

EFFECTS OF CHILD-PARENT ATTACHMENT AND GOD ATTACHMENT
ON DEPRESSION IN ADOLESCENT CHRISTIANS

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Liberty University

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ABSTRACT

EFFECTS OF CHILD-PARENT ATTACHMENT AND GOD ATTACHMENT ON DEPRESSION IN ADOLESCENT CHRISTIANS

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This thesis contains a description of a study that examined the relationships between parent attachment, God attachment, and depression in adolescent Christians. It was predicted that secure parent and God attachment are related, and that they will have positive effects on depression and that God attachment will mediate the effects of parent attachments on depression. The study was a cross-sectional correlation study that employed 75 adolescents in youth ministries in North-east Jersey. Depression and attachment measures were administered and the results were analyzed using hierarchical and simultaneous multiple regression, and Pearson's product-moment correlation coefficient. The study findings demonstrated that parent attachment and God attachment have a tendency to offer protection against depression in adolescent Christians, and that parent attachment is related to God attachment through the correspondence or the compensatory pathway. The hypothesis stipulating God attachment as a mediator was not supported.

DEDICATION

To my God and King, who has strengthened and supported me, and who has brought me this far. To my beloved wife and children, whose support and encouragement have also been a source of great strength for me.

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First and foremost, I would like to express my deepest appreciation to our Lord and Savior for making it possible for us to get to this point in the process. His faithfulness is the vehicle that has moved the process to its conclusion. I thank Him for His support and guidance. I would also like to appreciate the hard work and dedication of each of the members of my dissertation committee. I thank you for being there for me and for seeing me through to the end. I am forever indebted to Dr. Jeanne Brooks, Chair of the Committee, for her time and energy spent in coordinating the research and dissertation process. I also thank Dr. Lisa Sosin and Dr. Denise Daniel for finding time in their busy schedule to team up with Dr. Jeanne Brooks to comb through and fine-tune this writing into a professional document. All three faculty members spent incredible amounts of time repeatedly reviewing this document from start to finish, and pointed out areas that needed to be corrected, be they technical, semantic, or typographic. Their goal was to guide me through the intricate process of conducting scientific research and creating a document that demonstrates a high level of excellence. I thank them for their dedication, support, and encouragement throughout the process.

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CHAPTER ONE: INTRODUCTION

The Problem: Rationale for the Study

Introduction

Adolescence is widely recognized as a period of intense turbulence and stress. It is a period that coincides with maturation of the brain and body, which gives rise to intense psychological and physical changes. While it is acknowledged that immature prefrontal cortex results in lack of self-control and empathy, this alone cannot explain the psychological turmoil observed in this population (Casey et al., 2010). It is also important to emphasize that this age group is highly vulnerable to depression (Tao et al., 2012). This disease condition among adolescents is a major concern, not only because it leads to significant economic losses, social and academic impairment, and reduced productivity, but also because it causes severe distress in the family, and predisposes this age group to suicide and suicide ideation (Wilkinson, Harris, Kelvin, Dubicka, & Goodyer, 2012).

It is important to note that suicide is the third leading cause of death among adolescents and young adults in the United States and depressive disorders are consistently the most prevalent psychiatric disorder affecting adolescents who commit suicide (Consoli et al., 2013). This age group is particularly at risk of psychopathologies such as depression as a result of exaggerated neural activation in several areas of the brain, including frontal, temporal, and limbic cortices (Tao et al., 2012). The age group is also at risk because of underdevelopment of certain brain circuits that involve the pre-frontal cortex, hippocampus, and Amygdala (Maughan, DPhill, & Stringaris, 2013),

higher sensitivity to peer rejection (Platt, Kadosh, & Lau, 2013), and insecure parent attachment (Margolese, Markiewicz, & Doyle, 2005).

The role of insecure attachment has been the focus of a tremendous amount of research, and in the current study, this factor was further explored. More recently, researchers have started to examine the role of God attachment, due to the belief that God serves as an attachment figure that acts either in a compensatory or corresponding manner, as will be described in this chapter. The main objective of this chapter is to present evidence of the devastating effects of depression in adolescence and the role of attachment, as well as demonstrate why this current study is worthwhile. The chapter will contain a discussion on depression, its causes, risk factors and consequences, attachment theory, and internal working models, and will elucidate how belief in God makes Him serve as an attachment figure. It will also contain a description of what is currently known about the relationships among depression, parent attachment, and God attachment in the general population, while placing an emphasis on adolescents.

Depression

Depression represents a cluster of symptoms that may include low mood, inability to experience pleasure, emotional flatness or emptiness, changes in sleep and appetite, and a cognitive set of futility and hopelessness (Shaw & Dallos, 2005). Depression may be unipolar, bipolar, dysthymic, or cyclothymic. Major Depressive Disorder (MDD) is a unipolar depression characterized by periods of at least two weeks in which there is a feeling of depressed mood and loss of pleasure in activities that are usually enjoyable (Maddux & Winstead, 2008). According to the DSM V, it is characterized by two or

more periods, each lasting at least two weeks during which an individual experiences depressed mood and loss of pleasure in previously enjoyed activities, accompanied by other symptoms, such as unexplained weight loss or weight gain, insomnia, fatigue, psychomotor agitation or retardation, feelings of worthlessness, and thoughts of suicide (DSM V-TR, 2013). It is depression not accounted for by schizoaffective disorder and not superimposed on Schizophrenia, Schizophreniform Disorder, Delusional Disorder, or Psychotic Disorder.

There is a substantial amount of evidence supporting the presence of gender differences in depression prevalence, which is approximately twice as high in women relative to men (Maughan et al., 2013). Depression affects young people the same way it does adults, but it is relatively more common in adolescents than in younger children (Angold, 1988). Changes in their cognitive abilities enabling them to engage in abstract thought and in more sophisticated management of their attachment relations are thought to be responsible for the increased prevalence of depression in adolescence. In addition, adolescents tend to have increased focus on existential and global, as opposed to egocentric, issues, whereby they no longer view themselves as the all-important center of the universe (Shaw & Dallos, 2005). This is painful and incapacitating to them, and when other factors such as poor attachment and lack of support are present, many experience a downward spiral into depression. Empirical evidence suggests that family history of depression and exposure to stressful life events are by far the most important risk factors for depression (Maughan et al., 2013).

Attachment

Attachment was defined by Bowlby (1969) as the psychological and relational bond that motivates individuals to seek and to maintain proximity to an attachment figure. It is based on four distinct functions of attachment figures, namely proximity seeking, safe haven, separation anxiety, and secure base. The work of Bowlby, Ainsworth, and other researchers has led to the conceptualization of four major patterns of attachment seen in children, namely *secure*, *avoidant*, *ambivalent*, and *disorganized* attachments (Feldman, 2008). These patterns are relatively stable throughout life and closely correspond to Bartholomew's (1994) model of self and others, resulting in the identification of four types of adult attachment, namely *secure*, *pre-occupied*, *dismissing*, and *fearful* attachments. Attachment is not only a childhood phenomenon, as it exists in relationship situations involving adolescents and adults. Apart from child–parent attachment, adult nuclear family attachment and romantic attachment are particularly noteworthy (Werner-Wilson & Davenport, 2003).

The works of Kirkpatrick and other researchers have led to a fourth conceptualization, which is God attachment. Kirkpatrick (1992, 1999) as well Rowatt and Kirkpatrick (2002) studied how belief in God makes Him function as a substitute attachment figure, which led to the premise that God attachment is very similar to child–parent attachment. The present study aimed to examine how God attachment and child–parent attachment interact in a triadic fashion with depression in adolescent Christians, a population that is known for its proneness to the negative effects of this mental health condition. A historical background and context will first be presented.

Historical Background and Context

In the 1940s, while Bowlby worked in a childcare clinic in Britain, he was struck by the affectionless qualities of the juvenile thieves that were under his care. He then decided to work to unearth features of their early family history that may have influenced their emotional development (Fraley, 2002). This was a task that occupied him for the rest of his life, yielding some comprehensive and penetrating theories in personality development and close relationships that are the hallmarks of modern psychology (Fraley, 2002). He soon became known as the father of attachment theory. Patterns of attachment to parents have been correlated to depression (Kamkar, Doyle, & Markiewicz, 2012; Najam & Majeed, 2012).

According to Fonagy (1999), and Hawkins, Howard, and Oyeboode (2007), children with secure attachment have been found to be more resilient, self-reliant, socially oriented, and empathic to distress, while also forming deeper relationships than those with insecure attachment histories. Secure attachment tends to offer immunity against depression (Borellii, David, Crowley, & Mayes, 2010; Hallab & Covic, 2010; Kullik & Petermann, 2013; Margolese et al., 2005). Insecure attachment has been associated with anxiety, depression, and other symptoms of psychopathology (Crowell & Treboux, 1995; Egeland & Erickson, 1987; Jinyao et al., 2012). Similar conclusions were reached by DiFillipo and Overholser (2000), who observed that insecure attachment created vulnerability to depression and suicide attempts. But Margolese et al. (2005) were able to distinguish the effects of attachment to mother relative to other attachment figures. According to these researchers, insecure attachment to mother was more strongly linked to depression than insecure attachment to father and romantic partners.

A correlation has also been observed between God attachment and depression. Research by several scholars has established that spirituality and belief in God provides some protection against depression. The work of Kirkpatrick and Shaver (1990) led to the conclusion that relationship to God serves the same purpose as parent attachment, with God serving as a safe haven and secure base, in the same way that parents or caregivers do. According to Kirkpatrick (1999), God attachment provides people with a “safe haven” from stress and crisis, since they believe that there is protection from an all-present, all-knowing, and all-loving father, in the same way that infants feel secure in the presence of their parents or caregivers. Petts and Jolliff (2008) showed that religious participation and religious importance indirectly reduces depressive symptoms by enhancing social support for youth. While Sim and Yoh (2011) found a positive correlation between religious involvement and depression, Leondari and Gialamas (2009) did not find any link at all. However, Balbuena, Baetz, and Bowen (2013) reported that attending religious services at least once a month had a protective effect against major depression.

Lastly, through two different pathways (correspondence and compensation), several authors reported an association between parent attachment and God attachment (Cassiba & Graqvist, 2008; Cassiba, Graqvist, & Constatini, 2013; Chou, 2012; Hall, 2009; Limke & Mayfield, 2011). Exploring the correspondence and compensatory hypotheses linking God attachment to parent attachment, McDonald, Beck, Allison, and Norswothy (2005) demonstrated an association between early experiences in the home and later religious experience. Additionally, the results of a study conducted by Granqvist, Ivarsson, Broberg, and Hagekull (2007) supported the correspondence

hypothesis stipulating that a security of attachment is linked to a religion-spirituality, which is socially based on the parental relationships. Lastly, results reported by Hall, Fujikawa, Halcrow, and Hill (2009) also supported the correspondence hypothesis, as the authors found that secure attachment groups demonstrated higher levels of spiritual community than the other attachment groups.

Depression in Adolescents

As noted earlier, depression among adolescents is a major concern. This mental health condition is highly prevalent within this age group as a result of the presence of some risk factors that predispose them to the disease, which are the subject of this section. The negative effects of depression on the overall functioning of the adolescent will also be addressed.

Prevalence of Depression in Adolescents

Depressive disorders are consistently the most prevalent psychiatric disorder among adolescents who commit suicide in the United States (Consoli et al., 2013). Major Depressive Disorder (MDD) is more prevalent in females (10–25%) than in males (5–12%), and this discrepancy appears to be unrelated to ethnicity, education, income, or marital status (First, 2000). Similar claims were made by Maughan et al. (2013), who found that the MDD prevalence in early adulthood ranged from 10 to 17%, with women about twice as likely to be affected as men. A study by Maharajh, Ali, and Konings (2006) in Trinidad and Tobago revealed that 14% of students were depressed, and that 76% of this number were girls. In addition, adolescents 16 years of age were found to be

much more depressed than 14-year-olds. Students that attended prestigious schools were less depressed than those from non-prestigious schools. More importantly, adolescents who attended religious institutions were found to be seven times less depressed than their counterparts studying at non-affiliated institutions (Maharajh et al., 2006). The MDD rates were also explored in other countries and were found to be 6.9% Nigeria (Adewuya, Ola, & Aloba, 2007), 15.3% in Egypt (Khalil et al., 2010), 8.6% in Uganda (Kinyanda, Kizza, Abbo, Ndyabangi, & Levin, 2013), and 24% in India (Mohanraj & Subbaiah, 2010). In Turkey, findings were reported for each gender, with 39.6% noted for girls and 22.6% for boys (Unsal & Ayranci, 2008).

Risk Factors and Causes: Why Adolescents are Vulnerable

Adolescents are much more susceptible to psychopathologies compared to other age groups, and some unique characteristics of the adolescent phase of development are deemed responsible for this susceptibility. The brain structures, circuitry, and neurochemicals of adolescents are currently being studied to gain a better understanding of the reasons for this vulnerability (Tao et al., 2012). Exaggerated neural activation in several areas of the brain, including frontal, temporal, and limbic cortices, are thought to be responsible for depression in adolescence (Tao et al., 2012). Children and adolescents suffering from MDD show a dysregulated HPA axis response to stress challenge, as shown by a higher peak cortisol and higher cortisol levels during recovery (Stewart, Mazurka, Bond, Wynne-Edwards, & Harkness, 2013). Extant research suggests that vulnerability to depression has both genetic and environmental origin, with heritable factors increasing the risk of exposure to stressful environments and susceptibility to

psychosocial stress (Maughan et al., 2013). Peer rejection, cognitive biases, and neurobiological substrates were cited by Platt et al. (2013) as some of the risk factors that may predispose some adolescents to depression. Langille, Rasic, Kisely, Flowerdew, and Cobbett (2012) have also determined that peer connectedness has demonstrated an independent protective association with the risk of depression in students, with peer connectedness defined as acceptance, respect, and inclusion.

Parental and family factors are presently in the focus of research aiming to ascertain the causes and risk factors for adolescent depression and parent attachment, which was examined in the current study. Patterns of parental behavior were implicated as one of the risk factors for depression in this age group (Swartz et al., 2012). Parents' acceptance promotes secure attachment and positive outcome in children and defends them from depression (De Minzi, 2006). In addition, Moharib (2013) believes that parental favoritism also plays a significant role in depression and aggression in adolescents. Parental socioeconomic status has also been linked to depression in adolescents, with lower socioeconomic status being associated with a greater incidence of depression (Najman et al., 2010; Sanckoglu & Sayar, 2012). Over-General Autobiographical Memory (OGM) was also found to be a risk factor for adolescent depression. This was the result of a study by Rawal and Rice (2012), who determined that OGM to negative cues predicted depression in adolescents.

Following what is known as the "broken windows theory" and social disorganization theory, Ford and Rechel (2012) suggested that neighborhood physical disorder and low social cohesion are positively linked to depression in adolescents. Neighborhood physical disorder is deterioration of an urban environment, which

according to Quinn et al. (2014), is highly associated with mental and physical health outcomes. There is also a strong relationship between attachment to parents and peers and depression in adolescents, with less attachment to parents and peers indicating greater propensity for depression (Kulik & Peterman, 2013). This factor was examined in the current study.

Consequences of Depression

Suicide. One major consequence of depression in adolescence is suicide, and as noted earlier, suicide is the third leading cause of death in this age group (Consoli et al., 2013). While adolescent females are three times more likely to attempt suicide than are males, males are four times more likely to complete the act (Bloch, 1999). More specifically, according to the available data, 15 out of every 100,000 adolescent males will commit suicide, compared to only 3.3 females (Bloch, 1999). This disparity exists as boys are more likely to use more lethal force such as firearms, whereas girls are more likely to resort to less lethal means such as drug overdose (Bloch, 1999).

Negative relationships with parents are often associated with suicide risks. Vander Stoep et al. (2011) suggested, based on the evidence yielded by epidemiological studies, that approximately 14.5% of 9th–12th grade students seriously consider suicide, 7% of whom make suicide attempts. With 50% of teens who complete suicide having a diagnosable mood disorder such as depression, it is believed that not only are depression and suicidality often linked, but both place a significant burden on patients and their families (Cheung & Dewa, 2007). This risk of suicide, suicide attempts, and recurrent

behaviors is elevated in depressed adolescents with co-morbid conduct problems (Vander Stoep et al., 2011).

Drug and alcohol use. Depression in adolescents is also associated with several other complications and risks. For example, adolescents with high self-ratings of depression were more likely to smoke cigarettes, drink alcohol, and smoke marijuana (Deykin, Levy, & Wells, 1987; Diego, Fields, & Sanders, 2003; Saraceno, Heron, Munafo, & Craddock, 2012). Depression and Cannabis dependence were also found to be closely associated (Gilder & Ehler, 2012). The incidence of early drinking (before age 15) in the adolescents with MDD was found to be 1.7 times higher than in the sample without MDD (Deykin et al., 1987). There is, however, an indication of a bidirectional relationship, in which depression may lead to drinking, and a history of drinking could be linked to depression (Bulloch, Lavorato, & Williams, 2012).

Economic losses. As noted earlier, the financial cost of MDD is staggering, and in 2000, the annual cost of MDD for all age groups in the United States was estimated at \$83 billion (Dominos et al., 2009). In 1998, the cost of treatment of adolescent depression stood at \$12 billion. This is particularly relevant, given that 91% of medical costs for participants without insurance were borne by families. Results yielded by a similar study conducted in Switzerland by Tomonaga et al. (2013) indicate that this mental health disorder costs an average of 8 billion Euros at the national level, and that this cost is dependent on the severity of the disease.

Other effects of depression in adolescents. Depression impacts academic performance as well as social relationships involving adolescents (Maag & Reid, 2006),

and it has also been found to lead to intimate relationship and childbearing adversities in adulthood (Jonsson et al., 2011).

Depression in Adolescent Christians

Studies have shown that Christian adolescents are also at risk of depression, although not much work has been done in this area (Rasic, Asbridge, Kisely, & Langille, 2013). It is important to state that some of these studies have indicated that spirituality and attachment to God may have a tendency to provide some protection, because religious individuals tend to have greater self-efficacy and social support (Rasic et al., 2013). Even related activities, such as levels of church engagement, were shown by Kang and Romo (2011) to be associated with stronger spirituality, which in turn was linked to lower depression. The direction of this relationship is, however, hard to establish because depression also has the ability to limit one's interest in attending religious services, which may account for the observed relationship (Rasic et al., 2013). Monthly or more frequent religious attendance was also found to have protective effects on the development of elevated depressive symptoms, as well as on the recurrence or persistence of elevated depressive symptoms in males (Rasic et al., 2013).

Depression in adolescents was discussed in this subsection, and this mental health condition was found to be highly prevalent in this population due to certain risk factors. These risk factors include immature brain structures and circuitry, exaggerated brain activation, parental behavior including rejection, peer rejection, low social cohesion, as well as neighborhood physical disorder. It was also noted that depression leads to serious consequences, which include suicide, drug and alcohol abuse, as well as economic losses.

Lastly, it was noted that adolescent Christians are not exempt from developing depressions; however, spirituality and God attachment tend to give them some protection. Attachment theory and internal working models will be discussed next.

Attachment Theory, Attachment Types, and Internal Working Models

An exploration of how parent attachment affects depression was one of the areas of focus of this study. Therefore, a discussion of attachment theory, attachment types, and internal working models was indicated. This section, while providing some insight into these subjects, will also address the causes of insecure attachment as well as the consequences. This will help to gain an understanding of the factors that influence attachment patterns and how these can be modulated in order to minimize their impact on the individual. According to the attachment theory, an infant's attachment pattern to a parent or caregiver is fundamental to his/her survival, and is determined by whether or not the caregiver is viewed as a reliable source of protection and support, and whether or not the self is viewed as worthy of the said protection and support (Bowlby, 1969). The bond serves to protect the infant/child from fear and harm, as well as set the stage for the formation of the caregiver as a secure base from which the infant/child can explore the world (Fitton, 2012). These models of self and others seem separate; yet, in reality, they are complementary and mutually confirming. Once a bond has been established with a parent or a caregiver, the attachment relationship extends beyond providing security. It is also an invaluable source for the infant to learn about him/herself and the social world (Shaw & Dallos, 2005). The behavioral response of the parent or caregiver is instrumental in the creation of the internal working model (IWM), which becomes

programmed in the brain of the infant as mental representations. These models act as templates that later guide the views of the infants about self and others, as well as about relationships in general (Eckert & Kimball, 2003). According to Bowlby (1988), these internal working models are active throughout the life of the individual.

Support for Bowlby's notion was pioneered by Ainsworth, using the Strange Situation procedure, in which she suggested that infants seek proximity to the caregiver during times of stress (Ainsworth, 1973; Ainsworth, Blehar, Water, & Wall, 1978). A safe haven is provided by a caregiver if he/she responds sensitively and consistently, alleviating the stress of the infant. Such a caregiver would function as a secure base from which the child can freely engage and explore the environment and the world. These factors work together to promote a healthy emotional and personality development in the infant (Bowlby 1969, 1982).

Internal Working Models and Attachment Types

An Internal Working Model (IWM) is a set of thoughts, emotions, beliefs, and expectations about the self and others, in which self may be considered worthy or unworthy of love and attention, and others considered reliable/trustworthy or unreliable/untrustworthy (Mills-Koonce et al., 2011). These models tend to control the overall attachment system and help individuals in the adaptation process (Bowlby, 1988). As children internalize experiences with their parents or caregivers, prototypes or templates, otherwise known as internal working models, are formed and these persist and provide a guide for future relationships, including friendships and marriage (Main, Kaplan, & Cassidy, 1985; McCarty & Maughan, 2010; Shomaker & Furman, 2009).

These models are mental representations of the social world, and they assist in perceiving events, forecasting the future, and making plans (Colonessi et al., 2011). They play a key role in guiding interpersonal behaviors and regulating affect throughout the lifespan of the individual. They function at an unconscious level, are relatively stable and difficult to change (Bartholomew & Horowitz, 1991). However, researchers such as Buist, Reitz, and Dekovich (2008) suggest that there are individual differences in the quality of adolescents' attachment, and they posit that this could be due to adolescents' individual characteristics, differences between attachment figures (e.g., sensitivity), and characteristics of the specific attachment relationships.

According to Simpson and Rholes (1998), internal working models help in understanding future adult relationships. In addition, the quality of emotional and social development through early childhood has been found to be related to early attachment patterns (Ainsworth et al., 1978; Bretherton, 1985). Two key elements of these working models were identified, namely a perception by the individual regarding whether or not the attachment figure is reliable and responsive to the needs of the child, and whether or not the self is worthy of care and response from the attachment figure (Bowlby, 1988). Based on the work of Bowlby and Ainsworth, four types of infant attachment were identified—secure, ambivalent, avoidant, and disorganized. These attachment types are relatively stable throughout life (Shemmings, 2006) and correspond closely to Bartholomew's (1994) model of adult attachment patterns, namely secure, preoccupied, dismissing, and fearful attachments (Dereli & Karakus, 2011).

Securely attached individuals tend to have a positive view of self as well as others. They tend to experience low levels of anxiety and avoidance, have perceptions of

positive self-worth, and are comfortable with being close to others. Ambivalent and pre-occupied attachment results from inconsistent and unpredictable caregiving, which leaves the child with considerably mixed feelings about relationships (Shemmings, 2006). These individuals tend to have positive views of others but a negative view of self. They are high on anxiety but low on avoidance, have low perception of their self-worth, and are relatively more worried, clingy, and needy. They value closeness and are terrified of rejection (Shemmings, 2006). Dismissing and avoidant individuals have positive view of self and negative view of others, are high on avoidance and low on anxiety, are uncomfortable with closeness, and have a high sense of self-worth. They tend to turn away (avoid) others when they are under threat, mainly because from an earlier age, their primary caregivers consistently discouraged or rejected their display of feelings (Shemmings, 2006). Those that form disorganized or fearful attachment show inconsistent, confused, and contradictory behavior (Feldman, 2008). These individuals hold a negative view of themselves and others, and are high on anxiety and avoidance. The disorganized attachment type is particularly important because it is associated with problematic long-term behavioral outcomes (Feldman, 2008).

Avoidant attachment tends to be more negatively associated with positive indicators of relationship quality (connectedness, general satisfaction, and general support) than anxiety, while anxiety is more positively associated with negative indicators, such as conflict (Li & Chan, 2012). Individuals who report secure attachment with parents also tend to have secure relationships with close friends. This is in line with attachment theory, which posits that early attachments to parents and the internal working models developed as result of these relationships continue to be influential into

adolescence and adulthood. Attachment type is also related to gender. Girls tend to be more attached to their peers than are boys, and girls' friendships also tend to be deeper and more interdependent than those involving boys (Gorresse & Ruggieri, 2012). This gender difference may explain why depression is more prevalent in adolescent girls than in boys.

