with lower emerging adults' symptoms of depression.

Independent variable for hypothesis 1: early parental religiosity.

Dependent variable for hypothesis 1: emerging adult's depressive symptoms.

Hypothesis 2: Gender would be expected to moderate the relationship between parental religiosity and emerging adults' symptoms of depression.

Independent variable for hypothesis 2: early parental religiosity.

Moderating variable for hypothesis 2: gender.

Dependent variable for hypothesis 2: emerging adult's depressive symptoms.

Hypothesis 3: Race/ethnicity would be expected to moderate the relationship between parental religiosity and emerging adults' symptoms of depression.

Independent variable for hypothesis 3: early parental religiosity.

Moderating variable for hypothesis 3: race/ethnicity.

Dependent variable for hypothesis 3: emerging adult's depressive symptoms.

CHAPTER 2

LITERATURE REVIEW

This section will provide an overview of the literature regarding emerging adulthood and its link to depression, and religiosity. First, emerging adulthood will be discussed in the context of development, opportunities, and vulnerabilities. Then, depression and its relevance to the emerging adult population will be presented. Next, religiosity will be explored, with particular emphasis on family religiosity and its influence on the children's religiosity and mental health. Finally, this section will conclude with a review of articles that interconnect parental religiosity, emerging adult's symptoms of depression, gender, and race/ethnicity.

Emerging Adulthood

The emerging adult period, approximately between the ages eighteen to twenty-five, has been argued to be full of new responsibilities and opportunities for greater independence. In the United States, this time period often coincides with finishing high school, moving away from parental home, exploring options for school and work, and learning to be more independent (Arnett, 2000). Arnett (2000) suggests that emerging adulthood is no longer a part of adolescence, nor can this period be classified as adulthood. Rather, it is a time for exploring various roles and paths without accepting or surrendering to any specific function or responsibility (Arnett, 2000; Arnett 2007). With over twenty-one million emerging adults in

America (Howden & Meyer, 2011), this population has received greater attention from researchers and clinicians alike.

The emerging adult phase involves the acquisition of resources and development of financial independence, making decisions, and developing qualities such as helping others. Thus, the emerging adult time is a preparatory phase leading up to adulthood (Arnett, 1998). It is a time for developing an identity of who they are and what they want to become (Schwartz, Cote, & Arnett, 2005). Emerging adults take advantage of this freedom by attending colleges and universities, working towards a career choice, participating in romantic relationships in pursuit of marriage, and developing a more equal relationship with their parents (Arnett, 1997; Dennett & Azar, 2011; Lefkowitz, 2005). Thus, the emerging adult period seems to be an opportune time to explore and discover the likes and dislikes that may lead to career paths and relationship developments.

Despite the various opportunities for growth, learning, and discovery during the emerging adult period, this time can be fraught with difficulties and challenges. A recent survey interview with a nationally representative sample of emerging adult participants, researchers found that over half of the emerging adults were anxious, stressed, and thought life was full of uncertainty. In addition, thirty percent of the sample felt depressed and thought that life was not as good as they would like it to be (Arnett & Schwab, 2012). Through interviews with eighteen to twenty-three year olds Smith and colleagues (2011) found challenges commonly associated to emerging adults that related to morality and values, substance abuse, risky sexual behavior, and lack of understanding and involvement in community issues. Arnett (2005) said this was a period of instability, identity exploration, self-focus, time of possibilities, and feeling in-between.

Furthermore, this instability could increase the possibility to engage in risky behavior such as drug and alcohol use. One study found that drug and alcohol use reaches its peak during the emerging adult years. Furthermore, it was found that emerging adults who had a mental disorder were more likely to use substances than those who did not have a disorder (Sheidow et. al., 2012).

Some emerging adults struggle with the launching phase (Ruberman, 2014), becoming lost between youth and adulthood as they look for happiness and success. Moving away from home often produces feelings of homesickness and loneliness (Beck, Taylor, & Robbins, 2003). It becomes a time of adjustment for emerging adults, learning how to manage being on their own without their parents. Often the idea of coming home after having moved to college is perceived as having failed (Ruberman, 2014). It is possible that students perceive needing help from family as a weakness. If they want to become equals with parents then they need to be successful like they perceive their parents to be (Arnett, 1997). Jordyn and Bird (2003) found that emerging adults who lived away for college tend to face more problems such as difficulty with friendships, stress, academic issues, and homesickness compared to those who stayed at home. However, despite the greater difficulties faced, the emerging adults living away had developed a more firm identity of who they are and were more equipped at direct problem solving, while the stay at home students were slower in developing said identity (Jordyn & Byrd, 2003). Though staying at home may benefit emerging adults with familial support, they might miss out on opportunities that will further their growth by moving away and learning more independently.

Contrary to this notion, researchers found that perceived emotional support from family such as their parents was correlated to identity development and improved mental health (Azmitia, Syed, & Radmacher, 2013). Using a mixed methodology approach these authors found that emerging adults fell into four categories: improving mental health, maintaining mental health, poor declining mental health, and good yet declining mental health. Perhaps emerging adults also face the challenge of finding a balance between independence and maintaining family/parent relationships.

Chao (2012) conducted a study that researched the interaction between perceived stress and well-being among 459 college students over the age of eighteen. They found that there was a negative correlation between perceived stress and well-being. Those lacking support from family, parent, and other social relationships may be more exposed to a declination of well-being (Chao, 2012). Kuwabara, Van Voorhees, Gollan, and Alexander (2007) also found that the stresses of moving into emerging adulthood could increase depression symptoms. In their study interviewing depressed emerging adults, themes of struggling with identity, role transitions, and family and social relationships were all contributors to symptoms of depression (Kuwabara et. al., 2007).

Purpose and identity formation are an important aspect of emerging adulthood (Schwartz, Cote, & Arnett, 2005), yet it can prove to be difficult for this population. Crocetti, Scignaro, Sica, and Magrin (2012) studied 489 university students testing identity stability and well-being. They found that those who reported high levels of stability also had higher levels of well-being, while lower levels of stability positively correlated to low levels of well-being. Similarly, Dezutter and colleagues (2013) did a study with over 8,400 emerging adults regarding mental

health and perceived meaning of life. They found that outlook on life was positively correlated with mental health functioning. This suggested that emerging adults struggling with identity and purpose are more likely to experience negative symptoms such as depression.

