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The impact of perfectionism on well-being: Shame in perfectionism's influence on emotion regulation

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A TRANSFORMATIVE RELATIONSHIP WITH GOD:
ATTACHMENT STYLE, IDENTITY FORMATION, AND THE OBJECT
RELATIONSHIPS OF EMERGING ADULTS RAISED IN CATHOLIC HOMES

BY

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Abstract

Emerging adulthood is a critical time of development. Attachment research and theory indicate clear links between attachment and identity formation, and between attachment and object relations development. However, research investigating God as an additional attachment figure and the influence this role may have on identity formation and developing object relationships is limited. This study explored the relationships between attachment security, identity achievement, and adaptive object relations and the impact of a secure attachment to God in a sample of 200 Catholic, non-clinical emerging adults from the New York Metro area. Additionally, while past studies relied on self-report measures of attachment and object relations, this study incorporated an implicit method of narrative writing to more thoroughly evaluate experiences of influential object relationships. Results demonstrated an overall mediating effect, whereby a secure attachment to God partially explained the positive relationship between early secure attachment experiences and the achievement of a healthy identity, as well as the formation of explicit adaptive object relationships. Post hoc analyses focused on a model of the mediating effect of a secure attachment to God on attachment security and implicit adaptive object relations. Meaningful effects were revealed on certain paths of the model, including the direct effect of attachment security on adaptive object relations as well as the direct effect of attachment security on attachment to God security. Together, findings indicate the unique contribution of a secure attachment to God on the development of identity and adaptive object relationships in Catholic emerging adults.

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Chapter I

Introduction

Emerging adulthood is the prolonged transition from adolescence to adulthood, extending through one's 20s. It is a critical time of identity exploration, instability, and relationship development (Arnett, 2007). Venturing out into the world allows emerging adults to encounter people of differing cultures and faiths. One's identity may be highly dynamic during this time, integrating the newly introduced viewpoints or rejecting those imparted from primary caregivers (Marcia, 1980). Concurrently, an emerging adult encounters a wide range of new, meaningful relationships, including, for some, a relationship with God. The formation of new relationships may disrupt both the relationship development and identity achievement processes started in childhood (Brokaw & Edwards, 1994).

Identity functions as one of the fundamental organizing principles that develops over the lifetime; the achievement of a stable identity provides a sense of continuity within the self and in interactions with others. The identity achievement process begins in adolescence and occurs as a slow process of ego growth (Erikson, 1968). Erikson posited the developmental phase occurs solely during adolescence; however, other theorists argue that the process does not end until emerging adulthood for modern, young people in industrialized societies (Arnett, 2000). The extension of the identity achievement period may be due to the emergence of the emerging adulthood stage over the past 50 years (Arnett, 2000). This period is characterized as the time after the dependency of childhood and adolescence and before enduring responsibilities that are normative in adulthood (i.e., marriage); during this stage, identity development continues (Arnett, 2000). For many

emerging adults, the implicit questions become, “Who am I, what do I value in a relationship, and to whom can I turn for support?”

Emerging adults are influenced by their caregivers’ belief systems and newly-encountered perspectives when developing an identity. Some emerging adults can integrate all of the belief systems to emerge from this developmental stage with a well-formed identity structure. The achievement of identity formation, characterized by an integrated belief system with flexible and adaptive functioning, plays an important developmental role. Several aspects are affected, including self-esteem, the realistic appraisal of the self and others, and the development of insight into the effect that one has on others. By contrast, some do not settle on a set of beliefs. Continued exploration, or identity diffusion, is considered a lack of integration of the concept of the self and significant others (Erikson, 1968). Diffusion often leads to a broad spectrum of maladaptive and dysfunctional behaviors. Therefore, identity functions as a frame to differentiate the self from others to function autonomously (Schlüter-Müller, Goth, Jung, & Schmeck, 2015).

When emerging adults branch out, the attachment to and relationship with primary caregivers influence the formation of new relationships. Those with healthy, nurturing early experiences with primary caregivers have fundamentally different perspectives from those who had tumultuous, unsupportive foundational interactions (Stroebe & Stroebe, 1996). There are a multitude of theoretical similarities between attachment theory and object relations theory (Levy, Blatt, & Shaver, 1998). Both emphasize that early relationships influence an understanding of oneself and others. Also, the quality and nature of the interactions with primary caregivers become a mental

representation of a relationship; this is an internalized representation of oneself or another. The internalized representations guide how one perceives, conceptualizes, and experiences relationships (Stein, Siefert, Steward, & Hilsenroth, 2011). The result is internal working models composed of cognitive, motivational, affective, and behavioral parts of the representations (Levy et al., 1998).