There are two alternative perspectives on mechanisms that explain the continuity of attachment from infancy to adulthood, namely, the revisionist and the prototype perspectives. The revisionist perspective is in line with the reasoning that early attachment experiences are flexible and may change as current experiences become different from expectations that were based on previous experiences (Fraley, 2012). Beijersbergen, Juffer, Bakermans-Kranenburg, and Van IJzendoorn (2012) provided support for the revisionist theory, positing that attachment pattern may not be as stable as Bowlby had suggested, but is rather flexible and may change if child's experiences change. This is plausible, since the brain has the ability to change, re-wire, make new connections, and assume new roles in response to changes in the type and amount of stimulation reaching the brain, a condition known as neuroplasticity (Siegel, 1999). For example, maternal sensitive support in early childhood and in adolescence can predict continuity of secure attachment, and a relative increase in maternal sensitivity support from early childhood to adolescence has been shown to predict children's change from insecurity in infancy to security in adolescence. This is very important, since the rearing context can have a great impact on of children's attachment (Betts, Trueman, Chiverton, Stanbridge, & Stephens, 2013). In another study aiming to demonstrate neuroplasticity, Venta, Sharp, Shmueli-Goetz, and Newlin (2015) identified a subgroup of secure

adolescents and adults known to have “earned secure attachment.” These individuals reported difficult caregiving as infants, but were able to function interpersonally as adults, demonstrate parental warmth and structure, and have securely attached infants (Venta et al., 2015). The prototype perspective is based on one of Freud’s propositions, namely that a child’s early relationship with his or her mother serves as a prototype for subsequent relationships throughout the life span (McCarty & Maughan, 2010; Shemmings, 2006).

Causes of Insecure Attachment

Factors that may lead to attachment insecurity include child maltreatment (Baer & Martinez, 2006), rejection sensitivity (Erokian, 2009), parental incarceration (Murray & Murray, 2010), parental sensitivity, parental adult attachment, parental depression, parental stress, infant temperament difficulty, and social support (Emery, Pacquette, & Bigras, 2008). Poor parenting styles (Perry, 2009), family dynamics of relationship and communication, as well as other factors may also lead to insecure attachment. For example, according to Baer and Martinez (2006), children who have been maltreated tend to be insecure and/or disorganized. Emotional abuse by attachment figures during infancy and early childhood tends to contribute to the development of insecure attachment (Riggs, 2010). Absence of social support is another factor that may be of interest in the search for causes and associations relating to insecure attachment. There is an association between avoidant attachment and social support. For example, adults who are high in avoidant attachment tend to view their environment as unsupportive (Green, Furrer, &

McAllister, 2011), and are less likely to engage in exploration behavior as a result of perceived lack of social support (Wu & Yang, 2012).

Consequences of Insecure Attachment: Psychopathologies

It is not surprising that attachment insecurity has been linked to various psychopathologies, such as depression and anxiety. As noted earlier, and according to Bowlby (1969) and Ainsworth (1979), a secure attachment involves having an internal working model of an attachment figure as reliable and responsive, and of oneself as worthy of love and attention. Conversely, a child with an insecure attachment may have an internal working model of his/her caregiver as unresponsive and uncaring, or his environment as dangerous and threatening, and him/herself of undeserving of love and a secure attachment (Ainsworth, 1979; Bowlby, 1969; Cordon, Brown, & Gibson, 2009). Attachment patterns and internal working models that are disrupted tend to have long-term deleterious effects on children's neurobiological systems (Galynker et al., 2012) and this includes increased levels of stress hormone (Oskis, Loveday, Hucklebridge, Thorn, & Clow, 2011; Pierrehumbert, Torrisi, Ansermet, Borghini, & Halfon, 2012). The child-caregiver attunement systems are also disrupted, and this may lead to a child's negative self-perception, paranoid outlook, distrust of others, or poor affect (emotional) and behavior regulation (Anderson & Gedo, 2013; Shemmings, 2006). As noted earlier, emotional abuse by attachment figures during infancy and early childhood tends to contribute to the development of insecure attachment (Riggs, 2010). This impairs emotional regulation and fosters negative internal working models of self and others, which initiate and sustains negative coping responses (Riggs, 2010).

The link between poor attachment and delinquencies in both boys and girls is relatively well established, and youth with poor attachment have been found to exhibit higher levels of delinquency (Hoeve et al., 2012). This link tends to be more pronounced with mothers than with fathers, and has been found to be stronger when the parent and child are of the same sex, as well as with younger children as opposed to older children (Diener, Isabella, Behunin, & Wong, 2008; Schooppe-Sullivan et al., 2006).

Insecure attachment has also been linked to Obsessive-Compulsive Disorder (OCD) (Rezvan et al., 2012). Many researchers have sought to establish a link between insecure attachment and behavior patterns. In the extant studies, children rated as insecure have shown higher levels of externalizing behaviors, such as physical aggression, compared to children rated as secure (Fearon, Bakersmans-Kranenburg, Van Ijzendoorn, Lapsley, & Roisman, 2010). Early attachment is also related to social functioning. Available evidence indicates that, at school age, both early and concurrent attachment security is associated with good social functioning, yielding support for the attachment theory postulate that secure attachment is necessary for social competence (Bohlin, Hagekull, & Rydell, 2000; Towler & Stuhlmacher, 2013). According to Riggs (2010), insecure attachment is associated with impaired emotional regulation, which fosters negative IWM of self and others. In the course of time, these deficits create substantial vulnerability for maladaptive interpersonal schemas, which interferes with social functioning, and contributes to poor peer relations in childhood and adolescence.

Several authors link depression to attachment insecurity, childhood life events, including trauma, parental divorce, and loss of one or both parents (Hovens et al., 2010). The loss of a parental attachment figure between infancy and sixth grade was identified

by Coffino (2009) as a predictor of adult depression at age 26. The period between age five and second grade was found by this researcher to be the most critical, and loss history during this window was found to be the clearest predictor of adult depression. The results yielded by this study indicate that losses before and after this age range are not related to depression in adults.

Most of the studies on attachment and relationships with mental health involve attachment to one parent, aiming to elucidate how such attachment insecurity may lead to psychopathologies. Very few studies on the implication of early attachment for future behavior problems have included both parents. Kochanska and Kim (2013) are of the opinion that attachment insecurity to both parents, otherwise referred to as “double insecurity,” may lead to greater overall problems than attachment insecurity to one parent. On the other hand, Diener et al. (2008) demonstrated that attachment security to both parents was associated with greater academic competence than a sense of a secure attachment to only one parent. Moreover, findings reported by Duchesne and Ratelle (2014) indicate that contributions of attachment security by mother and father were complementary in the prevention of depressive symptoms in adolescence.

There is a reciprocal relationship between attachment organization and intelligence quotient (IQ), whereby reasoning IQ has been found to influence the development of secure attachment on the one hand, while attachment security and organization influences later verbal IQ, on the other (Stevienart, Roskam, Meunier, & Van De Moortele, 2011). Pertinent research has also revealed that secure attachment is related to better cognitive development, and that the quality of attachment between infant

and parent is strongly associated with the infant's language development (Ijzendoorn, Dijkstra, & Bus, 1995).

The relationship between depression in adolescents and suicide is well known. Ample body of research demonstrates that insecure attachment in adolescents is linked to suicide, while adolescents that have attempted suicide also reported lower maternal and paternal attachment relationships (Sheftall, Mathias, Furr, & Dougherty, 2013). Insecure attachment, especially to mothers, predicted higher suicidality (Viloato & Arato, 2004), and perceived unavailability and higher levels of depression have been shown to predict suicidal behaviors in adolescents (West, Spreng, Rose, & Adam, 1999). This knowledge supports the efforts to develop attachment-based interventions as a new route towards suicide prevention.

In this section, internal working models and attachment types were described. In addition, child maltreatment, rejection sensitivity, maternal sensitivity, maternal adult attachment, maternal depression, maternal stress, infant temperament difficulty, and social support were identified as the main causes of insecure attachment, along with parenting styles and family dynamics of relationship and communication. It was also noted that insecure attachment carries serious consequences, including psychopathologies such as depression and suicide, anxiety, OCD, and delinquencies. The next section is designated for a discussion of how God functions as an attachment figure.

God as an Attachment Figure

In the previous section, attachment theory and internal working models were discussed. The factors that have been linked to insecure attachment as well as the

psychopathologies that may be the consequences of insecure attachment were also delineated. The present section will provide insight into how God serves as an attachment figure. Attachment theory has been employed by researchers to explain an individual's relationship with God (Granqvist & Hagekull, 1999; Kirkpatrick, 1999; McDonald et al., 2005). Kirkpatrick and Shaver (1992) argued that individuals who experienced a secure attachment relationship with God tend to develop more secure and stable relationships even in adulthood. In other words, religion, and more importantly, a perceived relationship with God, has a tendency to provide the safe haven and secure base that are characteristic of attachment relationships. According to Beck (2006), faith in God provides a secure base for theological exploration that is anxiety-free. Attachment to God can occur through correspondence or compensation. Insecurely attached individuals can utilize their attachment to God in a compensatory manner, to compensate for their inadequate attachment to parents or caregivers (Kirkpatrick, 1998). On the other hand, individuals that are securely attached to parents or caregivers tend to attach to God in a corresponding way (Kirkpatrick & Shaver, 1990).

The current section describes God as an attachment figure, whereby the attachment with Him occurs either through the compensatory or corresponding mechanisms. In the sections that follow, several relationships will be examined, involving parent attachment, God attachment, and depression. How parent attachment relates to God attachment, how parent attachment is linked to depression in the general population, and specifically on adolescent Christians is also explored. Moreover, how God attachment is associated with depression in the general population as well as in adolescent Christians is described.

Parent Attachment and God Attachment

The question of whether attachment to God resembles other types of attachment relationships has been explored by several researchers, including Kirkpatrick (1997), Shaver (Kirkpatrick & Shaver, 1990), and Granqvist (2014) and their recent work suggests that attachment theory may constitute an appropriate framework for understanding the attachment between a believer and God (McDonald, 2005). Some studies provide support for the compensation hypothesis. According to Granqvist (2014), attachment figures of insecurely attached children are less sensitive, and as a result, these children may have an increased motivation to find surrogate attachment figures. Available evidence also indicates that women displaying an insecure (avoidant or anxious) adult attachment styles are more likely to find a new relationship with God (Kirkpatrick, 1997; Kirkpatrick & Shaver, 1990).

In addition, associations between early experiences in the home and later religious experience have also been reported. Parents' spirituality and bonding are associated with attachment to God dimensions, usually through the correspondence mechanism (McDonald et al., 2005). Spirituality in the home is also associated with greater reliance on, and intimacy with, God. McDonald et al. (2005) further noted that being raised in a family that engages in religious activities, such as attending church, reading scripture, and praying more often, tends to increase reliance on God later in life. Presence of this correlation is indicative of an association between parental attachment and God avoidance and anxiety. More specifically, families with rigid family structure and lower levels of warmth, care, and support tend to report greater God avoidance. Halam,

Gasparikova, and Sabo (2013) aimed to ascertain how attachment patterns would determine the ways individuals would embrace relationship with God. Their findings indicate that individuals that are insecurely attached tend to undergo sudden and emotional conversion, while securely attached individuals tend to be involved in gradual adoption of caregivers' religion. Granqvist et al. (2007) are also in support of the correspondence hypothesis and have proposed a security attachment that is linked to a religion-spirituality, which is socially based on parental relationships. Hall et al. (2009) also reported results in support of the correspondence mechanism. These researchers found that individuals with secure attachment demonstrate higher levels of spiritual community compared to the insecure attachment groups. Their study showed that fearful and preoccupied attachment groups scored higher than secure and dismissing groups, while secure attachment group scored higher on spiritual community than fearful, pre-occupied, or dismissing groups.

Parent Attachment and Depression

Several studies point to a correlation between parent attachment and depression not only in adolescents but also in the general population. Secure attachment is known to promote mental health, as well as moderate the impact of stress on psychological wellbeing (Sroufe, 2005). It is associated with positive affect and wellbeing, and with lower levels of depression (Shemmings, 2006). Miner (2009) conducted a study to examine the impact of child-parent attachment, God attachment, and religious orientation on psychological adjustment. Parent attachment was found to correlate positively with existential wellbeing, but negatively with anxiety. Similarly, scores on God attachment

correlated positively with existential wellbeing but negatively with anxiety. In addition, the author reported that intrinsic orientation mediated the relationship between God attachment and psychological adjustment.

Other authors posited that children with disorganized attachment tend to report significantly more depressive symptoms compared to children having organized attachment classifications (Borellii et al., 2010). According to Armour, Elklit, and Shevlin (2010), scores for PTSD, depression, and anxiety were found to increase from secure, preoccupied, to fearful attachment patterns. Early presence of anxiety/withdrawal was found by Jakobson, Horwood, and Fergusson (2012) to be related to increased risk of subsequent major adult depression and anxiety. This relationship was found to be linear and “dose-related,” meaning that the higher the level of anxiety/withdrawal at an early age, the higher the depression and anxiety in adulthood. In addition, positive child–parent attachment in adolescence was found to be associated with reduced risk of internalizing disorders. Above all, early anxiety/withdrawal and child–parent attachment were found to be additive risk factors for internalizing disorder. Karabekiroglu and Rodopman-Arman (2011) were able to distinguish the attachment to a particular parent that is most likely to result in pathology. According to these researchers, attachment to the mother is most crucial, and this view was supported by DiFillipo and Overholser (2000). Even parenting styles have been implicated in the development of mental disorders. According to Anhalt and Morris (2008), styles that are high on affectionless control are more likely to lead to high levels of depressive symptoms. Therefore, parenting and the family are very important aspects of efforts to prevent problem behaviors in adolescents (Gainnotta, Ortega, & Stattin, 2013). This view is in agreement with the results of studies by

Beijersbergen et al. (2012), who indicated that the rearing context can have a great impact on child's attachment, and thus has implications in the prevention of internalizing and externalizing behaviors in adolescence.

Parent Attachment and Depression in Adolescence

Among adolescents, the relationship between parent attachment and depression is similar to those described above for other populations (Shaw & Dallos, 2005; Najam & Majeed, 2012). According to Shaw and Dallos (2005), insecure parent attachment does not "cause" depression, but rather establishes vulnerability for emotional problems, whereby these problems manifest in ways that indicate gender differences. More specifically, while girls become more prone to depressive symptoms such as self-harm, eating disorders, and anxiety, boys tend to act out and become more aggressive (Shaw & Dallos, 2005). DiFillipo and Overholser (2000) also believe that poor attachment may increase one's vulnerability to depression, which indirectly increases chances of suicide. Attributions to negative events and self-esteem were found to mediate the relationship between parent attachment and depressive symptoms (Kamkar et al., 2012).

Apart from parent attachment, other attachment situations involving adolescents, such as secure attachment with best friends, peers, and romantic partners, are also strongly associated with lower depression scores (Margolese et al., 2005). The pathways to depression can be explained primarily by the types of attributions made in response to interpersonal stressors, and attachment theory may very well explain the negative attribution style that is predictive of depression (Margolese et al., 2005). Negative

attributions and rumination are believed to be mechanisms responsible for the development of depression from insecure attachment processes.

Not only is adolescents' attachment to parents associated with depression, it is related to anxiety as well (Colonesi et al., 2011). The results yielded by a study conducted by Eijck, Branje, Hale, and Meeus (2012) showed a bidirectional relationship between generalized anxiety disorder (GAD) symptoms and perceived quality of attachment with fathers, while a unidirectional model was found with mothers. In the case of mothers, GAD symptoms were found to predict adolescent–mother attachment, while the reverse link was not supported.

It was noted in this section that insecure attachment to parents by adolescents contributes to an increased vulnerability to depression and anxiety. This vulnerability may be due to negative attribution styles that are characteristic of this age group. Parenting context was found to be a relevant factor in the prevention of problem behaviors in adolescents. Evidence presented thus far points to an association between parent attachment and depression, necessitating exploration of a similar association between God attachment and depression.

God Attachment and Depression

The work of Kirkpatrick and other researchers indicates that faith in God truly acts as a secure base and safe haven. As a result, spirituality and attachment to God tend to have a protective effect against depression, not only in adolescents, but also in the general population. Even religious practices such as monthly attendance at religious worship have the ability to protect against major depression (Balbuena et al., 2013).

According to Rowatt and Kirkpatrick (2002), secure attachment to God is linked with improvement in distress, and predicts less emotional reactivity to social stressors. A similar view is held by Bishop (2008), who demonstrated that attachment to God had a negative influence on depression, whereby greater feelings of secure attachment were associated with lower levels of depression.

Although Leondari and Gialamas (2009) could not demonstrate an association between religious measures levels of spirituality or religiosity and depression, they did find a significant positive correlation between church attendance and general life satisfaction on the one hand and belief salience and general life satisfaction on the other. However, since general life satisfaction and depression usually have a negative linear relationship, it may be possible to infer from their study that church attendance may be associated with reduced depression symptoms.

God Attachment and Depression in Adolescence

Although studies on the effects of attachment to God on depression in adolescents are scanty, there is sufficient evidence that this relationship is similar to that described above for the general population. Indirectly, some researchers such as Francis, Gibson, and Robbins (2001) have also demonstrated an association between God attachment and depression in adolescents, through positive impact on their self-worth. They postulated a positive relationship between self-concept or self-worth and loving God images, and a negative relationship between self-concept or self-worth and rejecting God images, among adolescents. Since self-worth is well known to be related to depression scores (Sargent, Crocker, & Luhtanen, 2006), it could be deduced that God image or attachment

is inversely related to depression. Studies by Rasic et al. (2013) have provided evidence for the protective effects of monthly or more frequent religious attendance on the development of elevated depressive symptoms, and on the recurrence or persistence of elevated depressive symptoms in males. Yet, surprisingly, Sim and Yoh (2011) reported a positive relationship between God attachment and depression.

While it is not exactly certain how some demographics, such as ethnicity and gender, would impact the relationship between God attachment and depression, available evidence indicates that a negative correlation exists between religiousness (both internal and external) and depression, for African Americans but not for Hispanic, Asian, or Native Americans (Le, Tov, & Taylor, 2007). According to Petts and Jolliff (2008), religious participation and religious importance indirectly reduce depressive symptoms by enhancing social support for youth; however, this relationship may be unique for Latino and Asian adolescents. For Asian adolescents, the authors showed that religious participation and importance is associated with increased depression, a view that is similar to that of Sim and Yoh (2011). However, for Latino adolescents, the relationship is curvilinear.

The relationships between parent attachment, God attachment, and depression in adolescents have been explored, and the work of several researchers on this subject has been described. The results of previous studies that were reviewed thus far indicate that, in adolescents, there is a strong relationship between parent attachment and depression on the one hand, and between God attachment and depression on the other. These relationships were further investigated in the current study, a description of which will be presented next.

Current Study

Purpose

The studies discussed above have helped to establish relationships between parent attachment, God attachment, and depression. The present study aimed to ascertain the dynamics of these relationships within the context of adolescent Christians. Many studies have addressed several variables relating to depression in adolescents and teenagers, including the roles of family relationships, parental socioeconomic factors, parental depression, etc. Yet, very few have examined the effects of attachment patterns on individuals suffering from depression, and no research on adolescents who are Christians presently exists. As noted earlier, this age group is most vulnerable to the effects of depression. The reason for this vulnerability will be explained later in this dissertation. A relationship with God is expected to provide protection against anxiety and depression. How these two factors play out in an adolescent will be crucial to psychotherapy and to the scientific community. The purpose of this research, therefore, was to investigate the effects of God attachment and child–parent attachment on depression among adolescent Christians. The study was intended to help to expand the conversation on attachment as it relates to adolescent Christians with depression, and to establish how these different types of attachment interact with each other and with the depression. It would help to investigate empirically whether or not God attachment adds some unique variance to the prediction of depression after accounting for parent attachment. In this study, God

attachment and parent attachment were the independent variables, while depression was the dependent variable.

Research Design and Statistical Methods

The researcher employed a cross-sectional, case controlled, correlation design as the main design for the present investigation, along with a mediation piece. A case controlled design is one in which the variable of interest is studied by selecting subjects or cases that vary in the characteristics or experiences of interest (Kazdin, 2010). On the other hand, a cross-sectional design allows making comparisons between groups at a given point in time, as opposed to a longitudinal study in which comparisons are made over an extended period of time (p. 144). A cross-sectional case control study is employed when the goal is to examine factors that are associated with a particular characteristic of interest, which are useful in identifying correlates and associated features (p. 236). When employing a correlation study, the main objective is to determine whether an association exists, without regard to the direction of any such association. In this study, the characteristics or variables of interest were God attachment and parent attachment.

Several statistical methods were employed in order to gain a better understanding of the significance of the data obtained. These include Pearson's Product Moment Correlation Coefficient (Pearson's r) and Hierarchical Multiple Regression. The three variables, comprising of the child-parent attachment scores, and the corresponding God attachment and depression scores, were tested for possible correlations, using the Pearson's r . The combined effect of parent attachment and God attachment on depression

was tested using the hierarchical multiple regression. To determine if God attachment mediates the relationship between parent attachment and depression, a mediation analysis was conducted. In this analysis, God attachment was regressed on parent attachment, depression was regressed on parent attachment, and lastly, depression was regressed on both parent attachment and God attachment.

Research Questions

This study was designed to explore the following research questions:

1. Does a secure child–parent attachment correlate with reduced depression in adolescent Christians?
2. Do attachments to parents have any effects on attachment to God?
3. Does attachment to God offer protection against depression in Christian adolescents, by accounting for unique variance in depression after controlling for attachment to parents?
4. Does God attachment mediate the effects of parent attachment in predicting depression in adolescents who are Christians?

Research Hypotheses

In this study, it was hypothesized that:

1. A secure child–parent attachment will show a correlation to reduced depression in adolescents who are Christians.
2. An attachment to parents will impact attachment to God. This may be possible through either the correspondence or compensation pathways.

3. Attachment to God will add unique variance to the prediction of depression after accounting for parent attachment. In other words, it is predicted that attachment to God will offer protection against depression in Christian adolescents.
4. Attachment to God can mediate the effects of parent attachment in predicting depression in Christian adolescents.

List and Definitions of Variables and Key Terms

Variables

In this study, the independent variables were God Attachment (which was also tested as a mediator) and Parent Attachment. The dependent variable was Depression.

Key Terms

This section contains a description of key terms used in this study, namely attachment, parent attachment, God attachment, depression, internal working models, proximity-seeking, safe haven, and secure base. They are essential to define, because they represent the pedestal upon which this research was situated. Defining them based on how they are used in this study has helped to put things in proper perspective.

Attachment is the psychological and relational bond that is based on four distinct functions (proximity seeking, safe haven, separation anxiety, and secure base) and which motivates individuals to seek and to maintain proximity to an attachment figure (Bowlby, 1969). In *parent attachment*, a child seeks proximity to parent. In *God attachment*, individuals seek proximity to God, who is perceived as fulfilling the functions of a substitute attachment figure (Kirkpatrick, 1992, 1999; Rowatt & Kirkpatrick, 2002).

Depression is the presence of depressed mood, or loss of interest or pleasure in previously enjoyed activities, for a period of at least two weeks, in the presence of some other symptoms such as unexplained weight loss or weight gain, insomnia, fatigue, psychomotor agitation or retardation, feelings of worthlessness, and thoughts of suicide (DSM V-TR, 2013)

Internal Working Model (IWM) is the set of thoughts, emotions, beliefs, and expectations about the self and others, in which self may be considered worthy or unworthy of love and attention, and others considered reliable/trustworthy or unreliable/untrustworthy.

Proximity seeking is a function of attachment and is related to physical closeness of the individual with the attachment figure, especially when the individual is under stress, illness, or threat of separation (Bowlby, 1969; Hazan & Shaver, 1987).

Safe haven is a property of an attachment figure, which refers to its reliability in providing protection, comfort, support, and relief during times of illness, stress, or perceived separation (Ainsworth, 1991; Bowlby, 1969).

Secure base is a property of an attachment figure, which refers to its real or perceived availability, and which allows for an individual to explore other relationships and behaviors in a safe environment (Bowlby, 1969).

Limitations of the Study

As a result of the cross-sectional nature of the study, it is impossible to make conclusions on how an individual's developmental trend influences the relationships between the studied variables. This can only be achieved via a longitudinal study.

Secondly, because this is a correlation study, and not an experimental study, it is impossible to make causal inferences about the relationships between the variables. Thirdly, because this study was conducted in Middlesex County, New Jersey, generalizing the results to other societies may be difficult. For example, the results may be different in other societies that do not support freedom of religion as we have it in New Jersey and in most other Western societies. The results may also be different if the study is conducted on a population with very different demographic mix, culture, and institutional belief system. Fourth, extant studies and literature on God attachment have almost exclusively focused on Christianity. Owing to this focus, it is difficult to ascertain how God attachment affects individuals with other religious affiliations, such as Judaism, Islam, and Hinduism. Fifth, the sample used was a “sample of convenience,” whereby participant selection was not random, but rather based on the fact that they were available. This may pose a threat to the external validity in that characteristics unique to these subjects may impair attempts to generalize the results yielded by the study. Lastly, relationships or attachment to God among various Christian traditions are known to vary considerably. It is therefore uncertain how this will affect the results of the study.