Family Relationships and Religiosity in the Context of Emerging Adulthood

According to Ditzel (2012), there are nineteen main religions that can be broken down into 270 large parts or branches. Despite there being over 34,000 different types of Christian faiths (Robinson, 2011), religion can be found on every nearly every continent and in almost every country (PewResearch, 2014). Through the use of surveys and census reports, one research study concluded that in 2010 over eighty-four percent of the world's population claimed to affiliate with some type of religion (Lugo, 2012). However, the study also revealed that over one billion persons claim to not associate with any religious sect or group. In 2013, the GALLUP (2013) stated that over half of Americans thought religion was very important in their lives. Perhaps suggesting that religion provides benefits to one's life and family. Religion can even be a buffer from physical ailments such as heart disease and even prolong death (Powell, Shahabi, & Thoresen, 2003). Religion can be a resource from which to better oneself, receive guidance and support, and to maintain hope and positivity. Many values and morals are associated with religious principles and ideations, and religion can impact people in multiple ways and on various levels (Boyatzis, 2006).

Many of the diverse religious sects provide humankind with a new perspective for life. Many faiths teach concepts of deity or a higher power, how one can develop a relationship with said deity, and develop traits such as Godly love, forgiveness, and service (Sutton, Jordan, &

Worthington, 2014). Some religions provide mankind with tools to better cope with life's difficulties (Smolak et al., 2013), instruction for how to achieve happiness in this life, and others profess of a life beyond this mortal realm. Despite differences in doctrine or specific beliefs, many religious sects seek to improve and better oneself and his or her family through daily rituals, devotion, and consecrated time (Marks, 2004). Consequently, religion can be considered a vital aspect for many individual and family lives.

The way parents discipline and teach their child is often influenced by the beliefs held in their church or faith. In a study conducted by Lees and Horwarth (2008), forty students, ages thirteen to fifteen, participated in a group discussion regarding their views of parenting and religion. Many of the students reported that warmth and caring parenting was associated with their parents' religious beliefs. Though the majority of the participants were attending religious-based schools, they reported that religion influenced the ethical and moral principles taught and learned in their home (Lees & Horwarth, 2008). Many religions focus on creating harmony and love within the home. They teach principles of trust, kindness, and praise. In turn, parents strive to integrate such ideas into the lives of their children. Thus, much of the teaching, disciplining, accepting, and parenting is guided by these religious values (Mahoney, Pargament, Tarakeshwar, & Swank, 2001; Voling, Mahoney, & Rauer, 2009). One article stated that parents' religiosity has been related to warm and caring relationships (Vermeer, Janssen & Scheepers, 2012). Children begin to develop their own values and beliefs from a young age. Parenting practices and the incorporation of religious principles and practices greatly influences the child's feelings, thoughts, and desires in relation to religion and beliefs. It has also been found that maternal religiosity has a strong influence on the religiosity and beliefs of the child (Landor et al., 2011).

Though a parent's religion has a large influence on the child's beliefs such may not always be the case. In a study conducted by Potvin and Sloan (1985), it was found that adolescents were influenced by parental religiosity and parental control. However, as the adolescent increased in age the adolescent's religious activity decreased. In a two wave study, Vermeer, Janssen, and Scheepers (2012) also found that despite creating a more harmonious relationship between parent and adolescent, when adolescents were granted more religious autonomy religious attendance and activity decreased. In contrast, when parents placed importance on religion and religious activities adolescent attendance increased. Results also suggested that these associations carried on into the adolescent's adult years, though similarly decreased with time (Vermeer, Janssen, & Scheepers, 2012).

Parental religiosity has been shown to exert a positive influence in children and adolescents. Using data from the Family and Community Health Study (FCHS), researchers tested for the effects of parental religiosity on adolescent risky sexual behavior. With a sample of over 600 hundred African American adolescents and their parental figures, it was found that parental religiosity contributed to adolescent religiosity, which in turn was associated with lower adolescent risky sexual behavior. In addition, this parental influence was more focused towards female adolescents than male adolescents (Landor et al., 2011). Similar results were found in a quantitative study of over 1,900 African American male adolescents and binge drinking. Researchers found a negative correlation between religiosity, family connectedness, and adolescent binge drinking. In addition, the study followed up with the same participants during emerging adulthood, but no significant association was found between adolescent religiosity and family connectedness, and emerging adult binge drinking (Watson & Rostosky, 2010). Similar

results were found in Wills, Yaeger, and Sandy's (2003) study of seventh to tenth grade adolescents. Results indicated that religiosity acted as a protector for adolescent substance use, with there being a negative correlation between the two variables. This was particularly true for African American, Hispanic, and female participants. Thus, for different ethnicities religiosity appears to act as a buffer for risky behaviors such as decreasing the use of alcohol (Spein, Melhus, Kristiansen, & Kvernmo, 2010).

Religiosity has also been related with adolescent wellbeing (Van Dyke & Elias, 2007). Hall and Flanagan (2013) studied 132 adolescents, ages eleven to fourteen, and with over seventy percent being Caucasian and little more than half being female participants. Using one-tailed correlations and regression analysis, the researchers found a positive correlation between adolescent spirituality/religiosity and adolescent wellbeing. Furthermore, everyday use of religious ideas such as forgiveness was positively correlated to self-esteem (Hall & Flanagan, 2013). A healthy stable home has been shown to create greater likelihood for healthy psychosocial development, and religiosity can help provide such a family environment (Josephson, 2007). Josephson (2007) discussed that religion helps establish appropriate boundaries and rules. In one study, researchers discovered that despite the varying definitions of religiosity a positive relationship still exists. Using a meta-analysis of thirty-five different studies regarding religiosity and mental health, a general positive correlation was found between religiosity and mental health (Hackney & Sanders, 2003).

In another study it was also found that religiosity is positively correlated to well-being. Researchers Mochon, Martin, and Ariely (2010) conducted an online survey with over 6,400 participants. In addition to the positive correlation, they found that the greater commitment to

one's religion the stronger the correlation, and that those with weak religious commitment had lower level levels of well-being compared to those who denied having any type of religious affiliation. This suggests that religiosity could be harmful if there is a lack of commitment to religiousness and one might be better served without religion.

Understanding that parents' religiosity can have an influential buffering effect, it behooves one to consider the parental religiosity on the child's mental health. In a study of over 2,200 adolescents age ten to twelve and their parents, researchers looked at the relationship between parents' religiosity and the child's mental health. There was a significant relationship between parent religious harmony and the child's internalizing symptoms. When there was religious disharmony between parents, children experienced more mental health symptoms (Jagt-Jelsma et al., 2011). Over 700 adolescent students participated in a quantitative study through three different questionnaires looking at depression and religiosity. Results revealed that significant correlations between the two variables. Particularly, the study revealed a negative correlation between adolescent depressive symptoms and positive interpersonal religious experience. This study emphasized the social support received by adolescents from their religious congregation (Pearce, Little, & Perez, 2003).

The literature manifests various studies regarding the influence of religiosity among children and adolescents and its potentiality for buffering against risky behavior and mental health issues. However, there appears to be a paucity of research with emerging adults and parental religiosity. Milevsky, Szuchman, and Milevsky (2008) looked at the relationship of actual and perceived beliefs between emerging adults and their parents. With a sample of ninety-two emerging adults (seventy-one being female) and thirty-six parents, participants completed

surveys regarding religiosity, relationships, and explicit and implicit communication.

Researchers discovered that emerging adults' beliefs were correlated with their perception of their parents' beliefs and the parents' actual beliefs. In addition, the significant correlations were determined between mother and emerging adult child beliefs, but not for father and emerging adult child (Milevsky, Szuchman, & Milevsky, 2008). Conversely, a quantitative study of over 1,300 Columbian college students did not find such conclusions. Using Pearson correlations of data collected using the Zung anxiety scale, Well-being scale, and Francis scale for interest towards Christianity, researchers did not find a significant relationship between anxiety and depression and religiosity (Ceballos et al., 2013).

In another project, researchers conducted a qualitative study looking for religious meaning among emerging adult stories. Through in-person or phone interviews, 119 participants, with sixty males, answered questions that revealed parental attachment, identity, and religiosity (both intrinsic and extrinsic) results. Researchers concluded that participants that scored higher with intrinsic religiosity had secure parental attachment, greater identity exploration, and more intuitive religious responses (Kimball, Boyatzis, Cook, & Leonard, 2013). This study suggests a type of relationship between emerging adults and parents, yet does not answer the question of parents' religiosity's influence on emerging adults. Another study mentions the relationship between emerging adults and the younger years. Through a quantitative study with four waves, over 1,200 participants completed questionnaires regarding depressive symptoms, religious coping, and stress. Comparing data from adolescent years with data of emerging adult time period, it was found that greater religious experience in the younger

years correlated with a greater likelihood of religious coping skills during emerging adulthood. Additionally, this was particularly true for female participants (Eliassen, 2013).

Another study also found a correlation between religiosity during adolescence and religiosity in adulthood. Using data from the Iowa Family Transition's Project, researchers analyzed the twenty-year data set with structural equation models (SEM). They concluded that parents' religiosity positively influenced emerging adults marital relationship. Additionally, parents' religiosity influenced adolescent religiosity, which in turn could guess emerging adult religiosity (Spillman, Neppel, Donnellan, Schofield, & Conger, 2014). This study revealed important findings that indicate that parents' religiosity can be influential upon emerging adults. However, said religiosity was not studied toward depressive symptoms.

Depression During Emerging Adulthood

The American Psychiatric Association (2013) describes depression as having symptoms such as: feeling down, tired or fatigued, change in weight, difficulty sleeping, loss of interest in usual activities, feeling hopeless and worthless, trouble thinking and focusing, and can also include thoughts of suicide. One might also experience physical pain and anxiety symptoms (Mayo Clinic, 2015). These symptoms disrupt one's daily life, and though these symptoms can be treated many do not seek help (National Institute of Mental Health [NIMH], 2011). Furthermore, many people who suffer from depression struggle to overcome such symptoms without help through medicinal and/or therapeutic means (Mayo Clinic, 2015).

Some of the risk factors for depression include: major life changes, stressful situations, loneliness, family history, low levels of social support, financial difficulty, and marital or

relationship conflict (Smith, Saison, & Segal, 2015). Many emerging adults appear to experience these risk factors. According to one report, emerging adults age eighteen to twenty-five are sixty percent more likely to develop symptoms of depression compared to older adults age fifty and above (National Alliance on Mental Illness [NAMI], 2015). The National Survey of Drug Use and Health (2012) reported that during the years 2008 to 2010 over eight percent of full time college students and other emerging adults between the ages eighteen and twenty-two had experienced a major depressive episode. Despite the difference in percentage among races and ethnicities, each was impacted by depression.

In another article, Frye and Liem (2011) discussed the importance of considering the depressive symptoms of emerging adults while in their adolescent years. The authors found that a smaller yet significant group in their study had moderate to high depressive symptoms while in high school and maintained or increased said symptoms upon entering the emerging adult phase. They suggested that the stressors associated with the emerging adult time period might exacerbate depression (Frye & Liem, 2011; Kuwabara et. al., 2007). Vujeva and Furman (2011) found similar results in their longitudinal study. With 200 participants, these researchers studied the influence of adolescent depressive symptoms on later emerging adult relationship satisfaction using five different waves of data collection. A negative correlation was found between participants who reported higher levels of depression as tenth graders (first wave) and relationship satisfaction as emerging adults (final wave). Depressive symptoms may potentially increase or be exacerbated upon entering the vulnerable phase of emerging adulthood. Likewise, in their study, Salmela-Aro, Aunola, and Nurmi (2008) found that the emerging adults with high levels of depression tend to have poor relationships with their parents. This group's depression

levels increased with time while the groups with low and moderate levels of depression maintained said level. Furthermore, the high depression level participants reported lower levels of satisfaction with relationships and achievements in a follow-up wave (Salmela-Aro, Aunola, & Nurmi, 2008).

Depending on the stressor there is the possibility of increasing the likelihood for depression. Consistent with Smith, Saison, and Segal's (2015) report of financial difficulty as a stressor, unemployment rates for emerging adults are relatively high (O'Sullivan, Mugglestone, & Allison, 2014; Maloney, 2010). Looking at figures from the Behavioral Risk Factor Surveillance System, researchers studied a sample of over 1,500 eighteen to twenty-five year olds and found that among emerging adults who had jobs and those who did not, those without jobs were three times more likely to have symptoms of depression (McGee & Thompson, 2015).

Considering the time when emerging adults leave home, that is suggested to be particular to the emerging adult period (Arnett, 1998), it is important to consider the influence of the parent-child relationship on emerging adult symptoms of depression. Emerging adults' insecure attachment styles have been linked to symptoms of depression (Riggs & Han, 2009). In addition, it has been found that parental support is negatively correlated to emerging adults' symptoms of depression. Furthermore, there was a greater significant correlation between the relationship of the mother and emerging adult than with the father (Norwood, Rawana, & Brown, 2013). Comparably, another study looked at emerging adult memories of parental conflict and its impact on the emerging adult's current depressive symptoms. By looking at over 200 female participants in a quantitative study, researchers found that sibling warmth acted as a buffer between parental conflict during the adolescent years and the emerging adults current mental

health symptoms. However, those who did not have the sibling shield reported higher levels of depression (Tucker, Holt, & Wiesen-Martin, 2013). Though this study lacked male participation, it reiterated the potency of parental influence on the emerging adult child (Kenny & Sirin, 2006; McKinney, Milone, & Renk, 2011).