Assumptions

In this study, several assumptions were made. It is possible for certain demographic characteristics, such as age, gender, ethnicity or race, and socioeconomic factors, to affect the depression scores. It is also possible for other events in the lives of the participants, outside of the studied variables, such as parental separation or divorce, trouble with schoolwork, and relationship difficulties with friends, to influence their

depression scores. Although the importance of these factors is acknowledged in this study, the researcher did not control for them, as this would complicate the choice of participants and the research design. Therefore, a “within-group” uniformity was assumed, relative to these factors (Kazdin, 2010, p. 29).

Rationale for the Study

Social Relevance

As has been stated, this research sought to address the issue of depression and attachment in adolescents and was very important for several reasons. First, studies have shown that the prevalence of depression in adolescents is very high, and that this population is especially vulnerable for several reasons. Second, depression is the major cause of death by suicide in this population. Third, depression leads to economic losses and reduced productivity, as well as cognitive and academic deficits. Fourth, it causes distress for self, family, and friends, and throws vital relationships into vicious cycles. Fifth, in the search for causes and risk factors for depression in adolescents, attachment and interpersonal relationship qualities are deemed instrumental. This is well documented in literature, as described in previous sections. For this population, relationships in general are very important. The attachment referred to may include attachment to parents, peers, and even to God. Therefore, it is important that any reasonable search for opportunities to prevent or break the cycles of depression must include, at the minimum, efforts to address attachment variables relating to this population. It is thus interesting to establish how parent and God attachment influence depression in adolescents in general, including people of other faiths. However, this research focused on adolescents that are

Christians. The reason for this choice of population was that, as noted in the next section, Christians are “expected” to be inoculated against mental health conditions such as depression, due to their unique intimacy with God and hundreds of promises of support from Him. This research is expected to demonstrate whether this inoculation exists in practice. This research has provided some valuable insights into how depression is influenced by parent attachment and God attachment, and how these factors can be modulated or enhanced, to reduce the incidence of depression in this age group. Thus, the findings yielded by this study are a vital contribution to the extant literature, as they help expand knowledge on this issue.

Christian Worldview Relevance

Depression is one of the most common and distressing afflictions of the human race, and there are numerous Biblical references to this disease. According to King David, “I am troubled, I am bowed down greatly; I go mourning all the day long. For my loins are filled with a loathsome disease; and there is no soundness in my flesh. I am feeble and sore broken, I have roared by reason of the disquietness of my heart” (Psalm 38: 6-8 KJV). About the prophet Elijah, the Bible states, “But he himself went a day’s journey and came and sat down under a juniper tree and he requested for himself that he might die” (1 King 19:4 KJV). But God said, “my grace is sufficient for thee and my strength is made perfect in weakness” (2 Corinth 12:9 KJV); I will never leave thee nor forsake thee” (Heb 13:5 KJV). In spite of these and hundreds of other God’s promises, Christians often feel depressed, sometimes as often as the rest of society.

According to Kirkpatrick (1990), God serves similar purposes as an attachment figure as parents and caregivers do. Believers perceive God as a safe haven and a secure base. God fulfills that proximity function of an attachment figure because He is seen as omnipresent. The nearness is further enhanced, as believers tend to have a perception of closeness during prayers. This research helps to further explore the concept of God as a substitute attachment figure, and to explicate not only how God attachment is related to parent attachment, but also how both God and parent attachment affect depression. In addition, it will help to better understand how God attachment can possibly mediate the relationship between parent attachment and depression. The question of whether or not a relationship to God can provide a protection against depression in the adolescent Christian was answered through this research.

Summary

This chapter has addressed the relevance of this study, stating that it has helped to throw some light on a potentially dangerous mental health condition (depression) among adolescent Christians. Risk factors and causes were explored and were shown to include the adolescents' unique brain development, parent attachment, and parent behavior, whereas suicide and drug dependence were identified as consequences of this condition. Attachment relationships, such as attachment to parents, were described as vital in the search for solutions to depression. God attachment was also described as a relevant factor for believers, since God was shown as an attachment figure that functions as a secure base and safe haven, just as parents. The work of several researchers was cited to demonstrate that attachment to parents and to God may be linked to this

psychopathology. It has been stated that an exploration of the relationships between these variables is the main objective of the study. Also noted in this chapter is the type of study design that was employed to answer the research questions, which is a cross-sectional correlation design. It was hypothesized that secure parent and God attachment will correlate negatively with depression scores. These hypotheses were grounded in an extensive review of pertinent studies that were conducted on this subject, and some of these studies will be discussed in the next chapter (Literature review).

CHAPTER TWO: LITERATURE REVIEW

Introduction

In Chapter 1, the rationale for studying the interaction between parent attachment, God attachment, and depression in adolescent Christians was presented. This chapter is designated for a review of pertinent literature, as a part of which the work of several researchers on the subject will be examined. The studies reviewed will be presented under the following themes: depression, causes of depression, adolescent depression, risk factors for adolescent depression, the relationships between parent attachment and God attachment, parent attachment and depression, parent attachment and depression in adolescents, God attachment and depression, and God attachment and depression in adolescents. The inclusion of each of these themes is important because it increases the awareness of the current state of literature and knowledge on these subjects, especially as they relate to the issues being examined in the present study. A brief overview will be presented first, which will include a discussion on depression, its causes and consequences in general, but with an emphasis on the adolescent population.

Depression

There are several types of depression, including Major or Clinical depression, Dysthymic Disorder, Bipolar Disorder, and seasonal Affective disorder (SAD). Major Depressive Disorder (MDD), which is the focus of this study, is defined as a unipolar depression that is characterized by periods of at least two weeks in which there is an experience of depressed mood and anhedonia, which is the loss of pleasure in activities that are usually enjoyable (Maddux & Winstead, 2008). Certain factors tend to contribute

to depression while others are known to be buffers. Contributing factors include genetic predisposition, individual biochemistry, environmental stressors, and cognitive schemas, whereas social support and religious faith are believed to serve as buffering factors (White et al., 2003).

Causes of Depression

A Major Depressive Disorder (MDD) may occur due to an imbalance of brain neurotransmitters such as serotonin, dopamine, and nor-epinephrine. It may also occur as a result of possible deregulation of the hypothalamic-Pituitary-Adrenal (HPA) axis and changes in cognitive behavior, including presence of negative biases (Robinson & Sahakian, 2008). On the intra-psychoic level, MDD is believed to result from a tendency to internalize negative thoughts, whereby patients blame themselves for negative experiences, but fail to take credit for positive ones. MDD can also result from relationship issues, such as marital problems, divorce, or separation, and the separation or loss of a loved one (Gabbard, 2009).

A genetic–environmental interaction is another area that is receiving attention in the discussion of the causes of depression. Research on this interplay suggests that genetic and environmental factors combine to influence vulnerability, with heritable factors increasing the risk of exposure to stressful environments and susceptibility to psychosocial stress (Maughan et al., 2013). One variant of the serotonin transporter gene (5-HTTLPR) has been posited to play a role in increasing the risk of depression in those exposed to stressful life events or childhood maltreatment (Maughan et al., 2013). In addition, two circuits—the “threat” circuit, which connects the amygdala, hippocampus and the prefrontal cortex, as well as the “reward” circuit, which connects the striatum,

prefrontal cortex and the ventral dopamine-based systems—are currently being explored in this context (Maughan et al., 2013). Both circuits continue to undergo maturation, while exhibiting emergent gender differences in adolescence (Maughan et al., 2013).

Stressful life events, such as death of a loved one, loss of job, marital difficulties and divorce, are also risk factors for depression. In a study conducted in Canada by Patten (2013), using a longitudinal cohort consisting of 17,276 participants, early life events and adult stressors were found to be associated with depression. Although this study was not designed to provide a causal link, it revealed a strong association.

In a different study, the relationship between marital conflict and depression was examined by Atkins, Bortnik, Hahlweg, and Klann (2010) in Germany and Austria. The study sample comprised of employed 134 counselors and mental health workers, along with three marriage couples per counselor. The authors reported a strong association between marital conflict and incidence of depression among the couples studied.

Adolescent Depression

Prevalence

Suicide is the third leading cause of death in adolescents and adults in the United States and depressive disorders are consistently the most prevalent psychiatric disorders among adolescents who commit suicide (Consoli et al., 2013). According to Consoli et al. (2013), family discord and negative relationships with parents correlate strongly with increased suicidal behaviors among depressed adolescents. MDD is more prevalent in females (10–25%) than in males (5–12%), and this gender discrepancy appears to be unrelated to ethnicity, education, income, or marital status (First, 2000). Although the

disorder may begin at any age, onset usually occurs in the mid-twenties. Smith et al. (2008) conducted a study aiming to compare the clinical profiles of depression of 199 males and 399 females. According to the study findings, females with depressive disorders tend to develop symptoms at an earlier age, exhibit more frequent depressive episodes, have a greater number of depressive symptoms, and report higher rates of atypical depressive features during the depressive episodes (Smith et al., 2008). In this study, semi-structured interviews and case notes were used for clinical assessments. The demographic and clinical characteristic of the participants were compared using the t-test and Chi squared test, as well as logistic regression analysis. The major limitation of this study was that it relied on retrospective recall of depressive symptoms by the participants, which is usually prone to bias. Its strength is that it employed a relatively large sample.

Findings reported by First (2000) are in close agreement with those of Maharajh et al. (2006), who conducted a study to investigate depression in adolescents with the aim of identifying anything significant that is associated with its occurrence. The authors employed a large sample of 1,845 students from 24 schools in Trinidad and Tobago who completed Reynold's Adolescent Depression Scale (RADS). The data was analyzed using ANOVA and independent samples t-test via the Statistical Package for Social Sciences (SPSS). The analysis results revealed that 14% of the participants were depressed; however, large gender difference was observed, with female adolescents accounting for 76% of the depressed group. In addition, adolescents 16 years of age were found to be much more depressed than the 14-year-olds. Students that attended prestigious schools were found to be less depressed than those from non-prestigious schools. More importantly, adolescents who attended religious institutions were found to

be seven times less depressed compared to students from non-affiliated schools. Although the data provided by this study is very valuable in the prevention and treatment of depression, its limitation is that the participants were not pre-screened for substance abuse and general medical condition. Secondly, the instrument used (RADS) was designed and tested on an American adolescent population and may not be applicable to developing countries.

To estimate the prevalence of depression and to validate the Beck Depression Inventory (BDI) among adolescents in Nigeria, Adewuya et al. (2007) conducted a study using a relatively large sample of 1,095 youth. While 712 study participants were found to have BDI scores less than 10, the remaining 383 had scores above 10. Those with scores over 10 and 10% of those with scores less than 10 were later interviewed by two trained psychiatrists, who were “blinded” to the BDI scores. The results were analyzed using the SPSS. The findings showed that prevalence of depressive disorders among adolescents in Nigeria stood at 6.9%, which was, according to the researchers, comparable to values in Western societies. In addition, their study confirmed earlier findings in Western cultures that MDD in adolescents is more prevalent in females than in males (Adewuya et al., 2007). However, the researchers were unable to demonstrate a higher prevalence among older adolescents compared to younger adolescents. Adewuya et al. also found the BDI to be an effective screening tool for MDD among adolescents in Nigeria, based on the excellent Area-Under-the-Curve (AUC) obtained through ROC analysis.

In another study, Khalil et al. (2010) sought to investigate the clinical characteristics of depression and estimate its prevalence among Egyptian female

adolescents. This was a descriptive, cross-sectional school-based study that employed 602 adolescent female students in Cairo, Egypt. Data was collected between November 2006 and March 2007 using the General health Questionnaire (GHQ), the Children's Depression Inventory (CDI), and the Structured Clinical Interview for DSM-IV Disorders (SCID). The results were analyzed using the Chi squared test and the t-test based on the SPSS. The results indicated that 15.3% of the adolescents sampled met criteria for depression (Khalil et al., 2010). This figure is relatively high compared to findings from earlier studies.

In the attempt to investigate the dynamics of depression in mid-adolescence, Bomba and Modrzejewska (2008) conducted a longitudinal study using data collected at three points (in 2001, 2002, and 2003), with an initial sample of 1,737 13-year-old students that were in the first year of junior high school when the study commenced. They were surveyed at the three points using the Krakow Depression Inventory (KID). The analysis of the 2001 data indicated that 24.6% of the participants suffered from depression (26.8% for girls and 22.5% for boys). At follow-up, the percentage increased to 25.3% (27.4% for girls and 22.8% for boys). The findings demonstrated that the point prevalence indices for depression in adolescents are relatively stable, and that they are higher in girls than in boys.

Concerned with the fact that millions of African children grow up in harsh and adverse psychosocial conditions, such as chronic war trauma, poverty, infections, orphanhood, food insecurity, abuse and neglect, parental depression, and conflict, Kinyanda et al. (2013) conducted a study to investigate the prevalence and risk factors of adolescent depression in Uganda. Their study sample comprised of 1,587 children

between the ages of 3 and 19, who were surveyed using a Strengths and Difficulties Questionnaire (SDQ), administered by trained psychiatric nurses to the children or their mothers. The results were evaluated by using a backward elimination regression model. The findings revealed 8.6% prevalence rate of depression among adolescents in the war-torn region of Africa. In addition, several ecological, socio-demographic, and adverse psychosocial and psychiatric factors were significantly associated with depression. Emotional unavailability of parents, domestic violence, lack of warmth, harsh physical discipline, food and socio-economic deprivation, and war trauma were some of these factors.

Compared to the studies discussed above, a very high prevalence rate of depression was reported in western Turkey by Unsal and Ayranci (2008), who studied 879 high school students. The Turkish version of the Beck Depression Instrument was administered to the selected participants. The data was also gathered through a questionnaire that included information regarding the students' age, gender, place of residence, number of siblings, birth order, family income, mothers' education, etc. The inventory was administered in a school and took 20 to 25 minutes to complete. In addition, the participants' body mass index (BMI) was estimated, by measuring their height and weight. The gathered data was analyzed by using frequencies, percentages, ratios, Chi squared test, and t-tests via SPSS. The study results indicated that, although there was no difference between the depression scores of the boys and girls, their prevalence rates were significantly different, with 39.6% reported for adolescent girls and 22.6% for the boys.

Mohanraj and Subbaiah (2010) reported even higher prevalence rates of depression among adolescents in India. This cross-sectional study was conducted in the south Indian city of Chinnai, using a sample of 964 adolescents. Beck Depression Inventory was administered to these individuals and the results were analyzed using the SPSS version 11. Chi squared test was used to evaluate the association between depression and socio-demographic variables, such as age, gender, and family type and structure. A BDI score of 0–9 was considered as absence of depression, 10–19 indicated mild depression, 20–30 implied moderate depression, and scores over 30 signified severe depression. The authors reported that 24% of the adolescents had moderate to severe depression.

The financial cost of treatment of depression to patients and their families is staggering, making it important to know the cost-to-benefit ratio. This was the mindset of Watanabe, Hunot, Omori, Churchill, and Furukawa (2007), who conducted a meta-analysis to examine the clinical benefit of psychotherapy for depression, and its harm and cost-effectiveness, whereby they reviewed 27 published studies involving 1,744 participants. The authors concluded that psychotherapy was significantly superior to absence of treatment, but only in the short term. At six-month follow-up, the superiority was no longer present. Although no adverse effects were reported, cost-effectiveness outcomes were also omitted from the study findings.

Consequences of Depression in Adolescents

Suicide. Depression in adolescents has been known to be associated with serious risks, the most important of which is suicide. According to Consoli et al. (2013), suicide

is the leading cause of death among adolescents in the United States and the second leading cause in Europe. These authors aimed to assess the role of family factors in depression and suicidality in a 36,757 community-based sample of adolescents. They reported that, while 7.5% of the study sample had scores consistent with depression, 16.2% had suicide ideation within the past 12 months. In addition, negative relationships with parents were associated with suicide risks. With 50% of teens who complete suicide having a diagnosable mood disorder such as depression, it is believed that not only are depression and suicidality often linked, both place a significant burden on patients and their families (Cheung & Dewa, 2007).

The risk of suicide, suicide attempts, and recurrent behaviors is elevated in depressed adolescents with co-morbid conduct problems (Vander Stoep et al., 2011). This risk is the usual outcome associated with co-occurring internalizing and externalizing problems, and this is what causes the most concern (Vander Stoep et al., 2011). In addition, a co-occurrence is a definite marker of severity of psychopathology. However, suicide is not the only outcome of this co-morbidity. Other outcomes include alcohol and substance abuse, involvement with the criminal justice system, Axis II disorders, and poor general adaptive functioning (Vander Stoep et al., 2011). Findings yielded by epidemiological studies indicate that approximately 14.5% of 9th–12th grade students seriously consider suicide, 7% of whom make suicide attempts.

Drug and Alcohol Use. Depression in adolescents is also associated with several other complications and risks. Diego et al. (2003) examined the relationships between academic performance, popularity, depression, and substance use, using a sample of 89 school seniors. The results of a multiple regression analysis revealed that adolescents

with high self-ratings of depression were more likely to smoke cigarettes, drink alcohol, and smoke marijuana. In a study conducted by Gilder and Ehler (2012), using a sample of 202 American Indians from Southwestern California, depression and Cannabis dependence were also found to be closely associated. Similarly, in a cross-sectional study by Deykin et al. (1987) involving 424 adolescents and aiming to examine the relationships between depression and drug and alcohol use, the authors observed that drug use in both male and female adolescents was strongly associated with major depressive disorder and other psychopathologies. In addition, the incidence of early drinking (before the age of 15) in the sample with MDD was 1.7 times higher than in the sample without MDD.

Saraceno et al. (2012) conducted a large population-based longitudinal study to understand the relationship between adolescent depression and problematic alcohol use. The study sample consisted of 4,220 British boys and girls. The reported findings indicate a strong link between adolescent depressive symptoms and problematic alcohol use for girls but not for boys. While the studies reviewed above indicate that alcohol consumption is one of the consequences of depression, Bulloch et al. (2012) observed that individuals with a history of alcohol dependence are also at increased risk of MDD. This leads to the supposition that there is a bi-directional relationship between alcohol consumption and depression.

Economic Losses. As noted earlier, the financial cost of MDD is staggering and, in 2000, the annual cost of MDD for all age groups in the United States was estimated at \$83 billion (Dominos et al., 2009). Similar results were obtained in another study conducted by a group of researchers in Switzerland, who sought to examine the economic

impact of depression in the general population. Their results indicated that this mental health disorder costs an average of 8 billion Euros on the national level, and that this cost is dependent on the severity of the disease (Tomonaga et al., 2013).

Other Effects of Depression in Adolescents. Depression adversely affects academic performance as well as social relationships involving adolescents. Following a meta-analytic study by Maag and Reid (2006) aiming to examine the relationship between depression and learning disability, the authors reported that students with learning disability had significantly higher depression scores than those without learning disabilities. Depression in adolescents was found by Jonsson et al. (2011) to lead to intimate relationship and childbearing adversities in adulthood.

Risk Factors for Adolescent Depression: Why Adolescents are Vulnerable

Adolescents are much more highly susceptible to psychopathologies compared to other age groups, suggesting presence of some unique characteristics of adolescents that account for this susceptibility. Their brain structure, circuitry, and neuro-chemicals are currently being studied to gain a better understanding of the reasons behind this vulnerability. Neuroscientists have concluded that the adolescent brain is still not fully developed, and that rapid changes occurring in their brains make this period tumultuous. They agree that their “reward” systems are very sensitive and the brain circuits responsible for self-control are undeveloped. Their brains are said to be malleable and vulnerable (Tao et al., 2012).

Tao et al. (2012) studied brain activity in 19 depressed and 21 healthy adolescents between the ages of 11 and 19 to attain a better understanding of what occurs in those brains in the presence of major depression. The depressed participants were treated with

10 mg of the antidepressant Fluoxetine daily for the first week of the study. The dose was increased to 20 mg in the second week, and further to 30 and 40 mg after eight weeks. The brains of all the participants were scanned via functional MRI (fMRI) twice (before and after Fluoxetine was administered), while the participants were shown pictures of sad and neutral faces. The study showed that, compared to healthy subjects, the depressed adolescents had exaggerated neural activation in several areas of the brain including frontal, temporal, and limbic cortices. The major limitation of this study is that co-morbidities such as anxiety were not screened for and these may confound the results. In order to gain a better understanding of why adolescents seem to be more vulnerable to depression and addiction, and therefore particularly at risk, Moghaddam and Sturman (2012) led a group of researchers to compare the brains of adolescents and adults. The authors reported that, although the brain regions traditionally associated with reward and motivation (Nucleus Accumbens) were activated similarly in both adults and adolescents, there was a unique sensitivity of the adolescents' dorsal striatum to reward anticipation. That was an age-related neural response difference.

Recently, researchers started to focus on cortisol, a chemical normally produced in the Adrenal Cortex. On average, the concentration of circulating cortisol in the bloodstream reaches peak 20–30 minutes following the onset of an acute stressor, and returns to baseline 60 minutes after stressor is removed. Research by Stewart et al. (2013) has demonstrated that children and adolescents with MDD show a dysregulated HPA axis response to stress challenge, as shown by a higher peak cortisol and higher cortisol levels during recovery. This research has established a relationship between rumination and impaired recovery of the biological stress response in adolescence. In this study, the

researchers employed a sample of 64 adolescents between the ages of 12 and 18, residing in Ontario, Canada. They were stressed by being told to prepare to deliver a speech, and saliva samples were taken in between the stresses, to determine levels of cortisol.

A genetic–environmental interaction is another area that is receiving attention in the discussion of the causes of depression. Research on this interplay has suggested that genes and environments combine to influence vulnerability, with heritable factors increasing the risk of exposure to stressful environments and susceptibility to psychosocial stress (Maughan et al., 2013). One variant of the serotonin transporter gene (5-HTTLPR) has been implicated for its role in increasing the risk of depression in those exposed to stressful life events or childhood maltreatment (Maughan et al., 2013). In addition, two circuits are currently receiving attention. These are the “threat” circuit, which connects the amygdala, hippocampus and the prefrontal cortex, as well as the “reward” circuit, which connects the striatum, prefrontal cortex, and the ventral dopamine-based systems (Maughan et al., 2013). Both circuits continue to undergo maturation, while showing emergent gender differences in adolescence (Maughan et al., 2013).

The roles of rumination and negative cognitive styles were further investigated in the etiology of adolescent depression by Hamilton et al. (2013). This study was carried out by researchers at Temple University, Philadelphia, employing 301 participants between the ages of 12 and 13, from the Philadelphia school district. Self-report questionnaires relating to depressive symptoms were administered at baseline and at nine-month follow-up. The questionnaires included the Children’s Depression Inventory, the Multidimensional Anxiety Scale for Children, the Adolescent Cognitive Style

Questionnaires, and the Children's Response Style Questionnaires (for rumination). Their results indicated that, while negative cognitive styles predicted interpersonal stress and relational victimization in both adolescent boys and girls, rumination had no effect. Peer rejection was identified in a meta-analysis by Platt et al. (2013) as one of the risk factors that may predispose adolescents to depression. Since adolescents spend more time with their peers than with their families, and since they are concerned with forming social networks, peer rejection is one of the main factors contributing to adolescent depression (Platt et al., 2013). However, cognitive biases and neurobiological substrates, gender, and genetics may explain why some adolescents are more vulnerable than others (Platt et al., 2013).

Kullik and Peterman (2013) employed a sample of 345 adolescents aged 12–17, drawn from 11 local schools in Bremen, in northern Germany, in order to study the relationship between parent attachment and depression and the role of emotion regulation. The Regulation of Emotion Questionnaires, a German short version of the Inventory of Parent and Peer Attachment (IPPA) and the Center for Epidemiological Studies Depression Scale were administered. The analysis results indicated a strong relationship between attachment to parents and peers and depression in adolescents. Less attachment to parents and peers indicated more severe depression. This research is of significance, as adolescence is the period when people begin to develop attachment relationships with friends and romantic partners, who fulfill attachment functions comparable to those of their parents. A major weakness of this study is that the students who participated were believed to be either highly motivated or highly stressed.

Available evidence suggests that factors relating to the family may play a role in the etiology of depression in adolescents. Patterns of parental behavior were implicated as one of the risk factors for depression in this age group in a study by Swartz et al. (2012). Data for this study was drawn from the Adolescent Development Study, which was a large longitudinal study conducted in Melbourne, Australia, in which 2,543 sixth grade students took part. Assessments such as the Beck Depression Inventory and Family Interaction Assessment were administered, and Path Analysis was employed as the statistical method. The study findings revealed that higher levels of parental aggression predicted higher levels of both depression and anxiety. Family-focused prevention of adolescent depression was recommended, which is highly appropriate, as family dynamics of relationship and communication have been known to impact children in some ways.

Parenting style is also believed to play the role in the development of depression. De Minzi (2006) studied the relationship between attachment and parenting styles, as well as the relationships between self-competence, loneliness, and depression. The study sample comprised of 1,019 students from middle-class backgrounds in Argentina. Instruments such as the Argentine Scale of Perception of the Relationships with Parents were administered to the participants in groups of 15. The authors reported that parents' acceptance promotes secure attachment and positive outcomes in children and defends them from depression. They also noted that fathers' involvement was particularly important. In addition, they found that no particular parenting style was associated with loneliness. The results of this study are in line with those reported by Cohen, Sade,

Benarroch, and Pollack (2008), who posited that higher rates of symptoms of depression and anxiety are associated with more rejecting and controlling parenting styles.