Socioeconomic Status and Education

The emerging adult years often consist of searching for work and developing a career, obtaining an education, and becoming financially independent (Arnett, 1997; Dennett & Azar, 2011; Lefkowitz, 2005). The United States Census Bureau (2014) reported that out of 30,054 eighteen to twenty-four year olds, over 8,600 had graduated from high school, over 11,500 had some college, over 1,600 had an Associate's degree, and over 2,900 had a Bachelor's degree. The Federal Interagency Forum (2014) found that that in 2012, forty-two percent White, thirty-seven percent Hispanic, and thirty-six percent Black emerging adults were enrolled in college. Arnett (2003) also found differences among ethnicities for education involvement. In his study, Asian Americans had a higher percentage of college enrollment, with Hispanics with the lowest enrollment status.

The Pew Research Center (2012) stated that in 2011 the unemployment rate among emerging adults was almost eight percent higher than the entire American population, with just over half of eighteen to twenty-four years old being employed. In 2013, it was found that more emerging adults were not enrolled in school and not employed compared to emerging adults in 1990. They went on to report that this statistic was higher among Blacks and Hispanics (Federal Interagency Forum, 2014).

One study found that a negative outlook on life was associated to young emerging adults from a lower socioeconomic status. Studying over 1,000 emerging adults, researchers used education data from each respondent's mother and compared said data to respondent's answers to how he or she felt about his or her life. In addition, females were more likely than males to have this association (Arnett & Schwab, 2012). Consistently, McGee and Thompson (2015) found a significant relationship between unemployment and depression among emerging adults. The study showed that depression was three times higher among those without work.

Gender Differences in Symptoms of Depression

The NIMH (2011) and NAMI (2015) stated that seventy percent of women are more likely to experience depression compared to men. One article studied the gender differences among emerging adults who had a parent with depressive symptoms and those who did not. Using a mixed regression model it was found that females are more likely than males to develop depression when a parent also had depression (Morris, McGrath, Goldman, & Rottenberg, 2014). In 2011, it was found that five percent of women reported depressive symptoms whereas men had three percent report such symptoms among eighteen to twenty-four year olds (Child Trends Data Bank, 2012). These results are consistent with other research reporting gender differences with symptoms of depression (Marchand-Reilly, 2012).

Additionally, women tend to report more stress and depressive symptoms in comparison to men (Brenning, Bosmans, Braet, & Theuwis, 2012; Culbertson, 1997; Hankin, Mermelstein, & Roesch, 2007). In a quantitative study of 166 participants, researchers found that more women than men reported greater symptoms of stress with regard to family issues,

relationship/social issues, daily stressors, and financial stresses (Brougham, Zail, Mendoza, & Miller, 2009). Despite the differences in reported stress, women were more likely to men to report using coping strategies of self-help, approach, and self-punishment, each of which were considered an emotionally focused coping skill (Brougham, Zail, Mendoza, & Miller, 2009).

Race/Ethnicity Influences

It is also important to consider the differences among various ethnic groups. In a study conducted by Gomez, Miranda, and Polanco (2011), they looked at the cultural differences among a diverse sample of 969 emerging adults. Using questionnaires, the researchers found that perceived discrimination influenced suicidal attempts, a symptom of depression. However, these influences differed among each of the different ethnic groups (African American, Asian, Latinos, White non-US born, and White US born). In contrast, researchers Huynh and Fuligni (2012) found that ethnic minority groups' perceived discrimination diminished, as they got older. In their study of over 500 ethnic minorities they tested perceived discrimination and societal devaluation in waves, starting from the high school years and into emerging adulthood. Though perception of discrimination was positively correlated with symptoms of depression, such perception decreased with time. Nevertheless, perception of societal devaluation increased with time (Huynh & Fuligni, 2012).

The occurrence and management of depressive symptoms can vary across ethnicities (Gomez, Miranda, & Polanco, 2011; Gonzalez, Tarraf, Whitfield, & Vega, 2011). Fogel and Ford (2005) found that many Asian Americans were less likely to seek out services for symptoms of depression, whereas Caucasians were more likely to seek services. Often, Asian

Americans feel ashamed to seek help, and many Asian Americans develop somatic symptoms as a result of the depressive symptoms (Leong & Lau, 2001; Kalibatseva & Leong, 2011). Another study found that Caucasians and Mexican Americans are more likely to develop early onset of symptoms of depression in comparison to African Americans. Additionally, African Americans and Mexican Americans were more likely to maintain symptoms of depression for a longer period of time (Riolo, Nguyen, Greden, & King, 2005).

Jones and colleagues (2011) looked at the differing manifestations of religiosity among twenty-seven year olds in the ethnic groups: Caucasian, African American, Native American, and Asian American. They found that each group scored differently in the categories of daily religious rituals, personal spiritual experiences, and attendance of church activities, and that African Americans scored highest in overall religiosity (Jones et al., 2011). Smith, McCullough, and Poll (2003) conducted a study of various studies regarding religiosity and depression. They found that higher religiosity was associated with lower depressive symptoms, and that this association was consistent across the different ethnicities. In contrast, Hudson, Purnell, Duncan, and Baker (2015) found that religious attendance did not account for differences of depressive symptoms in their study. They found that African Americans and Caribbean Blacks reported fewer symptoms of depression and greater religiosity in comparison to Caucasian, but the results were not significant. Additionally, Kohn-Wood et al. (2012) conducted a research study looking at religious coping differences among African American and Caucasian emerging adults. In a sample of 467, with thirty-six percent African American and sixty-one percent female, researchers used Chi-Square tests and regression analyses to search for differences between the ethnicities. It was found that African Americans were more likely to use active (working

together with God) and passive (relying on God to do it all) forms of religious coping compared to Caucasians who were more likely to use self-directed (relying on self only) coping.

Nevertheless, only self-directed coping was negatively correlated to depressive symptoms for African Americans (Kohn-Wood et al., 2012).

Summary

Emerging adulthood has been proposed both as a time of opportunity and vulnerability (Arnett, 2003; Arnett, 2005; Arnett & Schwab, 2012). Emerging adults can be confronted with various challenges and stresses, and depression is high among the eighteen to twenty-five year olds (Ruberman, 2014; NAMI, 2015). Such depression influences multiple ethnicities, though each may respond differently (Fogel & Ford, 2005; Gomez, Miranda, & Polanco, 2011). In addition, females appear to be at a greater risk of manifesting symptoms of depression during emerging adulthood (Child Trends Data Bank, 2012; Morris, McGrath, Goldman, & Rottenberg, 2014). Because of the increased risks for depression, better understanding of the factors and correlates of depression during this period will be beneficial for prevention and intervention efforts.

Religion can provide tools, such as coping skills that help improve quality of emotional well-being (Smolak et al., 2013; Sutton, Jorda, & Worthington, 2014). Compared to families with low parental religiosity, high parental religiosity had been associated with more positive outcomes in children and adolescents, including more positive relationships among family members and lower substance abuse and risky sexual activities (Watson & Rostosky, 2010; Landor et. al., 2011; Vermeer, Janssen, & Scheepers, 2012). In addition, parental religiosity has

shown to be positively associated with adolescent emotional well-being and mental health (Hackney & Sanders, 2003; Van Dyke & Elias, 2007; Hall & Flanagan, 2013). Very few studies have shown the influence of parental religiosity on emerging adults such as its positive influence on emerging adults' marriages (Spillman et al., 2014). Despite the seemingly positive influence of parental religion, the link between parental religiosity and emerging adults' symptoms of depression had not been fully explored. This thesis attempts to explore this association.

CHAPTER 3

METHODOLOGY

Sample and Procedures

In order to investigate the link between parental religiosity and symptoms of depression in emerging adulthood, data from the National Longitudinal Study of Youth 1997 (NLSY97) were used. NLSY97 is an ongoing, nationally representative study of 8,984 youth who were born between 1980 and 1984. Data were collected from the target population every year through the use of surveys and questionnaires by way of phone or in person interviews. Such information includes, but is not limited to: employment, education, parents and family processes, childhood, dating/marriage and children, relationships, household, health, attitudes/expectations, crime, and substance use. The Bureau of Labor Statistics (BLS) funds the NLSY97 project, and rounds one through fifteen are currently available.

This study used information collected in 1997 (round one) and 2004 (round eight). The information utilized from round one consisted of the necessary parental data regarding religiosity. At round one the NLSY97 adolescents (target population) were between the ages of 12 – 18, with their parents participating in many of the questionnaires during this first wave. At round one, 51% of the participants were males (see Table 1). In terms of the racial/ethnic composition, 58% were non-Black/non-Hispanic White, 26% non-Hispanic Black, 11% Hispanic or Latino, and almost 2% reported being Asian. The average years of education for the respondents' fathers in 1997 were 12.88 (SD = 3.30). The average years of education for the

respondents' mothers in 1997 were 12.53 (SD = 2.95). The average family income in 1997 was \$46,392.49 (SD = 42126.45).

During round eight of data collection, the target population age range was from 19 to 25 (mean = 21.97, SD = 1.43), which was consistent with Arnett's (1997, 1998, 2000, 2007) description of the emerging adulthood period. The average level of education for the respondents in 2004 was 12.74 (SD = 2.16). The information utilized from round eight consisted of questions pertaining to the target population's mental health and symptoms of depression. In addition, information regarding the target population's religiosity was used. Because this study consisted of a secondary analysis of data that was publicly available online, anonymous, and had been previously reviewed and approved by the Institutional Review Board (IRB), approval from the IRB at Northern Illinois University was deemed unnecessary.

Table 1
Demographic Characteristics

Variable	n*	%	<i>M</i>	<i>SD</i>	Range
Gender					
Male	4,599	51.2			
Female	4,385	48.8			
R. Age in 2004			21.97	1.43	19-25
Race/ethnicity					
White	5,232	58.2			
Black	2,335	26.0			
Hispanic	1,022	11.4			
Asian	156	1.7			
Feduc97			12.88	3.30	1-20
Meduc97			12.53	2.95	1-20
Reduc04			12.74	2.16	0-20
Fincome97			46,392.49	42,126.45	0-246,474.00

*Total may not add to 8984 due to missing values

Instruments

Parental Religiosity

A series of questions drawn from round one of NLSY97 were used to measure parental religious beliefs and practice. The questions came from the parent questionnaire and were similar to other types of religiosity measures such as the Duke University Religion Index and the Centrality of Religiosity Scale (Huber & Huber, 2012; Koenig & Bussing, 2010). To measure parental religious beliefs, 6 items follow a true or false format after statements, such as: “I pray more than once a day,” “I often ask God to help me make decisions,” “I do not need religion to have good values,” and “the Bible/Koran/Torah should be obeyed exactly as written in every situation.” Responses on these items were coded and added together so that higher scores would indicate greater parental religious beliefs.

Two Likert-Scale questions: “In the past 12 months, how often have you attended a worship service (like church or synagogue service or mass)?” and “in the past 12 months, how often has (your spouse/partner) attended a worship service (like church or synagogue service or mass),” taken from the same questionnaire, were used to measure parental religious practice. Responses on these items range from 1 (Never) to 8 (Everyday) and were coded and averaged so that the higher score would indicate greater parental religious practice.

Emerging Adult’s Symptoms of Depression

To assess the emerging adults’ symptoms of depression, NLSY97 used the five-item version of the Mental Health Inventory (MHI). With the original version having been created

with thirty-eight questions, the MHI has the capacity to reveal symptoms of depression, anxiety, and other mood/emotional disorders (Veit & Ware, 1983; Huebeck & Neil, 2000). Furthermore, the shortened five-item MHI has proven to be as accurate as the eighteen-item MHI and General Health Questionnaire (GHQ), and has been recommended for use in detecting mood disorders such as depression for people sixteen years old and older (Berwick et al., 1991; McCabe, Thomas, Brazier, & Coleman, 1996; Rumpf, Meyer, Hapke, & John, 2000). The MHI questions followed a Likert-Scale format with questions such as: “How much of the time during the last month have you felt downhearted and blue?” and “How much of the time during the last month have you felt calm and peaceful?” The response categories range from 1 (All the time) to 4 (None of the time). Responses on these items were coded and averaged so that the higher score would indicate greater depressive symptoms. Cronbach alpha for the depression scale was .78.

In addition to assessing the independent and dependent variables, the moderating variables of gender and ethnicity were also included for the analysis. Gender was coded as male (score 1) or female (score 0). Race and ethnicity was represented by a series of dummy coded variables (score 1 or 0) for White, Black, Hispanic, and Asian.

Data Analysis

This study had been designed to determine if significant correlation exists between early parental religiosity and the emerging adults’ symptoms of depression. For the analyses, Pearson Correlation Coefficient was used in order to investigate the relationship between the independent variable (parental religiosity in adolescents) and dependent variable (emerging adults’ symptoms of depression). In addition, to test for the moderating influences of gender and ethnicity, a series

of multiple regression analysis were conducted. All analyses were run using IBM SPSS version

22.

CHAPTER 4

RESULTS

Testing the Hypotheses

Results from the Pearson Correlation analysis are presented in Table 2. Although parental religious belief was positively associated with parental religious practice ($r = .466; p < .01$), the correlation between parental religious beliefs and emerging adults' symptoms of depression was not significant ($r = -.20; p > .05$). However, there was a significant negative correlation between parental religious practice and emerging adults' symptoms of depression ($r = -.028; p < .05$), indicating that early parental church attendance was related to lower symptoms of depression in emerging adults.