Another family-related factor that may be important in the etiology of psychopathologies is differential parental treatment or favoritism. Moharib (2013) conducted a correlation cross-sectional study of the effects of parental favoritism on depression and aggression in Saudi Arabian adolescents. Employing a sample of 25,607 adolescents between the ages of 13 and 18, drawn from middle and high schools in 15 Saudi cities, the researcher measured perceived favoritism using the cruelty subscale of the Parenting Styles Scale, while depression and aggression were assessed using the Arabic version of depression and aggression subscales of the Symptom Checklist. The results validated those of past studies, which indicated that sons perceive themselves as being singled out for negative treatment by fathers, while daughters believe that they are being singled out by mothers. The conclusion is that parental favoritism is related to depression and aggression in adolescents.

Socioeconomic status (SES) is one of the characteristics that delineate one group of individuals from another, and which is related to a variety of mental health outcomes, depression in particular. To understand the link between SES and depression, anxiety, and self-esteem in early adolescents, Sancakoglu and Sayar (2012) conducted a cross-sectional correlation study. Their sample comprised of 106 adolescents in 7th grade from private and public schools in Istanbul, thus representing two different socioeconomic classes. The results of this study indicate a statistically significant relationship between depression scores and the kind of school attended. It shows that lower socioeconomic status is associated with higher rates of depression. Its findings are congruent with those

reported in previous studies, suggesting that low SES predicts higher levels of depression and anxiety in adolescents.

A similar study was conducted by Najman et al. (2010). The objective of this longitudinal study was to determine if exposure to family poverty in early childhood predicts anxiety and depression in adolescence. These authors used data from a cohort of 2,609 children born in Brisbane, Australia, between 1981 and 1984, and assessed their levels of anxiety and depression at the ages of 14 and 21. They found associations between family poverty and children's mental health at different times in their lives. However, they did not confirm that children are most vulnerable at gestation, childhood, and adolescence, as previously noted in literature. On the other hand, Najman et al. determined that the best determinant of poor mental health status in adolescence is the cumulative exposure to poverty.

As an extension of the role of poverty in the etiology of depression, a growing field of research, suggests that neighborhood physical disorder and associated processes such as low social cohesion may also contribute to depression in adolescents. This line of reasoning is guided by the "broken window" hypothesis and social disorganization theory (Ford & Rechel, 2012). Other research has shown that adolescents who grow up in poor neighborhoods are more likely to be exposed to ambient hazards, such as poor safety, crime, drug use, graffiti, and housing conditions, and other evidence of physical and social disorder, and that these exposures are positively linked to depression.

Several other factors outside of the family are also known to be positively linked to depression. The school environment is a place that adolescents spend a significant proportion of their time, and where they are also highly invested emotionally. As a result,

researchers have also focused on the impact of this environment in order to gain a better understanding of mental health conditions affecting adolescents. Langille et al. (2012) conducted a correlation cross-sectional study to determine if school connectedness demonstrated an independent protective association with the risk of depression among students in grades 10 to 12 of high school in Nova Scotia, Canada. School connectedness was defined as a perception of whether students were accepted, respected, included, and supported by others at school. In order to establish whether this perception can protect adolescents from depression, the researchers surveyed 408 students in grades 10 to 12 of high school in Nova Scotia. The results indicated presence of an association between school connectedness and depression, whereby school connectedness may be considered as a moderate or high risk factor for adolescent depression.

Adolescent Christians and Depression

In the preceding sections, some studies on depression in adolescents have been presented to elucidate why this age group is at risk, and illuminate the consequences of this disorder. Adolescents who are Christians are also at risk, and although literature in this area is scanty, several studies have indicated that spirituality provides some protection against depression. While some of these studies are presented under the heading “The Relationship between God Attachment and Depression,” some will be discussed here. In a study by Kang and Romo (2011), the relationship between frequency of church engagement and depression among Korean American adolescents was examined using a sample of 248 youth. The authors observed that higher levels of church engagement were associated with stronger spirituality, which in turn was linked to lower

depression. The direction of this relationship is, however, hard to establish via a cross-sectional correlation study, as depression also has the ability to limit one's interest in attending religious services, which may account for the observed relationship (Rasic et al., 2013).

To address the aforementioned deficiencies, Rasic et al. (2013) conducted a longitudinal study to examine the association between the importance of religion and frequency of church attendance and their effects on depression in adolescents. The authors provided evidence for the protective effects of monthly or more frequent religious attendance on the development of elevated depressive symptoms, and on the recurrence or persistence of elevated depressive symptoms in males.

As described in the previous paragraph, and based on findings that religious practices and intrinsic religiosity are associated with lower levels of depression and greater wellbeing, Wenger (2011) conducted a study in Salzburg, Austria, to determine if these findings pertaining to adolescents living in Anglo-Saxon speaking regions can be replicated in German-speaking countries. Their results showed that, unlike the Anglo-Saxon adolescents, in the German-speaking adolescents, there is no strong correlation between religiosity and less depression and greater wellbeing.

Several studies were presented in this section relating to depression in adolescents, its prevalence, causes, and consequences. In the next section, studies on attachment theory will be presented.

Attachment Theory

Studies on depression in the adolescent population were presented in the previous section. This section will contain studies that focus on attachment theory, internal working models, and how God serves as an attachment figure. Studies on the causes and consequences of attachment will also be presented.

Bowlby (1969) has argued that an infant's attachment pattern to a parent or caregiver is fundamental to its survival, and it revolves around whether or not the caregiver is viewed as a reliable source of protection and support, and whether or not the self is viewed as worthy of the said protection and support. Although these models of self and others seem separate, in reality, they are complementary and mutually confirming. Once a bond has been established with a parent or a caregiver, the attachment relationship goes beyond providing security; it is also an invaluable source for infants to learn about themselves and the social world (Shaw & Dallos, 2005). The behavioral response of the parent or caregiver is instrumental in the creation of the internal working model (IWM), which becomes programmed in the brain of the infant as mental representations. These models act as templates that later guide the views of infants about self and others, as well as about relationships in general (Eckert & Kimball, 2003). According to Bowlby (1988), these internal working models are active throughout the life of the individual.

Support for Bowlby's notion was pioneered by Ainsworth, using the Strange Situation procedure, in which she suggested that infants seek proximity to the caregiver during times of stress (Ainsworth, 1973; Ainsworth et al., 1978). A safe haven is provided by a caregiver if he/she responds sensitively and consistently, alleviating the

stress of the infant. Thus, the caregiver would function as a secure base from which the child can freely engage and explore the environment and the world. Both these factors work together to promote a healthy emotional and personality development in the infant (Bowlby 1969, 1982).

A review of other studies by Murray (1991) indicates that early disturbance of mother-infant relationships can have long-term consequences. The researcher used a representative community sample of 702 first-time mothers at Cambridge maternity hospital. The mothers were screened for depression six weeks postpartum, and the mother–infant pairs were assessed when the infants were 18 months old. At 18 months, infants of post-natally depressed mothers were found to show more adverse outcomes and more behavior problems on a variety of measures. The authors also observed that infants of post-natally depressed mothers were less securely attached to their mothers than were infants in the control group.

To answer the question of whether or not the length of pregnancy factors into attachment organization of an infant, Hallim, Bengtsson, Fostel, and Stjenqvist (2010) compared attachment types in 39 pre-term and 39 full-term infants. The results of this study indicated that children born extremely premature demonstrated lower attachment than children that were born at full-term. Therefore, being born pre-term is a risk factor for insecure attachment.

Experimental designs are not common in attachment studies, but have been employed in a few cases, and some of that research will be reported here. Anisfeld, Casper, Nozyce, and Cunningham (1990) conducted an experimental study to determine if infant-carrying or increased physical contact can promote attachment. For the purpose

of this investigation, 23 infants were randomly assigned to an experimental condition that required them to be carried in soft baby carriers, while 26 were assigned to a control group in which the babies were placed on infant seats. Ainsworth's "Strange Situation" was administered to all participants. The results showed that a significantly greater number of infants in the experimental group were attached to their mothers compared to the control group.

In another experimental study, Jacobsen and Frye (1991) sought to find out if maternal social support had any influence on attachment of infants. At the age of 14 months, infants assigned to the experimental group scored higher on affect and perceived support, indicating that social support is important in the development of attachment.

Internal Working Models and Attachment Types

Internal Working Model (IWM) is the set of thoughts, emotions, beliefs, and expectations about the self and others, in which self may be considered worthy or unworthy of love and attention, and others viewed as reliable/trustworthy or unreliable/untrustworthy. IWMs tend to control the overall attachment system and help individuals in the adaptation process (Bowlby, 1988). As children internalize experiences with their parents or caregivers, prototypes or templates, otherwise known as internal working models, are formed and these persist and provide a guide for future relationships (Main et al., 1985). These models are mental representations of the social world, and they assist in perceiving events, forecasting the future, and making plans (Colonesi et al., 2011). They play a key role in guiding interpersonal behaviors and regulating affect

during adolescence and adulthood. They function at an unconscious level, are relatively stable and difficult to change (Bartholomew & Horowitz, 1991).

According to Simpson and Rholes (1998), IWMs help in understanding future adult relationships. In addition, the quality of emotional and social development through early childhood has been found to be related to early attachment patterns (Ainsworth et al., 1978; Bretherton, 1985). Two key elements of these working models were identified, namely a perception by the individual regarding whether or not the attachment figure is reliable and responsive to the needs of the child, and whether or not the self is worthy of care and response from the attachment figure (Bowlby, 1988). Based on the work of Bowlby and Ainsworth, four types of infant attachment were identified—secure, ambivalent, avoidant, and disorganized. These are relatively stable throughout life and correspond closely to Bartholomew's (1994) model of adult attachment patterns, which include secure, pre-occupied, dismissing, and fearful attachments.

Securely attached individuals tend to have a positive view of self as well as others. They tend to experience low levels of anxiety and avoidance, have perceptions of positive self-worth, and are comfortable with being close to others. Ambivalent and preoccupied individuals tend to have positive view of others but a negative view of self. They are high on anxiety but low on avoidance, have low perception of their self-worth, and are relatively more worried, clingy, and needy. They value closeness and are terrified of rejection. Dismissing and avoidant individuals have a positive view of self and negative view of others, are high on avoidance and low on anxiety, are uncomfortable with closeness, and have a high sense of self-worth. The individuals exhibiting disorganized or fearful attachment show inconsistent, confused, and contradictory

behavior (Feldman, 2008). The adults hold a negative view of themselves and others, and are high on anxiety and avoidance. The disorganized attachment type is particularly important because is associated with problematic long-term behavioral outcomes.

Li and Chan (2012) conducted a meta-analytic study to determine how anxious and avoidant attachment patterns affect romantic relationships, drawing from 73 studies that were based on 118 samples consisting of 21,602 participants. Their results showed that avoidant attachment was more negatively associated with positive indicators of relationship quality (connectedness, general satisfaction, and general support) than anxiety. On the other hand, anxiety was more positively associated with negative indicators (conflict). The major strength of this type of research is that the data is already available, the results can be easily generalized to a larger population, and there is higher statistical power, better precision, and accuracy as a result of the larger sample size. A weakness of this design is that even a good meta-analytic study of poorly designed studies will still result in poor statistical results.

Gorresse and Ruggieri (2012) also conducted a meta-analysis, as a part of which they reviewed the results of 117 studies relating to attachment and the roles of gender and age. The results of this study indicated that individuals who report secure attachment with parents also tend to have secure relationships with close friends. This is significant because, according to Ainsworth and Bowlby, among the most important of human needs is the need to establish close and enduring emotional bonds with others in order to feel secure and be able to explore the world with confidence (Gorresse & Ruggieri, 2012). In adolescents, peer attachment tends to play a unique role, as it provides a source of emotional support and safe haven (Gorresse & Ruggieri, 2012). These researchers

utilized data obtained from psycINFO, ERIC and Medline. The review was based on 11 studies, including 570 female and 9,492 male participants. Their main finding is in line with the attachment theory, which posits that early attachments to parents and the internal working models developed as result of these relationships continue to be influential into adolescence and adulthood. These researchers also found that attachment is related to gender. Girls tend to be more attached to their peers than are boys, and girls' friendships also tend to be deeper and more interdependent than those involving boys.

Fraley (2002) conducted a meta-analysis to understand the basis of attachment stability from infancy to adulthood. This study was based on the reports of previous researchers that have asserted that attachment patterns are relatively stable throughout the life span, from infancy to adulthood. Their goal was to find out why this was the case. Two alternative perspectives on the mechanisms were put forth, namely the revisionist and the prototype perspective. The alternative perspective is in line with the reasoning that early attachment experiences are flexible and may change as current experiences become different from expectations that were based on previous experiences. The prototype perspective is based on one of Freud's (1940) propositions stating that a child's early relationship with his or her mother serves as a prototype for subsequent relationships throughout the life span (Fraley, 2002).

The results of a longitudinal study conducted by Beijersbergen et al. (2012) yielded support for the revisionist theory described above, which posits that attachment patterns may not be as stable as Bowlby had suggested, but are rather flexible and may change if child's experiences change. These researchers conducted a longitudinal study using a sample of 125 adolescents that were adopted at a very young age, whom they

followed from infancy (at 12 months) until they were 14 years old. The results showed that high levels of maternal sensitive support in early childhood and in adolescence predicted continuity of secure attachment. Moreover, a relative increase in maternal sensitivity support from early childhood to adolescence predicted children's shift from insecurity in infancy to security in adolescence. Therefore, the rearing context can have a great impact on children's attachment.

Fox, Kimmerly, and Schafer (1991) conducted a meta-analysis in order to explore attachment to mothers versus attachment to fathers. Their goal was to examine the concordance of the mother/father attachment relationships to an infant. The authors analyzed data from 11 studies, whereby their respective authors were contacted and their raw data was used. The results of the analysis indicated that security attachment to one parent was dependent on the security attachment to the other parent. It is particularly interesting to note that Fox and colleagues found that the types of insecurity attachment to one parent (for example, avoidant/resistant) were dependent on the attachment insecurity to the other parent.

In this section, studies on attachment theory and internal working models were discussed. Many of these studies point to the fact that attachment patterns are relatively stable and that patterns in childhood are very likely to be carried over into future relationships. For example, insecure attachment in childhood was found to negatively correlate with positive indications of future relationship qualities, and secure attachment to parents was found to correlate with secure attachment to close friends. Maternal sensitive support and maternal social support also correlated with the formation of secure attachment.

Causes of Insecure Attachment

Factors that may lead to attachment insecurity include child maltreatment, rejection sensitivity (Erokian, 2009), maternal sensitivity, maternal adult attachment, maternal depression, maternal stress, infant temperament difficulty, and social support (Emery et al., 2008). Parenting styles, family dynamics of relationship and communication, as well as other factors may lead to insecure attachment. In a meta-analytic study by Baer and Martinez (2006) aiming to explore the relationship between child maltreatment and insecure attachment, data from 25 studies that were conducted between 1988 and 2005 was reviewed. While study samples were ethnically diverse, they mostly comprised of poor children living in various abusive and neglect situations. In all studies reviewed, the researchers used the “Strange Situation” for collecting their data. Consistent with previous studies, maltreated children were rated as insecure and/or disorganized.

In a longitudinal study of early head start mothers by Green et al. (2011) aiming to elucidate the association between attachment style and social support among predominantly poor African Americans, a sample of 181 low-income mothers was assessed. The goal of the study was to determine the direction of the association between attachment and social support, i.e., establish whether attachment leads to improved social support or the opposite. Understanding this was thought to be helpful in finding an intervention that will improve either or both. Direct in-person interviews were conducted as a means of collecting data, using measures for stressful life events, adult attachment, and social support. Various associations were found in this study. For example, mothers that were higher in avoidant attachment viewed their social environment as decreasingly

supportive. Whereas life stress did not affect the relationship between attachment avoidance and perceived social support, anxiously attached mothers were influenced by their social environment.

Attachment and Psychopathologies

As noted earlier, and according to Bowlby (1969) and Ainsworth (1979), a secure attachment involves having an internal working model of an attachment figure as reliable and responsive, and of oneself as worthy of love and attention. On the other hand, a child exhibiting insecure attachment may have an internal working model of a caregiver as unresponsive and uncaring, or his/her environment as dangerous and threatening, and him/herself of undeserving of love and a secure attachment (Ainsworth, 1979; Bowlby, 1969). Attachment patterns and internal working models that are disrupted tend to have long-term deleterious effects on children's neurobiological systems, and this includes increased levels of stress hormone. The child-caregiver attunement systems are also disrupted, and this may lead to a child's negative self-perception, paranoid outlook, distrust of others, or poor affect (emotional) and behavior regulation (Anderson & Gedo, 2013).

As can be seen, the neurobiological pathway that is impacted by attachment insecurity is the same as that which is linked to psychopathologies such as depression, revealing the bridge between attachment and depression. According to Beatson and Taryan (2003), the neurobiology of attachment offers a means of integrating findings relating to the activation of the Hypophyseal-Pituitary-Adrenal (HPA) Axis and the predisposition to depression and other psychiatric disorders. These authors further

proposed that secure attachment acts a buffer against HPA activation. As infants with insecure attachment lack this buffering effect, they are predisposed to depression and other psychopathologies in response to psychosocial stressors (Beatson & Taryan, 2003).

A similar neurobiological mechanism was found by Gunderson and Lyons-Ruth (2008) to link attachment organization to Borderline Personality Disorder (BPD).

According to these researchers, there is growing evidence that interpersonal hypersensitivity, as seen in BPD, represents a trait with genetic components and neurobiological basis in areas of the brain that are closely connected to the meso-limbic areas responsible for attachment behaviors (Gunderson & Lyons-Ruth, 2008).

Hoeve et al. (2012) conducted a meta-analytic study to explore the relationship between attachment to parents and delinquency. Analyzing the data yielded by 74 studies with 55,537 participants in total, they found a link between poor attachment and delinquencies in both boys and girls. In other words, youths with poor attachment had higher levels of delinquency. This link was more pronounced with mothers than with fathers. In addition, the link was found to be stronger when parent and child were of the same sex, and with younger children as opposed to older children. The results of this study indicated that age is a moderating factor in the relationship between attachment and delinquency.

Insecure attachment has also been linked to Obsessive-Compulsive Disorder (OCD). In a study by Rezvan et al. (2012), in which female children between the ages of 10 and 12 took part, the level of attachment insecurity was strongly associated with the OCD symptoms. The authors used the Children's Yale-Brown Obsessive-Compulsive Scale as well as the Inventory of Parent and Peer Attachment as sources of data.

Fearon et al. (2010) conducted a meta-analytic study of the significance of insecure attachment and disorganization in the development of externalizing behavior in children. In reviewing the results of 69 studies with a sample of 5,947 participants, using data from PSYCHINFO, Medline, and other data sources, these researchers sought to establish a link between insecure attachment patterns and externalizing behavior. In this study, children rated as insecure showed higher levels of externalizing behaviors than children rated as secure.

Bohlin et al. (2000) conducted a longitudinal study to examine the association between early attachment and social functioning. They followed a sample of 96 children from 15 months until age 8–9, all of whom were from middle class families with relatively high levels of education. The children were observed with their mothers in the Strange Situation, and at the age of 8–9, they visited the laboratory to take the Seattle Version of the Separation Anxiety Test (SAT), allowing the researchers to measure the attachment status at the two different time points. Social functioning (social anxiety and social self-esteem) at the age of eight was measured through self-report by the children. The authors reported that, in school-aged children, early as well as concurrent attachment security was associated with good social functioning. This result supports the attachment theory postulate that secure attachment is necessary for social competence.

Coffino (2009) conducted a longitudinal study to determine whether loss of a parental attachment figure between infancy and sixth grade would be a predictor of adult depression at age 26. The 164 participants employed for this study were part of an ongoing longitudinal study of mothers that were recruited from the Minneapolis public health clinics. This study is unique in that, rather than documenting loss retrospectively,

as is commonly done, loss was documented prospectively. Data yielded by this study suggests that childhood loss experiences are a factor in the etiology of adult depression. The author further indicated that the period between age five and second grade is the most critical, since loss history during this window is the clearest predictor of adult depression. Losses before and after this age range were not related to depression in adults. Since the age group of maximum vulnerability has been identified, this should provide opportunities for early interventions in the quest for treatments for depression.

Most of the studies on attachment and relationships with mental health involve attachment to one parent and exploration of the link between such attachment insecurity and subsequent psychopathologies. Very few studies on the implication of early attachment for future behavior problems have included both parents. Kochanska and Kim (2013) are of the opinion that attachment insecurity to both parents, otherwise referred to as “double insecurity,” may lead to greater overall problems than attachment insecurity to one parent. This assertion was based on the findings yielded by the study they conducted in eastern Iowa on 101 children and their two-parent families, in which attachment patterns were observed in a Strange Situation when the children were 15 months old. Schoolteachers reported on their behaviors when the participants were six and half years old. The elevated levels of behavioral problems were consistent across the teachers’ ratings. They were even more robust across the children’s self-reports.

There is a reciprocal relationship between attachment organization and IQ, where reasoning IQ has been found to influence the development of secure attachment on the one hand, while attachment security and organization influences later verbal IQ, on the other (Stevienart et al., 2011). To explore the possible relationships between attachment

patterns, intelligence, and language, Ijzendoorn et al. (1995) conducted a meta-analysis. This study was based on the popular belief that secure attachment is related to better cognitive development. Data were collected using Psychlit, ERIC, and dissertation abstracts. Analysis of the data showed that the quality of attachment between infant and parent is strongly associated with the infant's language development. The researchers were able to draw a causal inference in this association. They further showed that the quality of attachment between infant and parent is significantly associated with cognitive development, as revealed by the DQ and IQ measures employed, although this attachment is still weaker than that noted between attachment and language development.

The relationship between attachment organization and psychopathologies has been the subject of several studies, due mainly to its contribution to the etiology and treatment outcomes of mental health conditions, as discussed earlier. Of even greater importance is the relationship between attachment and suicide. This was the focus of a team of researchers, Sheftall et al. (2013), who conducted a study on a sample of 236 Hispanic adolescent psychiatric patients with and without a history of suicide attempts. Their goal was to understand how attachment patterns and several other family factors (including family adaptability and cohesion) could influence suicide ideation and suicide attempts. The authors noted that adolescents that attempted suicide also reported lower maternal and paternal attachment relationships. This finding supports the efforts to develop attachment-based interventions as a new route towards suicide prevention.

To understand how attachment in childhood and adolescence is related to suicide, Viloato and Arato (2004), in a study based on a case-comparison design, employed 35 non-suicidal and 17 clinical adolescents. They determined that insecure attachment,

especially to mothers, predicted higher suicidality. In a similar case-comparison study by West et al. (1999), and using a sample of 187 psychiatric adolescents and a non-clinical comparison group comprised of 101 healthy individuals, it was also determined that perceived unavailability and higher levels of depression predicted suicidal behaviors in adolescents.

Interventions for Improving Attachment

According to Bowlby (1969), a disrupted attachment is likely to occur when a child–caregiver relationship is significantly disturbed, especially at an early age, and that significant disruption may cause negative developmental consequences. Children exhibiting disrupted attachment require psychotherapeutic interventions to prevent the detrimental developmental effects of their internal working models from being perpetuated, and to repair the disrupted attachment between the child and the caregiver (Anderson & Gedo, 2013). Several studies in the field of early attachment interventions have focused on ways to promote a secure attachment bond between mother and infant. These efforts are based on the belief that early interventions on the mother–child relationship stand a good chance of promoting socio-emotional development and preventing the emergence of problematic behavior in the child later in life (Santelices et al., 2010). Certain interventions such as Child-Parent Psychotherapy (CPP) and the Psycho-education Parenting Intervention (PPI) have been found effective in improving child–parent attachment. However, although effective in the short term, such interventions alone may not be effective in maintaining secure attachment over time

(Stronach, Toth, Rogosch, & Cicchetti, 2013). Other interventions that may offer benefits in promoting child–parent attachment include forgiveness (Lin, Enright, & Klatt, 2013).

Dozier et al. (2009) conducted an experimental study to determine if a training program designed for foster parents would have positive impact on attachment behaviors of young children in their care. This study was based on a review of literature indicating the parents' state of mind with regard to attachment, which can be either autonomous or dismissive, is the strongest predictor of attachment among children. The study involved a sample of 46 children that were randomly assigned either to the experimental condition or to an educational condition. The experimental condition was an intervention that would help caregivers in providing nurturance to young children, even when not sought by the children. The results showed that children whose parents had received the intervention showed significantly less avoidance compared to children whose parents were assigned to the educational condition.

Mikulnicer and Shaver (2007) reviewed several experimental studies to determine if attachment can be boosted with the purpose of promoting mental health and pro-social values. The authors hypothesized that attachment figures' love is important for establishing both effective coping strategies and being compassionate toward oneself and other people. According to their findings, attachment can be promoted by self-affirmation, mindfulness, and by reminding a person of his or her key attachment figures. Other ways include reminding people of their prior experiences of love and support, and making them feel loved by God.