Compared to females, males were less likely to report symptoms of depression in 2004 ($r = -.138; p < .05$). The negative correlation between Caucasian (White) and parental religious beliefs was $-.229$ ($p < .01$), meaning that White parents (as compared to non-White parents) were less likely to report high religious beliefs. Similarly, there was a negative correlation between White and parental church attendance, meaning that White respondents were less likely to have parents with higher church attendance scores. Conversely, the significant positive association between African Americans (Black) and parental religious beliefs ($r = .235; p < .01$), and Black and parental church attendance ($r = .133; p < .01$) indicate that Black parents tend to score higher in religiosity and church attendance.

There was also a positive correlation between Hispanic and parental religiosity, .028 ($p < .05$). This meant that Hispanic respondents were more likely to have parents with higher religiosity scores. There were no significant correlations between Asian Americans and the independent variable of parental religiosity, nor were there significant correlations between the race/ethnicity and the dependent variable of emerging adults' symptoms of depression. Overall, higher education (for parents and emerging adults) was associated with lower religious beliefs, but higher religious practice.

Table 2

Correlation among the Main Study Variables

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Par. rel. beliefs	-										
2. Par. rel. practice	.466**	-									
3. Emerging Adult Symptoms of Dep.	-.020	-.028*	-								
4. Male	-.006	-.003	-.138**	-							
5. White	-.229**	-.137**	.010	.006	-						
6. Black	.235**	.133**	-.002	-.016	.737**	-					
7. Hispanic	.028*	.019	-.010	.006	-.444**	-.220**	-				
8. Asian	-.006	.016	-.007	.014	-.164**	-.081**	-.049**	-			
9. Father Highest Grade	-.095**	.099**	.000	-.009	.198**	-.033*	-.279**	.049**	-		
10. Mother Highest Grade	-.103**	.070**	-.022	.018	.195**	-.017	-.287**	.033**	.655**	-	
11. Respondent Highest Grade	-.029*	.137**	-.077**	-.092**	.141**	-.109**	-.099**	.085**	.324**	.302**	-

* $p < .05$; ** $p < .01$

To test whether gender may moderate the relationship between parental religious practice and depressive symptoms in emerging adulthood (hypothesis 2), a hierarchical multiple regression analysis was conducted (Table 3). Gender and parental religious practice were entered in the first step of the analysis. These variables accounted for a significant amount of variance in depressive symptoms, $R^2 = .019$, $F(2, 6620) = 64.684$, $p < .01$. In the second step of the regression analysis, the interaction term between gender and parental religious practice was entered, but it did not explain a significant increase in variance in depressive symptoms, $\Delta R^2 = .000$, $F(1, 6619) = .023$, $p > .05$. Thus, gender was not a significant moderator of the relationship between parental religious beliefs and emerging adults' depressive symptoms.

Table 3

Moderating effects of gender on the association between early parental religious practice and depressive symptoms

	b	SE	β	<i>t</i>	<i>p</i> -value	R^2
<u>Model 1</u>						.019
Constant	1.996					
Par. Rel. practice	-.007	.003	-.028	-2.311	< .05	
Male	-.134	.012	-.136	-11.136	< .01	
<u>Model 2</u>						.019
Constant	1.998					
Par. Rel. practice	-.007	.004	-.030	-1.746	> .05	
Male	-.138	.027	-.139	-5.042	< .01	
Rel. practice x male	.001	.006	.005	.150	> .05	

Additional hierarchical multiple regression analyses were also conducted to examine whether race/ethnicity may moderate the relationship between parental religious practice and depressive symptoms in emerging adulthood (hypothesis 3). In the first step of the regression

model (Table 4), parental religious practice and White were entered in the analysis. Although parental religious practice was associated with lower depressive symptoms in emerging adulthood ($\beta = -.026, t = -2.07, p < .05$), being White was not associated with an increase or decrease in depressive symptoms ($\beta = .001, t = .12, p > .05$), the amount of variance explained by these variables were also not significant, $R^2 = .001, F(2, 6471) = 2.222, p > .05$. In the second step of the regression model, the interaction term between parental religious practice and White was also not significant ($\beta = -.008, t = -.26, p > .05, \Delta R^2 = .000$).

Table 4

Moderating effects of race/ethnicity (White) on the association between early parental religious practice and depressive symptoms

	b	SE	β	t	p-value	R ²
<u>Model 1</u>						.001
Constant	1.926					
Par. Rel. practice	-.006	.003	-.026	-2.067	< .05	
White	.002	.013	.001	.119	> .05	
<u>Model 2</u>						.001
Constant	1.922					
Par. Rel. practice	-.005	.005	-.022	-1.050	> .05	
White	.009	.030	.008	.287	> .05	
Rel. practice x white	-.002	.007	-.008	-.262	> .05	

In the first step of the subsequent regression model (Table 5), parental religious practice and Black were entered in the analysis. Although parental religious practice was associated with lower depressive symptoms in emerging adulthood ($\beta = -.026, t = -2.05, p < .05$), being Black was not associated with an increase or decrease in depressive symptoms ($\beta = -.003, t = -.21, p > .05$), the amount of variance explained by these variables were also not significant, $R^2 = .001, F$

(2, 6471) = 2.238, $p > .05$. Further, the interaction term in the second step of the regression model between parental religious practice and black was also not significant ($\beta = .023$, $t = .70$, $p > .05$, $\Delta R^2 = .000$).

Table 5

Moderating effects of race/ethnicity (Black) on the association between early parental religious practice and depressive symptoms

	b	SE	β	t	p -value	R^2
<u>Model 1</u>						.001
Constant	1.928					
Par. Rel. practice	-.006	.003	-.026	-2.053	< .05	
Black	.003	.014	-.003	-.214	> .05	
<u>Model 2</u>						.001
Constant	1.933					
Par. Rel. practice	-.008	.004	-.031	-2.126	< .05	
Black	-.025	.034	-.022	-.726	> .05	
Rel. practice x black	.005	.007	.023	.699	> .05	

Next, parental religious practice and Hispanic were entered in the first step of the regression model in Table 6. As in Table 4 and 5, although parental religious practice was associated with lower depressive symptoms in emerging adulthood ($\beta = -.026$, $t = -2.11$, $p < .05$), being Hispanic was not associated with an increase or decrease in depressive symptoms ($\beta = .002$, $t = .14$, $p > .05$), the amount of variance explained by these variables were also not significant, $R^2 = .001$, $F(2, 6471) = 2.225$, $p > .05$. In the second step of the regression model, the interaction term between parental religious practice and Hispanic was also not significant ($\beta = -.018$, $t = .59$, $p > .05$, $\Delta R^2 = .000$).

Table 6

Moderating effects of race/ethnicity (Hispanic) on the association between early parental religious practice and depressive symptoms

	b	SE	β	<i>t</i>	<i>p</i> -value	R ²
<u>Model 1</u>						.001
Constant	1.927					
Par. Rel. practice	-.007	.003	-.026	-2.107	< .05	
Hispanic	.003	.020	.002	.143	> .05	
<u>Model 2</u>						.001
Constant	1.925					
Par. Rel. practice	-.006	.003	-.024	-1.809	> .05	
Hispanic	.028	.047	.018	.597	> .05	
Rel. practice x hispanic	-.006	.010	-.018	-.591	> .05	

Finally, the moderating influence of Asian on the relationship between parental religious practice and emerging adults' depressive symptoms were also examined (Table 7). Although parental religious practice was associated with lower depressive symptoms in emerging adulthood ($\beta = -.026$, $t = -2.10$, $p < .05$), being Asian was not associated with an increase or decrease in depressive symptoms ($\beta = -.001$, $t = -.07$, $p > .05$), the amount of variance explained by these variables were also not significant, $R^2 = .001$, $F(2, 6471) = 2.218$, $p > .05$. In the second step of the regression model, the interaction term between parental religious practice and Asian was also not significant ($\beta = .004$, $t = .12$, $p > .05$, $\Delta R^2 = .000$).

Table 7

Moderating effects of race/ethnicity (Asian) on the association between early parental religious practice and depressive symptoms

	b	SE	β	<i>t</i>	<i>p</i> -value	R ²
<u>Model 1</u>						.001
Constant	1.928					
Par. Rel. practice	-.007	.003	-.026	-2.104	< .05	
Asian	-.004	.055	-.001	-.073	> .05	
<u>Model 2</u>						.001
Constant	1.928					
Par. Rel. practice	-.007	.003	-.026	-2.104	< .05	
Asian	-.018	.137	-.004	-.135	> .05	
Rel. practice x asian	.003	.029	.004	.115	> .05	

CHAPTER 5

DISCUSSION AND CONCLUSIONS

With the emerging adulthood considered as a vulnerable time period with regard to depression risk, it was fitting to study this population (Arnett, 2000; Arnett, 2007; Arnett & Schwab, 2012). Over half of Americans reported religion to be an important part of their lives, and studies have shown that religion can have a positive influence in young adults' lives (GALLUP, 2013; Marks, 2004; Smolak et al., 2013; Sutton et al., 2014). Therefore, the purpose of this study was to determine the link between early parental religiosity and emerging adults' symptoms of depression. The first hypothesis predicted that higher parental religiosity was associated with fewer emerging adult symptoms of depression. No previous research (as known by the author of this study) had been done specifically on the emerging adulthood population. However, research had been done on parental religiosity and its influence on children and adolescences living at home. Much of the past research suggested that parental religiosity could have positive influences, such as: decreased risky sexual behavior, decreased use of drugs and alcohol, and improved well-being and mental health (Hackney & Sanders, 2003; Hall & Flanagan, 2013; Landor et al., 2011; Van Dyke & Elias, 2007; Will et al., 2003).

Results for the first hypothesis were mixed. Early parental religious practice, but not parental religious beliefs, was significantly associated with depressive symptoms in emerging adulthood. The non-significant relationship between parental religious beliefs and emerging adults' depressive symptoms may have occurred as a result of distance (the emerging adult no

longer living in the home) or time (the parents' religious influence gradually faded). The results suggest that early parental religious practice (church attendance) may have a long-term positive influence. Having parents who attended church more often were related to fewer symptoms of depression among emerging adults. This was an interesting finding because previous studies involving religiosity incorporated church attendance as an attribute of religiosity (e.g., Huber & Huber, 2012; Koenig & Bussing, 2010). In this study, parental church attendance was associated with having a positive influence, but not the parental religiosity involving the beliefs and values. These results suggest that the emerging adult participant might have more readily observed the physical act of his or her parents going to church rather than the parents' beliefs and feelings about religion overall, or maybe the emerging adult participant was strongly encouraged or forced to attend church with the parents. Thus, in this study the parents' cognition and emotions regarding religious values and beliefs (religiosity) were not suggested to be effective. However, the behavioral component (parental church attendance) did suggest a significant positive influence. Despite the difference, because church attendance was considered a part of the religiosity measure, then part of parental religiosity (attending church) was demonstrated to have a significantly positive relationship with the dependent variable.

The second hypothesis predicted that gender was expected to moderate the relationship between parental religiosity and emerging adults' symptoms of depression. Consistent with previous research (Marchand-Reilly, 2012; Morris et al., 2014; NAMI, 2015; NIMH, 2011) this study found that there was a significant negative relationship between gender and symptoms of depression. Females reported more symptoms of depression than males. Although both parental

religious practice and being male were associated with fewer depressive symptoms, there was no significant interaction effect of gender and parental religious practice.

Additionally, gender was found to have a moderating influence on parental religiosity and emerging adults' symptoms of depression. Emerging adult participants who were male and had religious parents were more likely to report fewer symptoms of depression. Because of the past research suggesting that females reported more symptoms of depression than males, this finding was expected (Brenning et al., 2012; Brougham et al., 2009; Culbertson, 1997; Hankin et al., 2007).

Nevertheless, for this study it should be considered as to whether the male participants fully disclosed their symptoms of depression or not. In addition, an interesting finding suggested that gender did not have a moderating influence on parental church attendance and emerging adults' symptoms of depression. Whether parents had higher scores of church attendance or not, this did not change symptoms of depression among males or females.

The third hypothesis predicted that race/ethnicity was expected to moderate the relationship between parental religiosity and emerging adults' symptoms of depression. Past research had findings suggesting that each race/ethnic group was affected by depression (Leong & Lau, 2001; Kalibatseva & Leong, 2011; Riolo et al., 2005). However, some of the research suggested that African Americans were more likely to have higher religiosity scores (Hudson et al., 2015; Jones et al., 2011; Kohn-Wood et al., 2012). This study related to the previous research with African American/Black emerging adults more likely to have parents with high religiosity and church attendance scores. Caucasian/White emerging adults were more likely to have parents with low religiosity and church attendance scores. Interestingly, despite these

relationships revealed on the Pearson Correlation test, race/ethnicity did not demonstrate a moderating effect between parental religiosity and emerging adults' symptoms of depression on the multiple regression analysis. Thus, there were no changes found between parental religiosity/parental church attendance and emerging adults' symptoms of depression on account of race/ethnicity. This was an unanticipated finding, because of the research that suggested the potential for changes among race/ethnicity. The results from this study suggest that emerging adults of different race and ethnicity are equally vulnerable in their risk for depressive symptoms.