In this section, several studies were reviewed, focusing on research on the causes of attachment, the relationship between attachment and psychopathology, as well as

interventions for improving attachment. Some of the studies revealed that insecure attachment might be caused by child maltreatment, rejection sensitivity, maternal sensitivity, maternal adult attachment, maternal depression, maternal stress, infant temperament difficulty, social support, parenting styles, and family dynamics of relationships and communication. On the other hand, psychopathologies caused by insecure attachment may include depression, borderline personality disorder, and OCD. Interventions such as Child-Parent Psychotherapy (CCP), Psycho-education Parenting Intervention, and self-affirmation were identified as ways to improve attachment. In the subsections below, studies on the relationships between parent attachment, God attachment, and depression will be reviewed.

God as an Attachment Figure

In the previous section, studies relating to attachment theory and internal working models were discussed. The present section will contain studies that will provide insight into how God serves as an attachment figure. Attachment theory has been employed by researchers to explain an individual's relationship with God (Granqvist & Hagekull, 1999; Kirkpatrick, 1999; McDonald et al., 2005). Kirkpatrick and Shaver (1992) have argued that individuals who have experienced a secure attachment relationship with God tend to develop more secure and stable relationships even in adulthood. In other words, religion, and more importantly a perceived relationship with God, has a tendency to provide the safe haven and secure base that are characteristic of attachment relationships. Attachment to God can occur through correspondence or compensation. Insecurely attached individuals can utilize their attachment to God in a compensatory manner, to

compensate for their inadequate attachment to parents or caregivers (Kirkpatrick, 1998). On the other hand, individuals that are securely attached to parents or caregivers tend to attach to God in a corresponding way (Kirkpatrick & Shaver, 1990).

Beck (2006) conducted a correlation study employing 117 undergraduate students at Abilene Christian University to determine if God will provide a secure base for theological exploration. They measured attachment using the Attachment to God Inventory. The authors revealed that God does indeed provide a secure base for theological exploration that was anxiety-free. In addition, it provided increased tolerance for different Christian groups. Another result of interest was that securely attached individuals would not stray far enough (if they do stray) to reject the core Christian doctrine.

The Relationship between Parent Attachment and God Attachment

The question of whether attachment to God resembles other types of attachment relationships has been the focus of several researchers such as Kirkpatrick, Shaver, and Granqvist, because their recent work has suggested that attachment theory may constitute an appropriate framework for understanding the attachment between a believer and God (McDonald, 2005). A longitudinal study was conducted by Kirkpatrick (1997) to examine changes in the religious beliefs and experiences of 146 women, relative to their attachment and relationship patterns. This researcher aimed to find out if adult attachment styles are predictive of religious change over time, and whether this change would follow the correspondence or compensatory hypotheses. A survey of an initial sample of 714 participants was conducted using measures of adult attachment, social relationships, work

life, and religion. A follow-up survey conducted 51 months later involved 344 respondents. The results of this study provided support for the compensation hypothesis. The author further reported that women displaying an insecure (avoidant or anxious) adult attachment style at first assessment were more likely to find a new relationship with God.

In a similar study, McDonald et al. (2005) explored the correspondence and compensatory hypothesis of God attachment relative to the attachment of infants to their parents or caregivers. The results of their study showed an association between early experiences in the home and later religious experience. Parents' spirituality and bonding were associated with attachment to God dimensions among college students.

Correspondence between parents and God was supported by the study findings.

Spirituality in the home was associated with greater reliance on, and intimacy with, God.

In the study, being raised in a family that engaged in more religious activities, such as attending church, reading scripture, and praying, was associated with later reliance on God among college students. Correlation showed support for an association between parental attachment and God avoidance and anxiety. Responses from families with rigid family structure, lower levels of warmth, care, and support indicated greater God avoidance. These results largely supported the view of correspondence. This study employed a cross-sectional case control correlation design, in which the main objective and merit was to help determine if a relationship exists between two or more variables. The major weakness of this design is that it does not permit making causal inferences. Again, the study is cross-sectional and therefore cannot indicate how the relationships

examined would change over time. A longitudinal study would be required to explore such dynamics.

The question of how attachment patterns would determine the ways individuals would embrace a relationship with God was yet another concern for researchers. Halam et al. (2013) studied the compensatory and correspondence mechanisms in the context of religious conversion. The study was based on a review of extant literature in which authors posited that certain attachment styles are associated with particular types of religious conversion. Specifically, the authors hypothesized that individuals that are insecurely attached tend to undergo a sudden and emotional conversion, while securely attached individuals tend to be involved in gradual adoption of caregiver's religion. In this study, Attachment History Paragraphs and Relationship Questionnaires were administered to 101 Christian converts. The results supported the hypothesis, indicating the compensation and socialized correspondence mechanism. As proposed by Kirkpatrick (1992, 1999), and in line with the attachment theory, a compensation occurs when an individual who had insecure attachment based on the unavailability and unreliability of an attachment figure later uses God as a substitute attachment figure. On the other hand, a correspondence mechanism, based on Bowlby's (1969) idea of attachment permanence and stability, posits that attachment with God will mirror the attachment individuals have with other humans.

Reinert (2005) conducted a longitudinal study of Roman Catholic college seminarians. The researcher set out to determine whether attachment to a primary caregiver (usually the mother) is related to seminarians' sense of themselves (levels of self-esteem and internalized shame) and to their perceived spiritual relationships with

God. The study sample comprised of 75 college-level male seminarians attending a seminary in the Midwest. The findings yielded support for the hypothesis that attachment to mothers is a key variable that is related to the seminarians' sense of themselves and to the quality of their attachment to God

Granqvist et al. (2007) conducted a longitudinal study in order to explore both the correspondence and the compensation hypothesis. They examined the relationship between parent attachment and religion-spirituality in adults. The results supported the correspondence hypothesis and indicated a security of attachment that was linked to a religion-spirituality, which is socially based on the parental relationships. A major limitation of a longitudinal study such as this is the possibility of elevated level of attrition or loss of participants, potentially making the results biased (Kazdin, 2010).

Kirkpatrick and Shaver (1990) explored the relationship between parent attachment and relationship with God. Their results showed that participants reporting avoidant attachments with their mothers were clearly the most religious, suggesting the compensation mechanism. This reference made to mothers is in line with traditional attachment theory, which suggests that relationships with mothers may be more important than relationships with fathers (Limke & Mayfield, 2011). The results of the study are similar to those reported by Kirkpatrick (1997), suggesting that compensation is the main mechanism responsible for attachment to God, which is a direct result of poor attachment patterns to childhood caregivers.

In a study by Hall et al. (2009), the correspondence and compensation models of God attachment were further explored, based on the data yielded by a sample of 483 undergraduate students from a protestant university. As predicted, the secure group

demonstrated the highest levels of spiritual community relative to all other attachment groups. The fearful and preoccupied attachment groups scored higher than secure and dismissing groups, and the secure attachment group scored higher on spiritual community than fearful, preoccupied, or dismissing groups. The latter three groups did not differ from each other. Fearful and preoccupied attachment groups scored higher than secure and dismissing group. This study was also a cross-sectional correlation study, with strengths and weaknesses as described above.

Researchers are also interested in knowing how other types of attachment are related to God attachment. To gain a better understanding of this relationship, Hart, Limke, and Budd (2010) investigated the link between romantic attachment anxiety, romantic attachment avoidance, and faith development in a sample of traditional undergraduate students. They hypothesized that attachment anxiety, but not attachment avoidance, would predict faith development. The authors further postulated that individuals with secure and dismissing attachment would report higher levels of faith development relative to individuals exhibiting preoccupied or fearful attachment. The study sample comprised of 95 participants that were assessed on the experiences in Close Relationships Scale (ECR) as well as the Faith Development Scale (FDS). Relationships were tested using multiple regression analysis. The analysis results revealed that attachment anxiety, but not attachment avoidance, predicts faith development. The authors thus concluded that, for faith to grow, individuals must approach their attachment figures (and God) with no fear of abandonment, and see themselves as worthy of love and acceptance.

Attachment Types and Depression

Although the aim of the present study was to explore child-parent attachment and God attachment and determine how they affect depressive symptoms, it should be noted that almost all types of attachment relationships are associated with psychopathologies, such as depression. This assertion is intuitive, since the common denominator in all attachment relationships, according to the attachment theory, is the infant–caregiver attachment, which remains stable throughout life, affecting all other future attachment relationships. Peer attachment, sibling attachment, and adult romantic attachment are all known to be associated with depression and other psychopathologies.

Ruijten, Roelofs, and Rood (2011) hypothesized that the quality of attachment to parents and peers would account for a unique portion of the variance in depression scores. In their work, rumination was studied as a mediator between quality of attachment and depressive symptoms, since previous research suggested that rumination not only mediated the relationship between low social support and depression, but also that social support also mediated the relationship between rumination and depressive symptoms. Data for this research was collected from 455 students attending three high schools in the southern part of Netherlands. Ruminative Response Scale, Beck Depression Inventory, and the short version of the Parent and Peer Attachment Inventory were used as data collection instruments. The data was subjected to SPSS regression analysis, which revealed that quality of attachment was associated with rumination and depression. In addition, rumination was found to fully mediate the relationship between peer attachment and depression.

Liu, Nagata, Shono, and Kitamura (2009) conducted a study aiming to determine if (a) insecure adult attachment can predict future depression, (b) secure attachment and perceived life stress can have a “main effect” or “buffering effect” on daily depression, and (c) insecure adult attachment can predict the generation of perceived life stress. This study involved a survey of 487 university students, and the variables were rated using various instruments, such as the Adult Relationship Questionnaires and the Zung Self-rating Scale. Data were analyzed using correlations and hierarchical multiple regression. The results indicated that individuals who reported insecure adult attachment were more likely to experience stress from life events. In addition, life stress and adult attachment were found to be univariately associated with depression.

Relationship between Parent Attachment and Depression

Miner (2009), in a study to examine the impact of child–parent attachment, God attachment, and religious orientation on psychological adjustment, employed a research design that was a combination of cross-sectional correlation and a mediation study. In this research, child–parent attachment, God attachment, and religious orientation were independent variables, while psychological adjustment was the dependent variable. The two aspects of psychological adjustment used were anxiety and existential wellbeing. The gathered data was analyzed using product moment correlation coefficient, multivariate analysis of variance, and hierarchical multiple regression. The results showed that parent attachment correlated positively with existential wellbeing, but negatively with anxiety. Similarly, scores on God attachment correlated positively with existential wellbeing but

negatively with anxiety. The mediation analysis results indicated that intrinsic orientation mediates the relationship between God attachment and psychological adjustment.

Anhalt and Morris (2008) conducted a study to investigate the relationship between parenting factors and symptoms of anxiety and depression. Data for this study was collected from 434 students, aged 18–22, at West Virginia University. Parental Bonding Instrument (PBI), Inventory of Parents and Peer Attachment, Beck Depression Scale, and Social phobia and Anxiety Inventory were used. Results of the regression analysis indicated that participants who perceived their parents in a manner consistent with the PBI affectionless control parenting style are more likely to endorse high levels of depressive symptoms.

Borellii et al. (2010) examined the associations between different classifications of disorganized attachment and symptoms of psychiatric disorders. The researchers collected data from 97 children between the ages of 8 and 12, using the Child Attachment Interview (CAI), the Children Depression Inventory (CDI), Child Behavior Checklist, the revised version of the Early Adolescent Temperament Questionnaire, and the Symptom Checklist. The gathered data was analyzed using ANCOVA, and the results indicated that disorganized children report significantly more depressive symptoms compared to children exhibiting organized attachment.

Karabekiroglu and Rodopman-Arman (2011) conducted a cross-sectional correlation study, in which they sought to investigate the relationships between maternal and paternal attachment styles and the severity of emotional and behavioral problems in a sample of 103 toddlers younger than 43 months. Beck Depression Inventory (BDI) and Adult Attachment Scale were used as measures for adults, while Child Behavior

Checklist was used for the toddlers. The parents and their children were assessed in an outpatient setting at least twice a week. The results indicated that attachment to mothers (but not to fathers) was associated with the development of behavioral and emotional problems in toddlerhood.

One of the objectives of a study conducted by Armour et al. (2010) was to test the validity of the four-category attachment typology. The other objective was to establish if the resultant attachment styles produced by latent profile analysis (LPA) predicted the severity of PTSD, depression, and anxiety symptoms in response to a whiplash trauma. The authors hypothesized that individuals that are classified as secure will have better psychological status, as indicated by lower levels of PTSD, depression, and anxiety. Data were collected from 1,567 individuals between the ages of 16 and 76, all of whom were recruited through mail correspondence issued by from the Danish society for Polio, Traffic and Accident Victims. The gathered data was analyzed using attachment LPA and One-way ANOVA. The results demonstrated evidence for three categories of attachment only, namely secure, fearful, and preoccupied. The dismissing class seemed to amalgamate with the preoccupied class and was not identified clearly in the analysis. The authors also reported that scores for PTSD, depression, and anxiety increased from secure, through preoccupied, to fearful attachment patterns.

Sroufe (2005) reported on a 30-year longitudinal study of the developing person, emphasizing the key points regarding the role of infant attachment in the developmental course of an individual. One of the conclusions reached in this Minnesota study was that attachment history is clearly related to the development of self-reliance, social competence, and the capacity for emotional regulation. Secure attachment was observed

to promote mental health, although this is not guaranteed. In addition, a history of secure attachment was found to moderate the impact of stress on disturbance. Avoidant and resistant attachment styles were found to be moderately related to depression. According to the researchers, these links could be established via one of two pathways, alienation and hopelessness on the one hand, and anxiety and helplessness on the other.

Jakobson et al. (2012) conducted a longitudinal study to examine the extent to which positive parent–child attachment acted to mitigate the risk of internalizing disorders in children with high levels of early anxiety/withdrawal. In this study, data from a 30-year longitudinal cohort in New Zealand was used. The birth cohort of 1,265 children was studied at birth and annually thereafter until the age of 16, and then at 18, 21, 25, and 30, using measures such as childhood anxiety/withdrawal and parent child attachment. Results indicated that early presence of anxiety/withdrawal was related to an increased risk of subsequent major adult depression and anxiety. This relationship was found to be linear and “dose-related.” Secondly, positive child–parent attachment in adolescence was associated with reduced risk on internalizing disorders. Most significantly, early anxiety/withdrawal and child–parent attachment were found to be additive risk-factors for internalizing disorder.

In this section, studies that describe how parent attachment influences depression generally were discussed. In most of these studies, the authors observed that parent attachment is a very important factor not only in the development of depression, but several other psychopathologies as well. Secure attachment was found to mitigate depression, PTSD, and anxiety, and to improve self-reliance, social competence, and

emotion regulation. Studies on how parent attachment affects depression in the adolescent population will be discussed in the next section.

Relationship between Parent Attachment and Depression in Adolescence

Studies on how parent attachment influences depression symptoms in adolescents will be reviewed in this section. This is important because, as stated earlier, this population is highly vulnerable to depression. Kamkar et al. (2012) conducted a study to understand how negative attributions and self-esteem mediated the associations between mother and father attachments and depression. In this study, it was hypothesized that more anxiously attached adolescents would report more internalizing symptoms of depression, and that attachment anxiety would moderate the relationship between avoidant anxiety and depressive symptoms. Moreover, anxious attachment was expected to lead to lower self-esteem and more depressive symptoms. Data for this study was obtained from 140 seventh and eighth grade students between the ages of 12 and 15, residing in Montreal, Canada. The Adolescent Relationship Scale Questionnaire, the Children's Depression Inventory, and the General Self-esteem Scale were used by the researchers to gather data, which was analyzed using hierarchical multiple regression. Results showed that both attributions to negative events and self-esteem fully mediated the association between anxious attachment to mothers and depressive symptoms in early adolescent girls.

Najam and Majeed (2012) conducted a cross-sectional correlation study to understand the relationship between depression and attachment in Pakistani adolescents. These authors focused on the exact roles of parental acceptance and rejection. The sample

of 60 adolescents between the ages of 13 and 19 was administered the Child Depression Inventory and the Child Parental Acceptance-Rejection Questionnaires. The main hypothesis of the study that there is relationship between depression and perceived rejection in children and adolescents was supported. In addition, no gender differences were revealed by the Parental Attachment and Rejection Questionnaire.

Brennings, Soenens, Braet, and Beyers (2013) conducted a longitudinal study to examine associations between intra-individual change in adolescent depressogenic personality orientations, dimensions of mother–adolescent attachment, and depressive symptoms. These researchers sought to understand how intra-individual personality might affect the relationship between adolescent depression and attachment to parents. By analyzing data pertaining to a sample of 389 high school students, the researchers determined that, although initial levels of sociotropy were not related significantly to changes in attachment and depressive symptoms, high initial levels of autonomy were associated with increased attachment anxiety, attachment avoidance, and depressive symptoms.

Eijck et al. (2012), in a longitudinal study, examined the direction of effects between adolescents generalized anxiety disorder symptoms and perceived parent–adolescent attachment relationship quality. They also studied the moderating effects of age and gender. The sample for this study consisted of 11,313 adolescents from junior-high and high schools in Netherlands, and measures included the GAD subscale of the Screen for Child Anxiety Related Emotional Disorders (SCARED) and Perceived Attachment Relationship Quality Scale. The results of the study showed a bidirectional relationship between GAD symptoms and perceived quality of attachment with fathers,

while a unidirectional model was found with mothers. In the case of mothers, GAD symptoms predicted adolescent–mother attachment, but a reverse link was not supported. In addition, gender and age were found to moderate the relationship between GAD symptoms and attachment to fathers, but not with mothers.

The relationship between parent attachment and depression was examined in a review by Shaw and Dallos (2005). The review was based on the current understanding that primary attachment relationships may offer protection for adolescents from depressive symptom

matology. These researchers concluded that insecure parent attachment does not “cause” depression, but rather establishes vulnerability for emotional problems, and that these problems manifest in ways that indicate gender differences. While girls become more prone to depressive symptoms such as self-harm, eating disorders, and anxiety, boys tend to act out and become more aggressive (Shaw & Dallos, 2005).

Park (2009) conducted a correlation study to examine the relationship between parental care and parental control as perceived by Korean-American adolescents. Another study objective was to examine the link between the parent attachment styles and measures of mental health (depression, self-esteem, and social support). The authors recruited 260 Korean-American adolescents between the ages of 12 and 18 from 20 Korean community churches in the southeastern region of the United States for their study. The 25-item Parental Bonding Instrument was used to measure parental attachment, while depression was assessed via the depression self-rating scale. The results indicate that Korean-American adolescents perceive their parents’ parenting style as more controlling than their Anglo-European counterparts do. In addition, the Korean-

American adolescents viewed their parents' parenting as characterized by high control and low care.

In a study reported by DiFillipo and Overholser (2000), mother attachment (but not father attachment) was found to be significantly related to depressive symptoms and suicide ideation in adolescent psychiatric patients. The authors concluded that poor attachment may increase one's vulnerability to depression, thus indirectly contributing to suicide ideation. In this study, attachment to fathers did not show any significant variations in depressive symptoms and suicide ideation, even among boys (DiFillipo & Overholser, 2000).

Margolese et al. (2005) conducted a study aiming to elucidate how attachment patterns affect depression in various attachment situations, with parents, best friend, and romantic partner. By analyzing the data obtained from a sample of 134 adolescents, the researchers determined that relative to attachment to fathers and best friend, adolescents' attachment to mothers and romantic partners was more strongly associated to depression. They added that the pathways to depression could be explained primarily by the types of attributions made in response to interpersonal stressors. These results suggest that attachment theory may very well explain the negative attribution style that is predictive of depression (Margolese et al., 2005). The authors posited that negative attributions and rumination were the likely mechanisms responsible for the development of depression from insecure attachment processes. They employed a correlation design, with a mediation aspect, the goal of which was to determine if negative attributions and rumination would mediate the relationship between attachment and depression.

As was noted earlier, the results of the longitudinal study by Beijersbergen et al. (2012) indicated that the rearing context can have a great impact on child's attachment. This has implications in the prevention of internalizing and externalizing behaviors of adolescence. Employing a sample of 147 mothers and 147 adolescents, Gainnotta et al. (2013) utilized a quasi-experimental method to determine if an attachment-based parenting style will help in preventing adolescents' problem behaviors. The intervention consisted of 10 one-hour lessons administered to some parents, while ANCOVA and Cohen's d were used to analyze the data. The results showed that parenting and the family are very important aspects of efforts to prevent problem behaviors in adolescents.

Colonesi et al. (2011) conducted a meta-analytic study to determine the relationship between insecure attachment and child anxiety. They analyzed data yielded by 46 studies that employed 8,907 students and the results showed that insecure attachment and anxiety are moderately associated, but that this association is stronger in adolescents than in children. The authors, however, cautioned that the relative strength in adolescence should be considered carefully, since this difference may be due to the variations in the methodological design of the studies, in which self-reporting was used for adolescents, but not for the children.

Several of the studies reviewed in this section indicated that insecure attachment to parents by adolescents contributes to an increased vulnerability to depression and anxiety. In some of these studies, the authors proposed that this vulnerability may stem from negative attribution styles characteristic of this age group. Parenting context was also found to be a relevant factor in the prevention of problem behaviors in adolescents. In sum, evidence presented thus far points to an association between parent attachment

and depression. It will also be important to review studies that explored a possible association between God attachment and depression, which is the topic of the next section.

Relationship between God Attachment and Depression

Similar to the discussion of the effects of parent attachment in the previous section, patterns of attachment to God may be fundamental and crucial to pathways that are responsible for healthy adjustment. This proposition will be explored in this section and relevant studies will be reviewed. Balbuena et al. (2013) concluded that attending religious services at least once a month has a protective effect against major depression. This assertion was based on the results of a longitudinal study that sought to analyze the effect of religious attendance, importance of spiritual values, and self-identification as a spiritual person on occurrence of major depression. This research, as well as most of the studies on how God attachment affects depression and mental health, indicates that God truly acts as a secure base and safe haven.

In another longitudinal study by Ellison, Bradshaw, Kuyel, and Marcum (2012), the association between attachment to God and psychological distress was examined. The authors employed 906 participants from a national survey of two samples of population affiliated with the Presbyterian Church (USA). While attachment to God was measured using the Rowatt and Kirkpatrick's (2002) nine-item multidimensional measure, psychological distress was assessed using the Kessler (2002) K6 scale of psychological distress. Consistent with the results of studies by other researchers such as Kirkpatrick, the results of this study indicated that secure attachment to God at baseline is linked with

improvement in distress over the study period. In addition, secure attachment to God at baseline predicts less emotional reactivity to social stressors.

Bishop (2008) conducted a study to understand whether friendship and attachment to God would provide a protective benefit against stress and depression. This study employed a cross-sectional design and was conducted on 235 individuals in a religious monastery, all of whom were 64 years or older. Hierarchical multiple regression analyses were conducted to determine the main effects of stress, friendship, and attachment to God on depressive symptoms. The aim was to determine if interpersonal relationships and God attachment moderate the influence of stress on depression. The study results showed that attachment to God had a negative influence on depression. That is, greater feelings of secure attachment were associated with lower levels of depression.

Leondari and Gialamas (2009) studied the effects of religiosity on psychological wellbeing using a sample of 383 Greek Orthodox Christians. Different aspects of psychological wellbeing were considered, including depression, anxiety, loneliness, and general life satisfaction. Religiosity variables used were church attendance, frequency of prayers and belief salience, which were measured via single-item scales with answers given on a five-point scale ranging from 1 to 5. The data analysis revealed significant positive correlation between church attendance and general life satisfaction on the one hand, and between belief salience and general life satisfaction, on the other. The authors also reported a significant positive correlation between anxiety and frequency of prayers. Surprisingly, no association was found between religious measures and depression. The researchers agreed that this finding is in contrast to the results of previous studies, positing that the measures they used may have resulted in this lack of association

(Leondari & Gialamas, 2009). For example, measures of religiosity were weak in that they were single-item measures. These measures were also considered global measures that are built on the assumption that religiousness across time, context, and situations are stable. Since this is not always the case, they tend to be weaker predictors of wellbeing (Leondari & Gialamas, 2009). Another weakness of this study is that, as a correlation study, it does not reveal any causal connections. However, its major strength is that, unlike many of the other studies, it assessed the full complement of psychological wellbeing, consisting of general life satisfaction, depression, anxiety, and loneliness, in addition to employing a relatively large sample size of 363.

Just as parent attachment, God attachment was found, in most of the studies reviewed, to have protective effects on depression and to lead to general life satisfaction. Even related activities such as church attendance and participation in religious activities were found to have similar effects. The next set of studies will be discussed to determine whether a similar association exists between God attachment and depression in adolescents.