Limitations

There are several limitations posed on this study. First, though the sample size was large, the distribution among race/ethnicity was not equal and potentially not as representative of the minorities in America. Additionally, some of the participants within the ethnic groups did not fully complete the questionnaires. This might have occurred because of the questionnaires' cultural insensitivity. The religious questions may not have offered sufficient options for one's religious beliefs and practice including items, such as: spiritual meditation and mindfulness (Chadha, 2015). Therefore, the missing data may have influenced the results of the overall study.

Secondly, though comparable to its predecessor, the MHI-Five was a brief questionnaire that tested for symptoms of depression. There is the possibility that the five questions did not thoroughly assess for symptoms of depression. Another limitation would be accounting for other variables that could be influencing the dependent variable. Some studies have argued that the

participation in religion provides friends and support and that these variables provide an influential buffer for life stressors (Hovey, Hurtado, Morales, & Seligman, 2014). Additionally, this might suggest that the religiosity questions could also be more extensive.

Another limitation of this study was the self-reporting nature of the measurements given to the respondents and their parents. Because the answers were not physically observed such as watching how many times each parent attended church or having a health professional verify symptoms of depression, this could influence the obtained scores and results (Prince, Adamo, Hamel, Hardt, Gorber, & Tremblay, 2008). Thus, this study relied upon the memory of the participants.

Lastly, there was a limitation of generalizability with this study. This research did not account for potential social, economical, national, or global influences. For example, the rounds used from the NLSY97 occurred before the economic difficulties of 2008. This financial struggle could exacerbate symptoms and thereby change participant scores. Such could be said for any other external stimuli occurring before, during, or after the collection of the data for this study.

Implications for Future Research and Practice

This study provided important recognition to the potential long-term effects of parental religiosity, and more particularly parental church attendance. Though, parental religiosity and depression had been studied by other researchers in the past, this study was one of the first to look at the influences of parental religiosity on emerging adults' symptoms of depression. It would be important for future research to strengthen the knowledge and understanding of the

distal effects religiosity might have on emerging adults by continuing research on this topic.

Continuing this research might answer more questions as to how and why there was an influence.

Future research should incorporate questions that measured the emerging adults' religiosity and church attendance. Researchers could determine how these variables interacted with the original dependent and independent variables of this study. Some research has suggested that emerging adult religiosity can act as a protector against drug use or help with mental health issues (Palamar, Kiang, & Halkitis, 2014; Power & McKinney, 2014). It would also be important to consider other variables that may be positively influencing the emerging adults' symptoms of depression such as social support from church (Hovey, Hurtado, Morales, & Seligman, 2014). Additionally, it would be important to consider other variables that may be exacerbating their symptoms, such as pressure to conform to certain religious ideas and principles. A study found that guilt was strongly associated to religion, and the participants who were affiliated with religion had a higher correlation with guilt (Albertsen, O'Connor, & Berry, 2006). Such variable might have an influence on symptoms of depression.

Future research should analyze the influence of parental church attendance and why this study produced a relationship between parental attendance and emerging adult symptoms of depression. Because church attendance was part of religiosity, further investigation of the differences between the religiosity questions (beliefs and values versus church attendance) would be merited. It would be interesting to know if there are other variables from attending church that led to influence emerging adults' symptoms of depression. Perhaps parents learned discipline techniques to incorporate at home, felt more positive after associating with peers and friends at church, or they strongly encouraged their children to attend with them (Headey,

Hoehne, & Wagner, 2014; Mahoney et al., 2001; Shor, 1998). Additionally, future studies could search for differences among religious sects and whether one particular religion provided a stronger association between parental church attendance and emerging adults' symptoms of depression (Loewenthal, Cinnirella, Evdoka, & Murphy, 2001).

Another question that came from this study would be to examine immigration differences and influences. Future research could compare differences among first generation, second generation, and so forth, of ethnic minorities. Past research has shown there can be differences among intergenerational immigrants such as language, educational attainment, and assimilation (Rumbaut, 2004). Though, this study did not reveal any significant differences among ethnicities, perhaps a more thorough examination of the cultural components might provide new information. This would also necessitate the use of measurements that ensure cultural competence and sensitivity.

Therapists and counselors could benefit from this research when working with emerging adult clients. Better understanding of clients' religious background and upbringing may help mental health professionals to develop a more effective therapeutic approach or intervention (Miller, 1991). Family life educators, therapists, and other health professionals might also consider incorporating discussions and explorations on the mental health benefits of attending church. Such discussions might provide parents with ideas that could have a long-term benefit for their child.

Additionally, emerging adults face stresses and difficulties, and they might participate in therapy services (Ruberman, 2014). Yet, emerging adulthood appears to be a new concept (Arnett, 2000; Arnett, 2007). Therapists might feel insignificant, uncomfortable, or confused

when working with this population in therapy. Research is lacking regarding knowledge and treatment of emerging adults, and greater understanding might be needed in order to effectively treat this population (Park, Mulye, Adams, Brindis, & Irwin, 2006).

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APPENDIX A
PARENTAL RELIGIOUS PRACTICE AND RELIGIOUS
VALUES AND BELIEFS

Parental Religious Practice Questions:

In the past 12 months, how often have you attended a worship service (like church or synagogue service or mass)?

1. Never
2. Once or twice
3. Less than once a month / 3-12 times
4. About once a month / 12 times
5. About twice a month / 24 times
6. About once a week
7. Several times a week
8. Everyday

In the past 12 months, how often has (your spouse/partner) attended a worship service (like church or synagogue service or mass)?

1. Never
2. Once or twice
3. Less than once a month / 3-12 times
4. About once a month / 12 times
5. About twice a month / 24 times
6. About once a week
7. Several times a week
8. Everyday

Parental Religious Values/Beliefs Questions:

I don't need religion to have good values.

1. True
0. False

The Bible/Koran/Torah should be obeyed exactly as written in every situation.

1. True
0. False

Religious teachings should be obeyed exactly as written in every situation.

1. True
0. False

I often ask God to help me make decisions.

- 1. True
- 0. False

God has nothing to do with what happens to me personally.

- 1. True
- 0. False

I pray more than once a day.

- 1. True
- 0. False

APPENDIX B

MENTAL HEALTH INVENTORY-FIVE

MHI-5 Questions:

How much of the time during the last month have you been a very nervous person?

1. All of the time
2. Most of the time
3. Some of the time
4. None of the time

How much of the time during the last month have you felt calm and peaceful?

1. All of the time
2. Most of the time
3. Some of the time
4. None of the time

How much of the time during the last month have you felt downhearted and blue?

1. All of the time
2. Most of the time
3. Some of the time
4. None of the time

How much of the time during the last month have you been a happy person?

1. All of the time
2. Most of the time
3. Some of the time
4. None of the time

How much of the time during the last month have you felt so down in the dumps that nothing could cheer you up?

1. All of the time
2. Most of the time
3. Some of the time
4. None of the time