Relationship between God Attachment and Depression in Adolescents

As described above, results of several studies have pointed to a correlation between God attachment and depression, as well as other psychopathologies. This assertion is intuitive, since God acts as a secure base and safe haven, in the manner that parents and caregivers do. However, studies on adolescents are scanty at best, but a few will be reported here. In a case controlled cross-sectional correlation study to understand the effects of mother attachment, father attachment, and God attachment on adjustment in

early and middle adolescence, Sim and Yoh (2011) employed a sample of 236 adolescents of mixed religious background, selected from high schools in Singapore. They measured three adjustment indices, including hope, self-esteem, and depression. In addition, to assess the attachment to God, the authors employed the 16-item Sim and Loh (2003) measure, and assessed attachment to mother and father using a modified version of the same measure. They found that attachments to mother and father, but not to God, were positively related to hope, as they hypothesized. God attachment was related to self-esteem in early adolescence, but only mother and father attachment were related to self-esteem in middle adolescence. For depression, the authors observed a three-way interaction between mother attachment, father attachment, and adolescent adjustment. Surprisingly, there was a positive relationship to depression involving God attachment. These researchers believe that although God may serve similar roles as human attachment figures, the way God attachment plays out in its link with daily life experiences may be different from the ways human attachments do (Sim & Yoh, 2011).

If frequency of attendance at religious worship can be used to estimate religiosity and attachment to God, it could be hypothesized that more frequent attendance at worship may predict lower depression in adolescents, based on the relationship between God attachment and depression, described earlier. Rasic et al. (2013) conducted a longitudinal study to determine the direction of the association between self-reported religious importance or worship attendance and depression among adolescents. Data were collected from 976 participants in Nova Scotia, who were enrolled for the AHS study. Paired samples t-test, cross-tabulation, longitudinal analysis, and logistic regression were used to analyze the data. Results showed that, for boys, elevated depressive symptoms at

baseline predicted lower levels of church attendance, independent of the effects of age, gender, and living arrangements. Similarly, for girls, religious attendance was found to be protective of increased depressive symptoms, especially starting from a baseline without depression. The difference between the responses of the boys and girls was that protection from depressive symptoms was observed in boys that were depressed at baseline, whereas similar responses occurred for girls that were healthy at baseline. The study therefore provides evidence that religious attendance may protect girls from the development of depression, by increasing general self-efficacy (Rasic et al., 2013). In addition, for some of the boys, a bidirectional relationship was observed, in which depressive symptoms at baseline also predicted lower religious attendance (Rasic et al., 2013). This study provided evidence for the protective effects of monthly or more frequent religious attendance on the development of elevated depressive symptoms, and on the recurrence or persistence of elevated depressive symptoms in males.

It is not exactly certain how some demographics would affect the relationship between God attachment and depression. Nonetheless, empirical evidence suggests that ethnicity and gender may affect this relationship. Le et al. (2007) conducted a study to determine the relationships between religiousness and depressive symptoms in five ethnic adolescent groups in the US using a sample of 13,317 youth. The ethnic groups included African American, Asian, American, European American, Hispanic American, and Native American. Adolescents included in this study were aged 7 to 12 years old. While depression was measured using the Center for Epidemiological Studies Depression Scale, participants' gender, ethnicity, and religious affiliation were coded. For example, males were coded "1", while "2" was assigned to females. The results of the study showed a

negative correlation between religiousness (both internal and external) and depression, for African Americans but not for Hispanic, Asian, or Native American youth. Although this research has served to expand knowledge in this relatively new field, it has some notable weaknesses. Apart from relying on self-reports as the main source of data on the adolescents, operationalizing religiousness was certainly a complex issue, since the term is global and represents various aspects of religious experience, including frequency of prayers, frequency of service attendance, and belief salience, among other factors.

The impact of race and gender on the relationship between religion and adolescent depression was studied by Petts and Jolliff (2008), who reported that religious participation and religious importance indirectly reduce depressive symptoms by enhancing social support for youth. The authors also suggested that the relationship between religion and depression might be unique for Latino and Asian adolescents. For Asian adolescents, the study results showed that religious participation and importance is associated with increased depression. Yet, for Latino adolescents, the relationship was curvilinear.

Indirectly, some other researchers have also demonstrated an association between God attachment and depression in adolescents, through a positive impact on their self-worth. For example, Francis et al. (2001) examined a sample of 866 participants between the ages of 12 and 15, aiming to investigate whether God image and perceived self-worth in adolescents can be related. The results of this study indicated that there is positive relationship between self-concept or self-worth and loving God images, and a negative relationship between self-concept or self-worth and rejecting God images, among adolescents. Since the link between self-worth and depression scores is well established,

it could be deduced from the conclusion reached in this study that God image or attachment is inversely related to depression.

The studies reviewed in this subsection revealed that God attachment was related to depression in adolescents. While some authors proposed that attachment to God and participation in religious services have protective effects on depression in adolescents by exerting positive influence on self-esteem, others revealed that the positive effect on depression was through improved self-worth and social support.

Summary

In this chapter, the concepts of attachment and internal working models were traced to Bowlby and Ainsworth, who pioneered the work in these areas. The studies cited demonstrated a proneness of adolescents to depression. Their authors traced the causes of depression to imbalance of neurotransmitters, HPA axis deregulation, and a tendency to internalize negative thoughts. The studies reviewed in this chapter also suggested that depression might lead to suicide, drug/alcohol dependence, and economic difficulties. Their findings also indicated that there are relationships between parent attachment and depression, as well as between God attachment and depression. Other studies demonstrated a link between parent attachment and God attachment, and their authors attributed this to either correspondence or compensatory mechanisms. The observed relationships between these variables were further explored in this study, and methods employed, including choice of participants and research design, will be discussed in the next chapter.

CHAPTER THREE: METHODS

Introduction

The previous chapter was dedicated to a review of extant literature in which the exact relationships between parent attachment, God attachment, and depression were examined. While most of the studies included in the review focused on some specific segments of this triad, using various populations, this current study included all the segments. In addition, it examined a possible mediation by God attachment. This chapter will provide discussions on the choice of participants, procedures, research design, measures, validity, data analysis, and ethical considerations. Since this study focused on the adolescent Christian population, this limited context affected the choice of sample, setting, measuring instruments, consent requirements, and some specific details that are unique to this population.

Participants

The participants for this study consisted of 75 adolescent Christians between the ages of 13 and 18. These youth were recruited from several youth ministries in northeast New Jersey. To enroll the candidates for research, permission from the respective youth pastors and church leadership were obtained. Attempts were made to meet with the parents or guardians of interested candidates, to discuss the study. Selected candidates required parental consent in order to participate. It was emphasized throughout the study that participation was completely voluntary, and that candidates could discontinue participation at any time. Candidates were pre-screened and an initial sample of about 81 was selected based on the inclusion criteria of being a Christian and aged 13 to 18. These

criteria were verified with the parents and documented on the consent forms. Exclusion criteria included being currently on medications for depression or receiving therapy two months prior to beginning of study. A final sample of 75 was selected.

Procedure

Approval for this study was obtained from the Institutional Review Board (IRB) prior to commencement of study. As noted earlier, the study sample comprised of adolescents from several youth groups in some churches in northeastern New Jersey. Eight ministries in the area agreed to participate in the study. Senior leadership and youth pastors in these ministries were briefed and they promised to allow their youth members to take part in the study, if the parents and guardians gave consent. In all eight ministries, there were about 158 youth members that met the age requirements. I had a group meeting with the parents and guardians in each of the participating ministries, and explained to them the purpose of the study and the type and scope of data that would be collected. These meetings took place at the church premises at the end of their Sunday services. The candidates were provided with informed consent forms that described the study and its purpose, as well as the rights of the participants. The consent assured the participants that their participation would be purely voluntary and that they reserved the right to withdraw from the study at any time. Since these participants were expected to be minors, the consents were to be completed and signed by their parents or legal guardians. This study was discussed with the parents or guardians of selected participants to ensure that they understood the purpose of the study and the types and scope of data that was collected. In addition, confidentiality was stressed, since it was believed that this would

ensure comfort with privacy, and would help minimize effects due to social desirability. Packets of assessment materials were given to each participant and the forms and measures were completed in the presence of the youth pastors at the different ministries. Each packet included a background information and Family History Form that was used to gather basic demographic information and other facts about the participants and their families of origin. Other items in the package included the Center for Epidemiological Studies Depression Scale (CES-D), Parental Attachment Questionnaires (PAQ), and Attachment to God Inventory (AGI).

All the measures were administered to all selected and prescreened participants. The measures were completed by the participants in groups, in the presence of their youth leaders. The depression scores were separately correlated with depth of God attachment and parent attachment, as measured by the respective instruments. Possible mediation by God attachment was also explored.

Research Design

As noted in earlier sections, this research was based on a cross-sectional case-controlled correlation design, along with a mediation piece. A case-controlled design is one in which the variable of interest is studied by selecting subjects or cases that vary in the characteristics or experiences of interest (Kazdin, 2010). In this study, variables of interest were God attachment, parent attachment, and depression. The study was conducted in religious institutions and only religious adolescents were included in the sample, to determine how depression scores changed with varying levels of God attachment. Given its cross-sectional design, the study allowed comparisons to be made

between individuals or groups at a given point in time, as opposed to a longitudinal study in which the focus is on comparisons over an extended period of time (Kazdin, 2010). As noted earlier, in this study, depression scores were compared in relation to different God attachment and parent attachment scores. A cross-sectional case-controlled study helps to examine factors that are associated with a particular characteristic of interest, and are thus useful in identifying correlates and associated features (Kazdin, 2010). When conducting a correlation study, the main aim is to determine whether an association exists, without regard to the direction of any such association. In this study, the correlates or characteristics of interest were God attachment, parent attachment, and depression. The objective was to measure depression scores of participants and to observe how these may have changed in relation to participants' God attachment and parent attachment scores.

The study sought to explore the relationships between God attachment and depression, parent attachment and depression, as well as that between God attachment and parent attachment. In addition, as a mediation study, it sought to explicate how God attachment can mediate the relationship between parent attachment and depression. Its findings were intended to elucidate whether attachment to God strengthens or dampens the relationship between parent attachment and depression, or if it has no effect whatsoever.

Measures

Three instruments were employed in this study, namely the Center for Epidemiological Studies-Depression Scale, Parental Attachment Questionnaires, and Attachment to God Inventory. Each of these instruments will be described in this section.

The discussion will include descriptions of the scales and their method of scoring, statements on reliability, and the reasons behind their selection.

Center for Epidemiological Studies-Depression Scale

The Center for Epidemiological Studies-Depression scale (CES-D; Radloff, 1977) is a 20-item self-report measure, with an alpha of 0.91 and a test-retest reliability of .59. It is specifically designed to measure symptoms of depression. It was developed for use in studies of the epidemiology of depressive symptomology in the general population, and it is useful as a screening instrument at both adult and adolescent levels (Lewinsohn & Hops, 1988). The instrument measures the level of severity of depression via four factors, namely depressed affect, positive affect, somatic and retarded activity, and interpersonal factor (Cui, Shi, & Oei, 2013). The children's version is known as the Center for Epidemiological Studies Depression Scale for Children (CES-DC). The scales in this version are shorter and easier to read than other self-report depression instruments, and have been used successfully with large adolescent samples (Garrison, Shoenbach, & Kaplan, 1985; Schoenbach, 1982). The children's version is at a lower reading level and has higher reliability than the adult version. Other measures are either too long, too expensive, or have not been validated in adolescent populations (Bradley, Bragnell, & Brannen, 2010).

The 20-item measure is rated on a Likert-type scale ranging from 0 to 3, with 0 representing "not at all" and 3 denoting "a lot." Examples of questions include "I was bothered by things that usually don't bother me," "I did not feel like eating, I wasn't very hungry," "I felt I couldn't pay attention to what I was doing," and "I felt down and

unhappy.” Some items (4, 8, 12, and 16) are phrased positively and are reverse-scored. Possible scores range from 0 to 60, and the higher the CES-DC score, the higher the depression level. For children and adolescents, scores above 15 on this scale are indicative of significant levels of depressive symptoms.

Parental Attachment Questionnaires (PAQ)

The Parental Attachment Questionnaire (PAQ) scale was used to measure the attachment between the adolescent and his or her parents. Developed by Kenny (1987), the PAQ is a 55-item self-report measure with three subscales, namely, Affective Quality of Relationship (Cronbach’s $\alpha = 0.95$), Parents as Facilitators of Independence ($\alpha = 0.82$), and Parents as Source of Support ($\alpha = 0.84$). For the overall scale, the Cronbach’s α coefficient is 0.87. The high reliability values are an indication of the internal consistency of the scale (Imtiaz & Naqvi, 2012). The instrument is a five-point rating scale, where the responses “not at all,” “somewhat,” “a moderate amount,” “quite a bit,” and “very much,” are scored as 1, 2, 3, 4, and 5, respectively. Thus, the minimum score is 55 and maximum is 275, whereby higher scores indicate higher parental attachment. Examples of items on this scale include “my parents: support my goals and interests; respect my privacy; have trust and confidence in me; and are disappointed in me.”

This scale can be used in adolescents as well as young adults, and has been found to have significant associations with other measures such as the Beck Depression Inventory and some subscales of the Family Environment Scale. Although attachment to both parents can be rated simultaneously, separate scores for attachment to each of the

parents can be obtained. For PAQ assessment of attachment to the mother, the Cronbach's alpha is 0.772, whereas for the father, the Cronbach's alpha is 0.762 (Blissert et al., 2006).

Attachment to God Inventory (AGI)

The Attachment to God Inventory (AGI; Beck & McDonald, 2004) is a 28-item scale based on the experience in close relationships scale, and is used to measure an individual's attachment to God. The scale was designed to measure avoidance and anxiety, which are two dimensions of importance as people relate with God. It has 14 items on the Anxiety subscale with a Cronbach's alpha of 0.82, and 14 items on the Avoidance subscale with a Cronbach's alpha of 0.83 (Beck & McDonald, 2004). While the Avoidance subscale measures the level of discomfort that may be associated with closeness and dependence on God, the Anxiety subscale measures fears of possible abandonment or rejection by God. The instrument uses statements that describe one's relationship with God and requires responses on a Likert scale, anchored at 1 (strongly disagree) to 7 (strong agree). The instrument is scored by totaling the responses on each of the subscales and dividing by 14 to obtain the average score. Average scores on each subscale range from 1 to 7. Low scores indicate low levels of God anxiety or God avoidance, or high attachment to God, whereas high scores indicate high God anxiety or God avoidance, or low attachment to God. Examples of items on the Avoidance scale include, "I just don't feel a deep need to be close to God" and "I prefer not to depend too much on God." Examples of items on the Anxiety scale include "I worry a lot about damaging my relationship with God" and "I worry a lot about my relationship with God."

The AGI was constructed by Beck and McDonald, employing 507 graduate and undergraduate students from Abilene Christian University. From an initial pool of 70 items, 28 items (14 on Avoidance and 14 on Anxiety subscale) were finally selected to comprise the Attachment to God Inventory. A second study was conducted to replicate the factor structure and internal consistency of the AGI and to compare it to the adult romantic attachment scale. In the second study, the AGI as well as the Experiences in Close Relationship (ECR) scale were administered by the researchers to 118 individuals, consisting of 89 females and 29 males. These individuals were also undergraduate and graduate students that were sampled at the same Abilene Christian University. On replication, the AGI performed well, and the factor structure of the instrument remained stable. Scores on 26 of the 28 AGI items were found to be significantly correlated with subscale scores for anxiety and avoidance on the ECR, indicating a good match between God Attachment and Adult Attachment. This instrument was successfully used in several studies (Cooper, Bruce, Harman, & Boccaccini, 2009; Dumont, Jenkins, Hinson, & Sibcy, 2012; McDonald et al., 2005; Thomas, Moriarty, Davis, & Anderson, 2011)

Validity

Attrition was the only potential threat to the internal validity of this study. This was not expected to pose a serious problem, since the instruments were going to be administered to each participant only once. However, there was a threat to the external validity. As noted earlier as part of the limitations to this study, it may be impossible to generalize the results to other cultures that do not necessarily have the same religious freedom and other cultural or demographic characteristics as those of the study

participants, who were drawn from northeastern New Jersey. It was noted that the results may be different in other cultures that do not support freedom of religion as we have it in New Jersey and in most other Western societies, and that the results may also be different if the study is conducted on a population with very different demographic mix, culture, and institutional belief system.

About the Data Analysis

1. Test for Correlation Between Independent Variables (Parent Attachment and God Attachment) and Dependent Variable (Depression)

The following statistical procedures were employed:

a. Pearson's Product Moment Correlation Coefficient:

The Pearson's Product-Moment Correlation Coefficient (PPMCC) otherwise known as "Pearson's r ," was used to examine the separate relationships between the studied variables. PPMCC is a bivariate statistic that is usually used to describe the strength of the linear relationship between two quantitative variables (Warner, 2008, p. 255). The possible results range from -1 (indicating perfect negative linear association) and +1 (indicating perfect positive linear association). The groups of variables that were examined using this statistic included:

- God attachment and depression
- Parent attachment and depression
- Parent attachment and God attachment

b. Hierarchical Multiple Regression:

Hierarchical Multiple Regression was used to analyze how parent attachment and God attachment could jointly predict depression. Multiple Regression also helped to determine the proportion of unique variance in depression that could be predictable from parent attachment when God attachment was statistically controlled or partialled-out, and vice versa. In Figure 1 below, the areas where the two attachment circles overlap with the depression circle represented the overall proportion of variance in depression that could be predictable from parent attachment and God attachment combined. The statistical procedure employed for this purpose was a hierarchical multiple regression because the independent or predictor variables were introduced in a sequential manner.

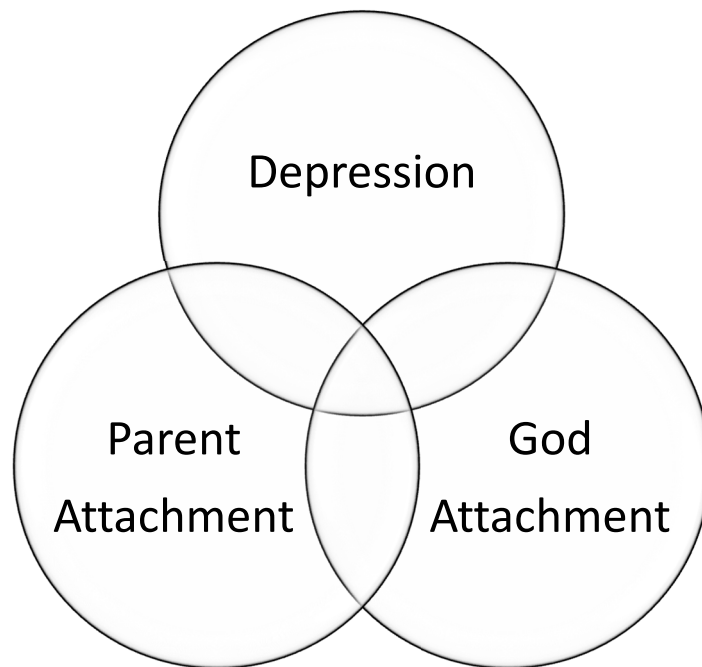


Figure 1. Partition of Variance.

2. Test for Mediation

This statistical procedure tested whether or not God attachment mediates the relationship between child–parent attachment and adolescent depression. The procedure involved the following steps:

- a. The Mediator (God Attachment) was regressed on the Independent Variable (Parent Attachment)
- b. The Dependent Variable (Depression) was regressed on the Independent Variable (Parent Attachment).
- c. The Dependent Variable (Depression) was regressed on both the Independent Variable (Parent Attachment) and the Mediator Variable (God Attachment), in a simultaneous Multiple Regression.

Ethical Considerations

Attention was paid to ethical issues that may have arisen prior to or during this research, and some of the actions that were taken have been identified in previous sections of this report. Nonetheless, it may be necessary to state them again here. For example, in order to participate in the study, informed consents were needed, and since the participants were adolescents, such consents were completed and signed by the parents. Participants were instructed that they were free to opt out of the study at any time. Confidentiality was assured in a written contract, and participants' information was not disclosed to a third party without the knowledge and consent of the participant. All possible exceptions, such as potential harm to self and others, were discussed and noted in the contract.

Summary

This chapter outlined the methods that were employed to study the relationships between parent attachment, God attachment, and depression. The study sample comprised of 75 participants aged 13–18, drawn from youth ministries in the northeastern parts of New Jersey. The research design employed was a case-controlled cross-sectional correlation design, and the measures included Center for Epidemiological Studies Depression Scale, Parent Attachment Questionnaires, as well as Attachment to God Inventory. The collected data was examined using statistical methods such as simple correlation procedures, hierarchical, as well as simultaneous multiple regression.

CHAPTER FOUR: RESULTS

Introduction

The purpose of this study was to investigate the relationship between three constructs – child-parent attachment, God attachment, and depression in adolescent Christians - in order to determine if secure attachment to parents and God correlate with reduced depression, or whether attachment to God mediates the relationship between child-parent attachment and depression in this population. The study was designed to explore the following research questions: Does a secure child–parent attachment correlate with reduced depression in adolescent Christians? Do attachments to parents have any effects on attachment to God? Does attachment to God offer protection against depression in Christian adolescents by accounting for unique variance in depression after controlling for attachment to parents? Does God attachment mediate the effects of parent attachment in predicting depression in adolescents who are Christians?

These questions were addressed by analyzing data obtained from a sample of 75 participants who were administered the Parent Attachment Questionnaire (PAQ), Attachment to God Inventory (AGI), and the Center for Epidemiological Studies Depression Scale (CES-D). The first research question (Does a secure child–parent attachment correlate with reduced depression in adolescent Christians?) was examined using Pearson Product Moment Correlation Coefficient or Pearson's r , in which scores on the three subscales of the Parent Attachment Questionnaires were separately regressed on the scores obtained on the depression (CES-D) measure, resulting in three correlation studies. The three subscales include Affective Quality of Relationships, Parents as Facilitators of Independence, and Parents as Source of Support.

The second research question (Do attachments to parents have any effects on attachment to God?) was also examined using the Pearson's r . This time, the three subscales of the Parent Attachment Questionnaire were separately regressed on the scores from the two subscales of Attachment to God Inventory, namely, God Anxiety and God Avoidance, resulting in six correlation studies. The third research question (Does attachment to God offer protection against depression in Christian adolescents, by accounting for unique variance in depression after controlling for attachment to parents?) was addressed using the Pearson Product Moment Correlation Coefficient, and Hierarchical Multiple Regression. In the Pearson Product Moment Correlation study, scores from the two subscales of the Attachment to God Inventory were separately regressed on scores on the Center for Epidemiological Studies Depression Scale, resulting in two correlation studies.

In this part of the study, scores on the God Attachment scales were directly correlated with the scores on the CES-D scale, without any attempt to control for or partial out contributions of the parent attachment. In the second part of the study, which involved the use of Hierarchical Multiple Regression, scores from the three subscales of the PAQ and the scores from the two subscales of AGI were regressed together in a sequential manner on scores on the CES-D scale. The goal was to determine the unique variance contributed by the God attachment scores on depression, after parent attachment has been controlled for or "partialled-out."

The fourth research question (Does God attachment mediate the effects of parent attachment in predicting depression in adolescents who are Christians?) was addressed by a mediation study, in which: (1) the Mediator (God Attachment) scores were regressed on

the Independent Variable (Parent Attachment) scores; (2) the Dependent Variable (Depression) scores were regressed on the Independent Variable (Parent Attachment) scores; and (3) the Dependent Variable (Depression) scores were regressed on both the Independent Variable (Parent Attachment) and the Mediator Variable (God Attachment) scores.

Results

Research Question One

The first research question was addressed using a zero-order correlation matrix to determine the relationship between parent attachment and depression. The three dimensions of parent attachment (Affective Quality of Relationships, Parents as Facilitators of Independence, and Parents as Source of Support) were regressed on the depression scores. Using SPSS, the scores the participants obtained on the three subscales of the Parent Attachment Questions were inserted as independent variables against the depression scores as the dependent variable. Pearson's correlation coefficients were calculated to determine the degree and direction of the linear relationships between the independent and the dependent variables. Although specific directions were predicted, two-tailed tests at significance levels of .01 and .05 were employed to determine if non-zero correlations exist. A summary of the correlation matrix and the calculated correlation coefficients is presented in Table 1.

Table 1

Correlations of the Relationships between Dimensions of Parent Attachment and Depression

	PA Affect(<i>p</i>)	PA Facilitator(<i>p</i>)	PA Support(<i>p</i>)	Depression(<i>p</i>)
PA Affect	1	.569(.001)	.595(.001)	-.424(.001)
PA Facilitator	.569(.001)	1	.401(.001)	-.486(.001)
PA Support	.595(.001)	.401(.001)	1	-.283(.05)
Depression	-.424(.001)	-.486(.001)	-.283(.05)	1

Note: PA Affect = Affective Quality of Relationships; PA Facilitator = Parents as Facilitators of Independence; PA Support = Parents as Source of Support;

Correlations of Child-Parent Attachment and Depression

It was hypothesized that a secure child-parent attachment would be correlated with reduced depression in adolescents who are Christians. Examining the correlation matrix in Table 1, all three dimensions of parent attachment were significantly and negatively correlated with depression in Christian adolescents. The correlation coefficients of $-.424$ ($p = .001$), $-.486$ ($p = .001$), and $-.283$ ($p = .05$) were obtained for Affective Quality of Relationships, Parents as Facilitators of Independence, and Parents as Source of Support, respectively. All three results provide strong support for the

hypothesis that a secure child–parent attachment will correlate with reduced depression in adolescent Christians. In other words, the more secure a child-parent attachment is, the less likely it is that an adolescent Christian will be depressed. Secure parent attachment therefore protects this population against depression.

Research Question Two

The second research question sought to determine the exact relationship between child–parent attachment and God attachment in adolescent Christians. This question was addressed in three ways: (1) using a zero-order correlation matrix, as described in Table 2, with the three dimensions of parent attachment and the two dimensions of God attachment; (2) using a zero-order correlation with combined values of the scores on all three dimensions of parent attachment and combined values of scores of God attachment; and (3) classifying the participants into four groups (correspondence positive, correspondence negative, compensation, and negative discontinuity) depending on how their attachment to parents compared to their attachment to God.

Correlations Using Separate Dimensions: Using the zero-order correlation matrix in SPSS, the three dimensions of parent attachment (Affective Quality of Relationships, Parents as Facilitators of Independence, and Parents as Source of Support) were separately regressed on the two dimensions of God attachment (God Anxiety and God Avoidance). Using SPSS, the scores on the three subscales of the Parent Attachment Questionnaire were applied as independent variables against the scores on the two subscales of the Attachment to God Inventory (as dependent variables). Pearson’s correlation coefficients were calculated to determine the degree and direction of the linear

relationships between the independent and the dependent variables. Since both directions are possible with this analysis, two-tailed tests at significance levels of .01 and .05 were employed to determine if non-zero correlations exist. See Table 2 below for a summary of the correlation matrix and the calculated correlation coefficients.

Table 2

Correlations of the Relationships between the Dimensions of Parent Attachment and those of God Attachment

	PA Affect(<i>p</i>)	PA Facilit(<i>p</i>)	PA Supp(<i>p</i>)	God Anx(<i>p</i>)	God Avoid(<i>p</i>)
PA Affect	1	.569(.001)	.595(.001)	.198	-.512(.001)
PA Facilit	.569(.001)	1	.401(.001)	-.131	-.138
PA Support	.595(.001)	.401(.001)	1	.117	-.287(.05)
God Anxiety	.198	-.131	.117	1	-.351(.001)
God Avoid	-.512(.001)	-.138	-.287(.05)	-.351(.001)	1

Note: PA Affect = Affective Quality of Relationships; PA Facilit = Parents as Facilitators of Independence; PA Supp = Parents as Source of Support; God Avoid = God Avoidance.

Correlations of Child-Parent Attachment and God Attachment

It was hypothesized that an attachment to parents would affect attachment to God, and that this may be possible through either the correspondence or the compensation pathway. The correspondence model posits that the types of attachment that humans have with other humans correspond to, or are reflected in, the attachments that humans experience with God. On the other hand, the compensation model posits that God is most likely to function as a substitute attachment figure for those who may be experiencing insecure human–human attachment. Examining the correlation matrix in Table 2, it can be observed that only two of six analyses that were conducted between the three dimensions of child–parent attachment and two dimensions of God attachment showed significant correlations. More specifically, Affective Quality of Relationships significantly and negatively correlated with God Avoidance, with a coefficient of $-.512$ ($p = .001$), while Parents as Source of Support significantly negatively correlated with God Avoidance, with a coefficient of $-.287$ ($p = .05$). These results demonstrate relationships between Affective Quality of Relationships and God Avoidance on the one hand, and between Parents as Source of Support and God Avoidance on the other. These negative correlations suggest that, as parent attachment increases, God avoidance decreases. Since God avoidance is inversely related to God attachment (as described above), it suggests that, as parent attachment increases, God attachment increases as well (on those dimensions). This link points to a possible correspondence mechanism as the reason for the relationships. In other words, on these dimensions, adolescent Christians who were more securely attached to their parents tended to also be more securely attached to God.

Correlations Using Combined Scores: In this model, the overall scores of parent attachment (obtained by combining scores on all three dimensions) were inserted onto SPSS as an independent variable, while the overall scores on the God Attachment scale were inserted as the dependent variable, and the results are presented in Table 3.

Table 3

Correlations of Parent Attachment and God Anxiety/God Avoidance

	Parent Attachment (<i>p</i>)	God Anxiety/Avoidance (<i>p</i>)
Parent Attachment	1	-.234(.05)
God Anxiety/Avoidance	-.234(.05)	1

This result indicates that the relationship between Parent Attachment and God Anxiety/Avoidance is significant, with a coefficient of -.234 and at a *p* level of .05. Since God Attachment is inversely related to God Anxiety and Avoidance (as described above), it can be posited that God attachment increases with higher parent attachment, thus providing an overall support for the correspondence mechanism.

Classification of Participants: Parent Attachment to God Attachment Transition:

The second step involved classifying the participants based on whether they were correspondence positive, correspondence negative, exhibited compensation, or negative discontinuity. Participants were correspondence positive if they transitioned from high parent attachment to high God attachment. They were correspondence negative if they transitioned from low parent attachment to low God attachment categories. Those that belonged to the compensatory category transitioned from low parent to high God

attachment. The negative discontinuity group included those participants that transitioned from high parent attachment scores to low God attachment scores. The major importance of this classification is that it provides greater understanding of the way the participants transitioned from a particular category of parent attachment to a specific category of God attachment. Although this procedure may not be of high statistical importance, it nonetheless allows readers to see at a glance the parent attachment-to-God attachment dynamics within the groups. To accomplish this classification, the participants' overall parent attachment scores were arranged in the ascending order. Thus, scores equal or greater than the median (183) were considered high scores and those below the median were considered low scores. This process was repeated using their God Attachment scores (with a median of 95). This procedure was employed in a similar study by Miner (2009), where the author used the same categorization to examine how the correspondence and compensation mechanisms influence existential wellbeing. The choice of the median scores as cut-off points may seem arbitrary, but it appears to be the best and easiest way to classify the candidates. Scores obtained by each participant were examined to determine how the adolescent transitioned from one category of parent attachment (low or high) into a category of God attachment (low or high). Based on the results, Table 4 was created. Participants who had high parent attachment and high God attachment scores were considered as correspondence positive; those with high parent attachment but low God attachment were said to have undergone negative discontinuity; participants with low parent attachment and low God attachment were considered correspondence negative; and those with low parent attachment but high God attachment

were deemed to have undergone compensation. The number of participants in each category is also documented in Table 4.

Table 4

Classification of Participants

High Parent Attachment Low God Attachment NEGATIVE DISCONTINUITY 22	High Parent Attachment High God attachment CORRESPONDENCE POSITIVE 18
Low Parent Attachment High God Attachment COMPENSATION 18	Low Parent Attachment Low God Attachment CORRESPONDENCE NEGATIVE 17

As can be seen from Table 4, 35 of the 75 participants (or 47%) have attachment to God that suggests a possible correspondence with reference to their attachment to parents. Of that number, 18 were correspondence positive and 17 were correspondence negative. Eighteen (or 24%) participants demonstrated attachments to God that suggest a compensatory pathway. In other words, they demonstrated secure God attachment that is compensating for the insecure attachment to their parents. The remaining 22 (or 29%) participants showed negative discontinuity. Overall, 53 participants (representing 71% of the sample) demonstrated either a correspondence or compensation mechanism.

Research Question Three

Research question three sought to determine if attachment to God offers protection against depression in Christian adolescents by accounting for unique variance in depression after controlling for attachment to parents. In other words, can God attachment predict depression in adolescent Christians after effects of parent attachment have been controlled for? To address this question, a hierarchical multiple regression was conducted. The first step or model involved the insertion of the depression scores as the dependent variable and the three dimensions of parent attachment scores as the independent variables into SPSS. The second step involved the inclusion of the two dimensions of God attachment (anxiety and avoidance) as a second set of independent variables. The results of the regression analysis are as shown in Tables 5, 6, and 7.

Table 5

Descriptive Statistics

	Mean	Std Deviation	N
Depression	20.4933	9.26979	75
PA-Affect	96.4400	17.87588	75
PA-Facilitator	43.7867	11.11280	75
PA-Support	37.2533	7.09605	75
God Anxiety	53.5467	14.79709	75
God Avoidance	40.1867	14.64507	75

Note: PA Affect = Affective Quality of Relationships; PA Facilitator = Parents as Facilitators of Independence; PA Support = Parents as Source of Support.

Table 6

Model Summary

Model	R	R ²	Adj R ²	Std Err.	R ² Change	F Change	DF1	DF2	Sig	F
1	.519	.269	.238	8.09154	.269	8.707	3	71	.000	
2	.594	.353	.306	7.71982	.084	4.501	2	69	.015	

Table 7

ANOVA

Model		Sum of Squares	DF	Mean Squared	F	Sig
1	Regression	1710.167	3	570.056	8.707	.000
	Residual	4648.579	71	65.473		
	Total	6358.747	74			
2	Regression	2246.648	5	449.330	7.540	.000
	Residual	4112.099	69	59.596		
	Total	6358.747	74			

In the first regression, Depression was regressed onto the three dimensions of Parent Attachment (Affective Quality of Relationships, Parents as Facilitators of Independence, and Parents as Source of Support). This model revealed that these three variables accounted for 27% of unique variance ($R^2 = 0.269$, $p = .000$, F change of

8.707). The second regression regressed Depression onto the two dimensions of God Attachment (Anxiety and Avoidance) while statistically controlling for the effects of Parent Attachment. The entire model accounted for 35% of variance ($R^2 = 0.353$, $p = .045$, $F = 4.501$), with God Attachment accounting for about 8% of unique variance ($\Delta R^2 = 0.084$). This last figure ($\Delta R^2 = 0.084$) is the difference between the R^2 from the two steps or models, and which represents the resultant R^2 , after parent attachment has been controlled for. Therefore, God attachment appears to add unique variance to depression, beyond that accounted for by parent attachment. Moreover, the direction of the relationship between God anxiety/avoidance and depression (positive correlation) indicates that depression scores increase with increasing God anxiety and God avoidance, and therefore with decreasing God attachment. This finding supports the hypothesis that God attachment has the ability to offer some protection against depression in adolescent Christians, after controlling for parent attachment.

Research Question Four

Research question four sought to establish whether God attachment mediates the effects of parent attachment in predicting depression in Christian adolescents. To address this question, a mediation analysis was conducted using the SPSS, in three steps.

Step One:

The first step involved the regression of the Depression scores on the Parent Attachment scores, and the results are reported in Table 8.

Table 8

Regression of Depression on Parent Attachment

	Unstd B	Std Error	Std Coef.	t	Sig	Zero Order	Part. Corr	Part	Coll. Tol
Constant	47.164	5.599		4.423	.000				
Par.Attach	-.150	.031	-.492	-.4826	.000	-.492	-.492	-.492	1.000

Note: Par-Attach = Parent Attachment; God-Attach = God Attachment; Unstd B = Unstandard B; Std Error = Standard Error; Part. Corr = Partial Correlation; Coll = Collinearity Tolerance.

This regression yielded a standard coefficient for parent attachment of -.492. This again demonstrates a strong relationship between parent attachment and depression, as already noted in Research Question 1 above.

Step Two:

The second step involved the regressing of the mediator (God Attachment) on the Parent Attachment scores, and the coefficients are reported in Table 9.

Table 9

Regression of God Attachment on Parent Attachment

	Unstd B	Std Error	Std Coef.	t	Sig	Zero Order	Part. Corr	Part	Coll.
Constant	115.894	11.078		10.462	.000				
Par.Att	-.126	.061	-.234	-2.052	.044	-.234	-.234	-.234	1.000

Note: Par-Att = Parent Attachment; God-Attach = God Attachment; Unstd B = Unstandard B; Std Error = Standard Error; Part. Corr = Partial Correlation; Coll = Collinearity Tolerance.

This regression yielded a standard coefficient of -.234. This demonstrates a significant relationship between parent attachment and God attachment and indicates an overall compensation mechanism, as described in Research Question 2 above.

Step Three

The third step in the mediation analysis involved the regression of the dependent variable (Depression) on the independent variable (Parent Attachment) and the mediator (God Attachment). The coefficients were as shown in Table 10 below:

Table 10

Regression of Depression on Parent Attachment and God Attachment

	Unstd B	Std Error	Std Coef.	t	Sig	Zero Order	Part. Corr	Part Coll.
Constant	30.681	8.553		3.587	.001			
Par-Attach	-.132	.031	-.433	-4.267	.000	-.492	-.450	-.421 .945
God-Attach	.142	.057	.252	2.488	.015	.353	.281	.245 .945

Note: Par-Attach = Parent Attachment; God-Attach = God Attachment; Unstd B = Unstandard B; Std Error = Standard Error; Part. Corr = Partial Correlation; Coll = Collinearity Tolerance.

This simultaneous multiple regression analysis yielded a standard Beta weight for parent attachment of -.433, which is less than the Beta weight of -.492, obtained in Step 1

above. This means that the introduction of the God Attachment variable to the regression has reduced the strength of parent attachment in predicting depression in the studied adolescent population. However, this reduction is not overwhelming, and parent attachment as a predictor of depression remains significant ($\beta = -.433$). Hence, this result is only indicative of a partial mediation, as opposed to a full mediation. To be considered a full mediator, a variable must be able to account for and explain the mechanism of a relationship that it is mediating. In such case, it must sufficiently suppress the Beta weight of that relationship when introduced into the relationship, rendering it statistically insignificant. Hence, to act as a full mediator, God attachment must sufficiently suppress the Beta weight of the relationship between parent attachment and depression from “significant” to “insignificant.” Since God attachment was only able to suppress the Beta weight from .492 (significant) to .433 (significant), it did not satisfy the condition for full mediation. As a partial mediator, God attachment cannot fully account for the relationship between parent attachment and depression. In other words, there must be some other factors and mechanisms that can better explain the relationship.

Summary

The four research questions guiding the present study were explored in this section, and the gathered data were statistically analyzed using the Statistical Package for the Social Sciences (SPSS). Pearson’s product-moment correlation, hierarchical multiple regression, simultaneous multiple regression, and mediation analysis were employed. The results of the analysis support the first hypothesis, which states that a secure child–parent attachment is correlated with reduced depression in adolescents who are Christians. They also support the second hypothesis postulating that an attachment to parents will

influence attachment to God, and that this effect may be exerted through either the correspondence or the compensation pathway. There is also strong support for the third hypothesis, which states that attachment to God will add unique variance to the prediction of depression after accounting for parent attachment, and indicates that attachment to God offers protection against depression in Christian adolescents, as hypothesized. Lastly, the results demonstrate that attachment to God is only a partial mediator of parent attachment in predicting depression in Christian adolescents. Therefore, due to the partial support for the fourth hypothesis only, other factors are likely to play a role in the mechanism of how parent attachment relates to depression.

CHAPTER FIVE: DISCUSSION

Introduction

The results of the data collection and statistical analysis were reported in the previous chapter, and were interpreted in line with the research questions and hypotheses. While the findings supported the first three hypotheses, as stated, they however, did not fully support the fourth hypothesis. A summary of the research findings will be presented in the following sections, followed by a discussion of the issues relating to these findings. Limitations of the study will also be discussed, along with the implications of the present study for psychotherapy and recommendations for topics of future research in this field.

Summary of Findings

Research Question One

The purpose of this study was to determine the exact relationship between child–parent attachment, God attachment, and depression in adolescent Christians. The first research question sought to ascertain if a secure child–parent attachment correlates with reduced depression in adolescent Christians. The correlation matrix in Table 1 presented in Chapter 4 demonstrates that the three dimensions of parent attachment (Affective Quality of Relationships, Parents as Facilitators of Independence, and Parents as Source of Support) all exhibit negative correlation with depression. These results offer strong support of the first hypothesis and indicate that a secure child–parent attachment correlates with reduced depression in adolescent Christians. This finding is consistent with those reported by Borellii et al. (2010), who noted that children with disorganized

attachment tend to report significantly more depressive symptoms compared to children exhibiting organized attachment.

Research Question Two

The second research question sought to determine the exact relationship between parent attachment and God attachment. Thus, it was hypothesized that parent attachment may correlate with God attachment through a correspondence or compensatory mechanism. Regressing the scores for the three dimensions of parent attachment (Affective Quality of Relationships, Parents as Facilitators of Independence, and Parents as Source of Support) on the two dimensions of God attachment (God Anxiety and God Avoidance) yielded two significant correlations from a matrix of six. These two significant correlations demonstrate that Affective Quality of Relationships are negatively correlated with God Avoidance, as well as that Parents as Source of Support are negatively correlated with God Avoidance, or positively with God Attachment (since God Avoidance is inversely related to God Attachment). These two correlations point to a correspondence mechanism. That is, on these two dimensions, adolescent Christians who were securely attached to parents tended to be more securely attached to God.

However, when the combined scores on all three dimensions of parent attachment were regressed on the combined scores on all dimensions of God attachment, the resultant correlation was significant and negative. As explained earlier, this represents a positive correlation with security of God attachment, suggesting a correspondence mechanism. This is consistent with the findings of McDonald et al. (2005), which indicate that parents' spirituality and bonding are associated with attachment to God

dimensions, usually through the correspondence mechanism. That is, overall, adolescent Christians who are more securely attached to their parents tend to be more securely attached to God (correspondence). This observation is also consistent with the findings reported by Granqvist et al. (2007), who also provided support for the correspondence hypothesis and proposed that security attachment is linked to a religion-spirituality, which is socially based on parental relationships.

While other researchers, including Hall et al. (2009), support presence of the correspondence mechanism, the reported correlations only pointed to an overall direction. In other words, they did not elucidate the manner by which adolescents transitioned from a specific parent attachment category to a particular God attachment category. This mechanism was further illuminated in the present study when the participants were divided into four groups based on how they transitioned. The adolescents were deemed correspondence positive if they transitioned from high parent attachment to high God attachment. Those that transitioned from low parent attachment to low God attachment categories were classified as correspondence negative. A third group comprised of those that transitioned from low parent to high God attachment, who were labeled compensatory. Finally, the fourth group demonstrated negative discontinuity, since the participants transitioned from high parent attachment scores to low God attachment scores. The analyses based on this categorization revealed that, although a greater number of participants seemed to exhibit a compensation/negative discontinuity relationship between their parent attachment and God attachment, the overall relationship was statistically determined to be of a correspondence type, with an overall coefficient of $-.234$ at $p = .05$ level of significance. This finding was unexpected, given the results

reported in table 3. However, it must be noted that the statistical model that yielded these results takes into account not only the number of candidates, but the values of their respective scores as well. Therefore, it should not be surprising that the overall relationship is statistically determined to be of a correspondence type.

Research Question Three

The third research question sought to determine if attachment to God offers protection against depression in Christian adolescents, by accounting for unique variance in depression after controlling for attachment to parents. It was hypothesized that God attachment accounts for unique variance and that it protects against depression in adolescent Christians. As described in Chapter 4, hierarchical multiple regression demonstrated that attachment to God appears to add unique variance on depression, beyond that which is accounted for by parent attachment, and that the direction of the relationship between God attachment and depression (positive correlation) indicates that depression scores decrease with increasing God attachment. The hypothesis that God attachment has the ability to offer some protection against depression in adolescent Christians, after controlling for parent attachment, was therefore supported. These findings are consistent with those of Bishop (2008), who demonstrated that attachment to God has a negative influence on depression, and that greater feelings of secure attachment tend to be associated with lower levels of depression. They are also consistent with the findings reported by Rowatt and Kirkpatrick (2002), Balbuena et al. (2013), and Rasic et al. (2013).

Research Question Four

The fourth research question sought to establish whether God attachment mediates the effects of parent attachment in predicting depression in adolescents who are Christians. It was thus hypothesized that God attachment does indeed mediate this relationship. As described in Chapter four, the mediation analysis results are indicative of only a partial mediation, rather than a full mediation, suggesting presence of additional factors that have not been examined in the present study. This assertion is made given that, as a partial mediator, God attachment cannot fully account for the relationship between parent attachment and depression.

Discussion

Relationship between Parent Attachment and Depression in Adolescent Christians

In answering the Research Question 1, the study demonstrated that a secure child–parent attachment correlates with reduced depression in adolescent Christians, thus offering findings consistent with the results of several other studies on the subject. Secure child–parent attachment tends to offer protection against depression not only in adolescents but also in the general population. Empirical evidence shows that it promotes mental health, and has the ability to moderate the impact of stress on psychological wellbeing (Sroufe, 2005). It is associated with positive effects on wellbeing, and with lower levels of depression (Miner, 2009; Shemmings, 2006). Attachment insecurity, on the other hand, has been linked to various psychopathologies, such as depression and anxiety. Children with disorganized attachment tend to report significantly more depressive symptoms compared to children exhibiting organized attachment. Scores for

PTSD, depression, and anxiety tend to increase as one transitions from secure to preoccupied, and to fearful attachment patterns. The pathways to depression can be explained primarily by the types of attributions made in response to interpersonal stressors, and attachment theory may very well explain the negative attribution style that is predictive of depression. Negative attributions and rumination are believed to be mechanisms that may be responsible for the development of depression from insecure attachment processes (Margolese et al. 2005).

This is consistent with the fact that a secure attachment involves having an internal working model of an attachment figure that is reliable and responsive, and of oneself as worthy of love and attention. Securely attached individuals have a tendency to have a positive view of self as well as others, experience lower levels of anxiety and avoidance, and have perceptions of positive self-worth (Ainsworth, 1979; Bowlby, 1969). On the other hand, children with insecure attachment tend to have an internal working model of their caregiver as unresponsive and uncaring, or their environment as dangerous and threatening, and themselves as undeserving of love and a secure attachment (Ainsworth, 1979; Bowlby, 1969; Cordon et al., 2009). They see the world as a dangerous place, and are more likely to develop defenses to deal with what they experience, in the attempts to defend themselves. The defenses are usually incompetent, just as with earliest defenses, and they make the growing child less socially and psychologically competent, and more prone to psychopathologies, both internalizing and externalizing.

From a neuro-biological perspective, attachment patterns and internal working models that are disrupted tend to have long-term deleterious effects on children's

neurobiological systems (Galynker et al., 2012), and that includes increased levels of stress hormones (Oskis et al., 2011; Pierrehumbert et al., 2012). The child–caregiver attunement systems are also disrupted, and this may lead to a child’s negative self-perception, paranoid outlook, distrust of others, or poor affect (emotional) and behavior regulation (Anderson & Gedo, 2013; Shemmings, 2006). As noted earlier, emotional abuse and neglect by attachment figures during infancy and early childhood tends to contribute to the development of insecure attachment (Riggs, 2010). This impairs emotional regulation and fosters negative internal working models of self and others, which initiate and sustain negative coping responses (Riggs, 2010).

Secondly, there is evidence that the neurobiological pathway that is impacted by attachment insecurity is the same as that which is linked to psychopathologies such as depression, and this bridge is likely responsible for the observed relationship between attachment and depression. The neurobiology of attachment offers a means of integrating findings relating to the activation of the Hypophysial-Pituitary-Adrenal (HPA) Axis and the predisposition to depression and other psychiatric disorders (Beatson & Taryan, 2003). Secure attachment acts as a buffer against HPA activation. As infants with insecure attachment lack this buffering effect, they are predisposed to depression and other psychopathologies in response to psychosocial stressors (Beatson & Taryan, 2003).

A similar neurobiological mechanism links attachment organization to Borderline Personality Disorder (BPD). There is growing evidence that interpersonal hypersensitivity, as seen in BPD, represents a trait with genetic components and neurobiological basis in areas of the brain that are closely connected to the meso-limbic areas responsible for attachment behaviors (Gunderson & Lyons-Ruth, 2008).

Parenting and family factors are also very important predictors of problem behaviors in adolescents, and they have the capacity to influence the ways attachment relates with depression and other pathologies. This is why it is believed that the rearing context can have a great impact on children's attachment, and that this fact has implications in the prevention of internalizing and externalizing behaviors of adolescents (Beijersbergen et al., 2012). The relationship between parent attachment and depression among adolescents is similar to that observed in the general population, and it needs to be emphasized that any relationship described in this as well as other sections of this thesis only represents associations or correlations, rather than causal relationships.

Relationship between Parent Attachment and God Attachment in Adolescent Christians

With regard to Research Question 2, the study findings indicate that parent attachment may be related to God attachment through correspondence or compensation, as hypothesized and as predicted by most researchers on this subject. Although the overall process was statistically determined to be more of a correspondence type, categorizing the participants based on how they transitioned indicated that two other processes are also relevant, namely compensation and negative discontinuity. The correspondence model posits that the types of attachment that humans have with other humans correspond to, or are reflected in, the attachments that humans experience with God. That is, the dynamic motivations that underlie one's use and experiences of relationships with God corresponds to, or are reflected in, one's Internal Working Model (IWM) of attachment. As proposed by Bowlby (1988), early attachments and an IWM formed in infancy are stable and perpetuate throughout life, affecting all other

relationships, including relationships with God. Those early relationships become templates for later relationships. Religion or a perceived relationship with God serves both as the haven of safety and the secure base functions of an attachment figure. More importantly, all the most popularly held beliefs about God meet all the criteria of an attachment figure.

On the other hand, the compensation model posits that the attachment humans have with other humans do not correspond to that which humans have with God, and that God is most likely to function as a substitute attachment figure for those who may be experiencing insecure human–human attachment (Hall et al., 2009). Attachment figures of insecurely attached children are less sensitive and, as a result, these children may have an increased motivation to find surrogate attachment figures. The function of God as a substitute attachment figure is similar to that played by teachers, older siblings, or significant adults in the lives of children with insecure attachment to their parents or caregivers (Kirkpatrick, 1998).

There is presently no consensus regarding the mechanisms that are actually at work in explaining the relationships between parent attachment and God attachment. For example, McDonald et al. (2005), Granqvist et al. (2007), and Hall et al. (2009) support the correspondence mechanism. On the other hand, Kirkpatrick and Shaver (1990), Kirkpatrick (1997, 1998), Halam et al. (2013), and Granqvist (2014) are in favor the compensatory mechanism. In the present study, however, adolescents that were categorized as correspondence negative, whereby they had low parent attachment but also failed to develop secure attachment to God, countering the validity of the compensation mechanism. It should be noted that these individuals are also less likely to develop secure

attachments to other surrogate attachment figures, apart from God, and that this may be related to lack of trust for everyone and everything else due to their IWM of insecure pattern of attachment to their parents. This still points to the stability of attachment as proposed by Bowlby.

Relationship between God Attachment and Depression in Adolescent Christians

In addressing the Research Question 3, the present study revealed that God attachment does indeed protect adolescent Christians from depression, and this result is consistent with those of other researchers, such as Rowatt and Kirkpatrick (2002), Bishop (2008), and Balbuena et al. (2013). It is also consistent with Kirkpatrick's description of God as an attachment figure who provides the secure base and safe haven necessary for any attachment to occur. Kirkpatrick and other researchers postulated that, when God functions as a secure base and safe haven, the resultant relationships become assets and act to protect individuals from several mental health conditions, such as depression.

Christians see God as the ultimate source of safety and protection from cosmic forces, since God is perceived to be all-powerful and benevolent. The fact that Christians tend to seek proximity to God, tend to view God as a safe haven in times of difficulty and a secure base for activities in the world, and they protest a perceived separation from God, confirms that attachment to God is similar to human-human attachment (Miner, Dowson, & Malone, 2014). These are the standard elements that make God a true attachment figure. In the same way, actions that normally activate the attachment system in humans, such as illness, threat of separation, or frightening events, also typically activate the human-God attachment system. Conversely, when believers perceive

comforting from God, the attachment mechanism becomes deactivated after they are soothed and are able to resume their previous worldly activities, in pretty much the same way that human–human attachment works (Miner et al., 2014).

An important pathway in the association between God attachment and depression in adolescents is through a positive impact on their self-worth. There is positive relationship between self-concept or self-worth and loving God images, and a negative relationship between self-concept or self-worth and rejecting God images, among adolescents. Since self-worth is well known to be inversely related to depression scores (Sargent et al., 2006), it is easy to reach the conclusion that God image or attachment is also inversely related to depression. There are significant positive correlations between church attendance and general life satisfaction on the one hand, and between belief salience and general life satisfaction on the other. However, since general life satisfaction and depression usually exhibit a negative linear relationship, it is possible to infer that church attendance may be associated with reduced depression symptoms (Leondari & Gialamas, 2009).

However, some researchers are concerned about the primacy or direction of this relationship, and specifically with the exact direction of the observed correlation. For example, Sim and Yoh (2011) observed a positive relationship between God attachment and depression, which prompted them to posit that, in some adolescents, the opposite direction may be at play. That is, for these adolescents, their safe haven processes are activated when they are depressed or have lost hope, which is when they become particularly close to God. Similarly, Petts and Jolliff (2008) observed that religious participation and religious importance indirectly reduces depressive symptoms by

enhancing social support for youth, but that this relationship may be unique for Latino and Asian adolescents. Surprisingly, in Asian adolescents, religious participation and importance were associated with increased depression.

It is presently not fully understood how demographics such as ethnicity and gender affect the relationship between God attachment and depression. However, available evidence suggests that a negative correlation exists between religiousness (both internal and external) and depression for African Americans, but not for Hispanic, Asian, or Native Americans (Le et al., 2007).

God Attachment in Mediation of Parent Attachment and Depression

As was noted in Chapter 4, the results yielded by the present study demonstrated that God attachment is only a partial mediator in the overall relationship between parent attachment and depression in adolescent Christians. This finding should not be surprising because attachment to God usually develops long after attachment to parents is formed. Therefore, attachment to God should not be expected to explain the mechanism of the correlation between parent attachment and depression. It would be more intuitive to expect that parent attachment would mediate the relationship between God attachment and depression, rather than the other way around. In other words, there is no sound theoretical basis for the hypothesis that God attachment is likely to mediate the relationship between parent attachment and depression. Researchers such as Miner (2009) and Straub (2009), who have conducted studies relating to God attachment and mediation, took note of this primacy effect and arranged their variables accordingly.

Limitations of the Study

As a result of the cross-sectional nature of the study, it is impossible to draw conclusions on how an individual's developmental trend impacts the relationships between the studied variables. This can only be done through a longitudinal study. Secondly, because this is a correlation study, and not an experimental study, it is impossible to make causal inferences about the relationships between the variables. Thirdly, because this was a small-sample study, with participants drawn from a few local churches in northeast New Jersey, generalizing the results to other societies may be difficult. For example, the results may be different in other societies that do not support freedom of religion as we have it in New Jersey and in most other Western societies. The results may also be different if the study is conducted on a population with very different demographic mix, culture, and institutional belief system. Fourth, this study did not take into account possible effects of demographic factors such as age, gender, ethnicity, race, and socio-economic factors on depression scores. Similarly, it did not take into account possible events in the lives of the participants, outside of the studied variables, such as parental separation or divorce, trouble with schoolwork, and relationship difficulties with friends. Although the importance of these factors was acknowledged, controlling for them in the analyses was not possible, as this would have complicated the research design and choice of participants. Fifth, studies and literature on God attachment have almost exclusively focused on Christianity. As a result of this focus, it is difficult to ascertain how discussions on God attachment would play out with other religions such as Judaism, Islam, and Hinduism. Lastly, relationships or attachment to God among various Christian

traditions are known to vary tremendously. It is therefore uncertain how this will affect the results of the study.

Implications for Psychotherapy

This study, the findings yielded, and the resulting conclusions are highly significant for psychotherapy. They have helped to shed light on the relationship between parent attachment, God attachment, and depression in adolescents that are Christians, and they will constitute great resource for therapists, social workers, pastors, parents, and others. Earlier in this work, Internal Working Model (IWM) was described as a set of thoughts, emotions, beliefs, and expectations about the self and others, in which self may be considered worthy or unworthy of love and attention, and others considered reliable/trustworthy or unreliable/untrustworthy. A child with an insecure attachment perceives the world as unloving, unreliable, untrustworthy, dangerous, and threatening. He or she also perceives self as unworthy of love and attention. These perceptions have serious implications in psychotherapy, as they have the potential to predispose individuals to several personality disorders, such as dependent, histrionic, and borderline personality disorders, as well as other pathologies such as depression and anxiety.

Extant research demonstrates that children with secure attachment tend to be more resilient, self-reliant, socially oriented, empathic to distress, and with deeper relationships than those with insecure attachment histories, and that secure attachment tends to offer immunity against depression. The results of this study also indicate that secure parent attachment and God attachment offer adolescents protection against depression. Therefore, any attempt to understand and treat depression in adolescent clients should

include gaining a good understanding of their attachment histories. Clients can be educated during therapy about their attachment patterns and how these can stand in their way of achieving fulfilling relationships, presently and in the future. They can be taught new ways of relating that will help minimize the impact of their insecure attachment histories. They can be trained to understand that God functions as a substitute attachment figure and that belief in Him has the capacity to elicit feelings of security, safety, and confidence that they may have been unable to obtain from the world.

Those exhibiting anxious attachment patterns may have their relationships shaped by anxiety and may see others as capable of loving them, and yet not feel worthy of that love and attention. They may be fragile, needy, feel incompetent, have self-doubt, and live in constant fear of rejection. Yet, therapy can help bring these feelings to the surface and encourage clients to work on them. According to Clinton and Straub (2010), it is possible for individuals who have anxious attachment to muster the courage to be strong and to gain more beneficial perception of the love of God, allowing them to start believing that they are truly worthy of His love. They can gain a healthy sense of independence, through therapy, such that they can learn to relate to people without fear or control, and acquire the wisdom to see through the deceptive message that they are somehow not worthy of love (Clinton & Straub, 2010).

Recommendations for Further Research

It is not exactly certain how some demographics such as race, ethnicity, religious affiliation, and gender would affect the relationship between God attachment and depression, and between parent attachment and depression. Thus, it is recommended that

further studies be conducted to determine the exact impact. Secondly, in this study, the question of whether God attachment serves as a mediator in the relationship between parent attachment and depression was examined. Future studies in this field should thus aim to determine if parent attachment may serve as a mediator in the relationship between God attachment and depression. Thirdly, it is recommended that larger sample sizes be used in future research to enhance the effect sizes and statistical power.

Fourth, samples employed in future research should comprise of participants from wider geographic regions in order for results and conclusions to pertain to a more diverse demographic mix, culture, and institutional belief systems. Moreover, authors of future studies should examine the dynamics of the relationships between parent attachment, God attachment, and depression among members of other major religions, such as Judaism, Islam, and Hinduism. Since Christianity is not a monolithic religion, it is also recommended that these relationships be examined within the context of each of the major Christian traditions. Fifth, longitudinal studies are recommended in order to gain knowledge of developmental trends involving Christian adolescents, attachment, and depression. Lastly, further research should focus on how parent attachment and God attachment affect depression among other age groups (apart from adolescents), as well as how they impact other mental health conditions such as anxiety and PTSD.

Conclusion

The present study aimed to explicate the relationships between parent attachment, God attachment, and depression in adolescent Christians. Although much work has been done and reported in literature on depression in adolescents and the impact on various

factors, few studies have explored the role of attachment theory. However, no work specifically focusing on Christian adolescents has been conducted to date. This study has sought to fill this gap in the empirical literature. To do so, it has drawn from the great treasure deposited in literature by scholars such as Bowlby, Ainsworth, Kirkpatrick, Shaver, Granqvist, McDonald, Shaw, and several others. It was predicted that secure parent and God attachment would have positive effects on depression, and that God attachment would mediate the effects of parent attachments on depression in Christian adolescents.

Participants were drawn from some ministries in the northeast New Jersey area, and they were surveyed using various instruments. The results were analyzed using SPSS, and statistical analysis demonstrated that parent attachment and God attachment have a tendency to offer protection against depression in adolescent Christians. It further revealed that parent attachment is related to God attachment through either the correspondence or the compensatory pathway, as hypothesized. The findings, however, supported God attachment as a partial mediator only, rather than a full mediator of the relationship between parent attachment and depression. It is hoped that this work will inspire other researchers to extend their efforts toward finding comfort for the adolescent Christian population plagued with depression that may be related to attachment and relationship difficulties.

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Protocol # 2388.011116

PARENT/GUARDIAN CONSENT FORM

The Effects of Child-Parent Attachment and God Attachment on
Adolescent Christians
Solomon Aifuwa
Liberty University
Center for Counseling and Family Studies

Your child/student is invited to be in a research study of how child-parent attachment and God attachment impact depression in adolescent Christians. He or she was selected as a possible participant because he/she is an adolescent who is a Christian. Candidates considered for this study are adolescents between the ages of 13 and 18 (inclusive) who are not currently on medications for depression or will not be on them two months prior to the study. I ask that you read this form and ask any questions you may have before agreeing to allow him or her to be in the study.

I, Solomon Aifuwa, a doctoral candidate in the Center for Counseling and Family Studies at Liberty University, am conducting this study.

Background Information:

The purpose of this study is to determine if a secure child-parent attachment is associated with reduced depression, how attachment to parents affects attachment to God, if attachment to God protects adolescents from depression, and how attachment to God can impact the relation between attachment to parents and depression.

Procedures:

If you agree to allow your child/student to be in this study, I would ask him or her to do the following things:

1. To take part in a survey, and complete three assessment instruments
2. This is expected to take approximately 60 minutes.
3. Data collected will be anonymous, and will not include names or any identifying information.
4. No video or audio recording will take place

Risks and Benefits of being in the Study:

The risks involved in this study: There is no risk involved in taking this survey

The benefits to participation are: Participants may not directly receive benefits or compensation from participating in the study. But the benefit to society will be enormous. From the study, this researcher hopes to get a better understanding of how child-parent attachment and God attachment will impact depression. This knowledge will aid in addressing this potentially life-threatening mental health condition (depression) in the society at large.

Compensation:

Your child will receive NO direct compensation for taking part in this study.

The Liberty University Institutional
Review Board has approved
this document for use from
1/11/16 to 1/10/17
Protocol # 2388.011116

Confidentiality:

The confidentiality of participants will be respected and stressed throughout the study. During the collection of data and completion of surveys, participants will not be expected to insert their names on any survey/assessment material. The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify a subject. Research records will be stored securely in a locked cabinet and only the researcher will have access to the records.

Voluntary Nature of the Study:

Participation in this study is voluntary. Your decision whether or not to allow your child/student to participate will not affect his or her current or future relations with Liberty University. If you decide to allow your child/student to participate, he or she is free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions:

The researcher conducting this study is Solomon Aifuwa. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact him at (732) 672 0798 or email address: siromex2@yahoo.com. You may also contact the research's faculty advisor, Dr. Jeanne Brooks, at jupchurch@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd, Carter 134, Lynchburg, VA 24515 or email at irb@liberty.edu.

Please notify the researcher if you would like a copy of this information to keep for your records.

Statement of Consent:

I have read and understood the above information. I have asked questions and have received answers. I consent to allow my child/student to participate in the study.

(NOTE: DO NOT AGREE TO ALLOW YOUR CHILD/STUDENT TO PARTICIPATE
UNLESS IRB APPROVAL INFORMATION WITH CURRENT DATES HAS BEEN
ADDED TO THIS DOCUMENT.)

Signature of minor: _____ Date: _____

Signature of parent or guardian: _____ Date: _____

Signature of Investigator: _____ Date: _____

APPENDIX B: CENTER FOR EPIDEMIOLOGICAL STUDIES
DEPRESSION SCALE FOR CHILDREN (CES-DC)

The Center for Epidemiological Studies Depression Scale for Children can be found at:

https://www.brightfutures.org/mentalhealth/pdf/professionals/bridges/ces_dc.pdf.

APPENDIX C: PARENTAL ATTACHMENT QUESTIONNAIRES (PAQ)

The following pages contain statements that describe family relationships and the kinds of feelings and experiences frequently reported by young adults. Please respond to each item by filling in the number on a scale of 1 to 5 that best describes your parents, your relationship with your parents, and your experiences and feelings. Please provide a single rating to describe your parents and your relationship with them. If only one parent is living, or if your parents are divorced, respond with reference to your living parent or the parent with whom you feel closer.

1	2	3	4	5
Not at All (0-10%)	Somewhat (11-35%)	A Moderate Amount (36-65%)	Quite A Bit (66-90%)	Very Much (91-100%)

In general, my parents.... .

- | | |
|--|---|
| ___ 1. are persons I can count on to provide emotional support when I feel troubled. | ___ 15. have provided me with the freedom to experiment and learn things on my own. |
| ___ 2. support my goals and interests. | ___ 16. are too busy or otherwise involved to help me. |
| ___ 3. live in a different world. | ___ 17. have trust and confidence in me. |
| ___ 4. understand my problems and concerns. | ___ 18. try to control my life. |
| ___ 5. respect my privacy. | ___ 19. protect me from danger and difficulty |
| ___ 6. restrict my freedom or independence. | ___ 20. ignore what I have to say. |
| ___ 7. are available to give me advice or guidance when I want it. | ___ 21. are sensitive to my feelings and needs |
| ___ 8. take my opinions seriously. | ___ 22. are disappointed in me. |
| ___ 9. encourage me to make my own decisions. | ___ 23. give me advice whether or not I want it. |
| ___ 10. are critical of what I can do. | |

- ___ 11. impose their ideas and values on me. ___ 24 respect my judgment and decisions,
even if different from what they would
- ___ 12. have given me as much attention as I want.
have wanted
- ___ 13. are persons to whom I can express ___ 25. do things for me, which I could do
differences of opinion on important matters. for myself.
- ___ 14 have no idea what I am feeling or ___ 26. are persons whose expectations I
thinking. feel obligated to meet.
- (go to next column) ___ 27. treat me like a younger child.

1	2	3	4	5
Not at All (0-10%)	Somewhat (11-35%)	A Moderate Amount (36-65%)	Quite A Bit (66-90%)	Very Much (91-100%)

During recent visits or time spent together, my parents were persons. . .

- ___ 28. I looked forward to seeing. ___ 36. to whom I enjoyed telling about the things I
have done and learned.
- ___ 29. with whom I argued. ___ 37. for whom I felt a feeling of love.
- ___ 30. with whom I felt relaxed and ___ 38. I tried to ignore.
comfortable.
- ___ 31. who made me angry. ___ 39. to whom I confided my most personal
thoughts and feelings.
- ___ 32. I wanted to be with all the ___ 40. whose company I enjoyed.
time.
- ___ 33. towards whom I felt cool ___ 41. I avoided telling about my experiences.
and distant.
- ___ 34 who got on my nerves.
- ___ 35. who aroused feelings of
guilt and anxiety.
(go to next column)

Following time spent together, I leave my parents. . .

___42. with warm and positive feelings. (go to next column) ___43. feeling let down and disappointed by my family.

When I have a serious problem or an important decision to make. . .

___44. I look to my family for support, encouragement, and/or guidance.	___47. I work it out on my own, without help or discussion with others.
___45. I seek help from a professional, such as a therapist, college counselor, or clergy.	___48. I discuss the matter with a friend.
___46. I think about how my family might respond and what they might say. (go to next column)	___49. I know that my family will know what to do.
	___50. I contact my family if I am not able to resolve the situation after talking it over with my friends.

When I go to my parents for help. . .

___51. I feel more confident in my ability to handle the problems on my own.	___54. I feel confident that things will work out as long as I follow my parent's advice.
___52. I continue to feel unsure of myself.	___55. I am disappointed with their response.
___53. I feel that I would have obtained more understanding and comfort from a friend. (go to next column)	

APPENDIX D: THE ATTACHMENT TO GOD INVENTORY (AGI)
(Beck & McDonald, 2004)

The following statements concern how you feel about your relationship with God. We are interested in how you generally experience your relationship with God, not just in what is happening in that relationship currently. Respond to each statement by indicating how much you agree or disagree with it. Write the number in the space provided, using the following rating scale:

1	2	3	4	5	6	7
Disagree			Neutral/Mixed			Agree
Strongly						Strongly

- _____ 1. I worry a lot about my relationship with God.
- _____ 2. I just don't feel a deep need to be close to God.
- _____ 3. If I can't see God working in my life, I get upset or angry.
- _____ 4. I am totally dependent upon God for everything in my life. (R)
- _____ 5. I am jealous at how God seems to care more for others than for me.
- _____ 6. It is uncommon for me to cry when sharing with God.
- _____ 7. Sometimes I feel that God loves others more than me.
- _____ 8. My experiences with God are very intimate and emotional. (R)
- _____ 9. I am jealous at how close some people are to God.
- _____ 10. I prefer not to depend too much on God.
- _____ 11. I often worry about whether God is pleased with me.
- _____ 12. I am uncomfortable being emotional in my communication with God.
- _____ 13. Even if I fail, I never question that God is pleased with me. (R)
- _____ 14. My prayers to God are often matter-of-fact and not very personal.*
- _____ 15. Almost daily I feel that my relationship with God goes back and forth from "hot" to "cold."
- _____ 16. I am uncomfortable with emotional displays of affection to God.*
- _____ 17. I fear God does not accept me when I do wrong.
- _____ 18. Without God I couldn't function at all. (R)
- _____ 19. I often feel angry with God for not responding to me when I want.
- _____ 20. I believe people should not depend on God for things they should do for themselves.
- _____ 21. I crave reassurance from God that God loves me.
- _____ 22. Daily I discuss all of my problems and concerns with God. (R)
- _____ 23. I am jealous when others feel God's presence when I cannot.
- _____ 24. I am uncomfortable allowing God to control every aspect of my life.
- _____ 25. I worry a lot about damaging my relationship with God.
- _____ 26. My prayers to God are very emotional. (R)
- _____ 27. I get upset when I feel God helps others, but forgets about me.
- _____ 28. I let God make most of the decisions in my life. (R)

Scoring:

Avoidance = sum of even numbered items

Anxiety = sum of odd numbered items

Items 4, 8, 13, 18, 22, 26, and 28 are reverse scored

* Researchers may want to consider dropping these items (14 and 16)

APPENDIX E: PERMISSION TO USE AND REPRODUCE AGI

RJ

Richard Beck Jr. <beckr@acu.edu>

Today, 4:42 AM

Hi Solomon,

Yes, please feel free to use the AGI for all your research purposes.

Grace and peace,

Richard

AO

Aifuwa, Solomon O

Today, 1:20 AM

Good evening Dr. Beck,

My name is Solomon Aifuwa, and I am a doctoral candidate at Liberty University, in Lynchburg, Virginia. I am writing to request permission to use the Attachment to God Inventory, that was developed by you and Dr. Angie McDonald, as a survey instrument in my research and dissertation. Thank you very much.

Solomon Aifuwa
Doctoral Candidate
Pastoral Care and Counseling
Liberty University

Permission to Use The Attachment to God Inventory For Research and Dissertation

AO

Aifuwa, Solomon O

Today, 5:03 AM

Good evening Dr. Beck,

Thank you very much for the permission to reproduce the Attachment to God Inventory (AGI) in my dissertation. I have referenced the scale in the dissertation as follows:

Beck, R., & McDonald, A. (2004). Attachment to God: The attachment to God Inventory, tests of working models correspondence, and an exploration of faith group differences. *Journal of Psychology and Theology*, 32(2), 92-103.

Thank you.

Solomon Aifuwa

RB

Richard Beck <beckr@acu.edu>

1

Sat 12/17, 2:21 PM

Hi Solomon,

That would be fine. I'd only ask that the reference for the AGI be included in any reproduction of the scale.

Richard

Richard Beck, PhD
Abilene Christian University
ACU Box 28011
Abilene, TX 79699
beckr@acu.edu
325.674.2310

AO

Aifuwa, Solomon O

Reply all

Permission to Use The Attachment to God Inventory For Research and Dissertation

Sat 12/17, 3:34 AM
 Richard Beck Jr. <beckr@acu.edu>
 Sent Items

Good evening Dr. Beck,

Thank you again for the permission to use The Attachment to God Inventory (AGI) for my research at Liberty University. Please I am contacting you again because I would like to ask permission to reproduce the survey in my dissertation. After defending my dissertation, my program requires me to submit it for publication in the Liberty University open-access institutional repository, The Digital Commons, and in the ProQuest Thesis and Dissertation subscription research database.

Thank you for your consideration in this matter.

Solomon Aifuwa
 Liberty University.

Thank you.

Solomon Aifuwa

Richard Beck <beckr@acu.edu>

Sat 12/17, 2:31 PM

Hi Solomon,

That would be fine. I'd only ask that the reference for the AGI be included in any reproduction of the scale.

Richard

Richard Beck, PhD
 Abilene Christian University
 ACU Box 28011
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 817.674.2310

Aifuwa, Solomon (1)

Reply all

APPENDIX F: PERMISSION TO REPRODUCE PARENTAL ATTACHMENT QUESTIONNAIRE (PAQ)

Permission to reproduce the Parent Attachment Questionnaire in Dissertation

AO

Aifuwa, Solomon O

Today, 6:08 AM

Good morning Dr. Kenny,

Thank you very much for the permission to reproduce the Parental Attachment Questionnaire. The scale will be referenced in my dissertation as follows:

Kenny, M. (1987). *Parental Attachment Questionnaire*. Retrieved April 16, 2016.

From <https://www2.bc.edu/~kennym/PAQ.html>.

Thanks.

Solomon Aifuwa

MK

Maureen Kenny <kennym@bc.edu>

Sat 12/17, 2:29 PM

You have my permission to reproduce the Parental Attachment Questionnaire in your dissertation.

Congratulations on concluding your research!

Best,

Maureen Kenny, PhD
Boston College

Sent from my iPhone

AO

Aifuwa, Solomon O

Reply all

Sat 12/17, 3:51 AM

kennym@bc.edu

Good evening Dr. Kenny,

My name is Solomon Aifuwa, and I have just concluded my research at Liberty University, on the effects of child-parent attachment and God attachment on depression in adolescent

Christians. Please I am contacting you because I would like to ask permission to reproduce the Parent Attachment Questionnaire in my dissertation. After defending my dissertation, my program requires me to submit it for publication in the Liberty University open-access institutional repository, The Digital Commons, and in the ProQuest Thesis and Dissertation subscription research database.
Thank you for your consideration in this matter.

Solomon Aifuwa
Liberty University.