Primary caregivers have a strong influence on the child's development of these models, and both theories hold that experiences of reunion, separation, and loss play a role in the creation and activation of these models (Steele & Steele, 1998). In addition to theoretical similarities, both attachment theory and object relations theory have informed conceptualizations of psychopathology that may guide psychotherapeutic treatment (Farber, Lippert, & Nevas, 1995). Despite the similarities between the two theories, data suggest they are related but distinct constructs; therefore, it is essential to examine associations between the two fields to better understand the relationships (Cassidy & Shaver, 2008).

During the phase of emerging adulthood, a wider range of relationships function to influence self-reflection about personal history and desires for the future (Arnett, 2007). The formation of new relationships foster identity achievement, attachment, and object relations processes (Brokaw & Edwards, 1994). As emerging adults begin to form independent, differentiated beliefs, they may do so regarding their faith. A child often learns about God through primary caregivers; therefore, the initial perceived concept of God and relationship with God is a co-construction by the child and the caregivers (Grandqvist, 2016).

While early interactions with caregivers are highly influential, they do not directly determine one's relationship with God. As part of the identity achievement process, some emerging adults often discover or rebuild a relationship with God (Ebstynne King, 2003) such that God is an involved presence that functions as an attachment figure and secure base. For those with early attachment insecurity, a relationship with God may positively influence the connection between early attachment experiences and identity achievement, as well as one's current view of others. For others, God may be absent or be an all-powerful force uninvolved in one's daily life. Rejecting God can be a way of separating from the family and its value system during this period of identity formation. As compared to relations with primary caregivers, an attachment to God is perceived to be a uniquely supernatural relationship (Beck, 2006). In this case, an exploration of the identity might also manifest itself within the metaphysical sphere; an emerging adult might explore both faith and an existential existence. These explorations might also be affected by the quality of the attachment bond with God.

A healthy relationship with God may positively influence the connection between early attachment experiences and identity achievement, as well as his/her current view of others. The nature and quality of his/her early interactions (attachments) guide how he/she perceives, experiences, and conceptualizes others (object relations) (Stein et al., 2011). A healthy relationship with God may influence early maladaptive attachment patterns by providing safety and security not provided by loved ones. Both theoretical (Beit-Hallahmi & Argyle, 1975) and empirical (Miner, 2009) literature have suggested that God may serve as a surrogate, or substitute, attachment figure in the absence of secure relationships with caregivers. Research has revealed conflicting results as to

whether God's role is similar to primary caregivers (correspondence hypothesis) or as an additional, adaptive attachment figure (compensation hypothesis) (Beck, McDonald, Allison, & Norsworthy, 2005).

Based on the findings, the current study aimed to explore attachment to God as a potential mediator in the relationship between attachment style and both identity achievement and relationships with others (Kirkpatrick, 2005). Unlike past studies that relied on primarily self-report measures of attachment and relationships (Stein et al., 2011), this study incorporated an implicit method of narrative coding of social cognition and relationships to thoroughly evaluate the constructs without social norms and conscious biases that tend to influence participant responses.

There is considerable literature on the early influential relationships of emerging adults from a range of religious affiliations (Hackney & Sanders, 2003). In the United States, Catholics represent approximately a quarter of the population (Skirbekk, Stonawski, & Goujon, 2011). Catholic teaching also conveys a paternal, two-way relationship with a God. In this relationship, one communicates with God (e.g., through prayer) and God may intervene in one's life in a positive manner (Beit-Hallahmi & Argyle, 1975). This compares to other Christian denominations or religions whose teachings convey a one-way relationship with God, in which one may communicate with God, but God does not respond. Therefore, it is valuable to investigate if a perceived attachment to God can influence the relationship between attachment with primary caregivers and identity as well as attachment and quality of object relations. While this study could be applied to a wide range of faiths, the study was designed to lead to better understanding of emerging adults raised in Catholic homes.

The purpose of this study was to replicate and expand on previous work on how secure attachments relate to the development of both an identity and object relationships. In a sample of emerging adults raised in a Catholic home (received sacrament of Confirmation before age 18, it was hypothesized that a secure Attachment to God (Attachment to God Security) had an impact on primary caregiver attachments (Attachment Security) and Identity Achievement. Further, it was hypothesized that Attachment to God Security mediated Attachment Security and adaptive experiences of relationships (Explicit Adaptive Object Relations).

Chapter II

Literature Review

This section contains a review of the theoretical and empirical literature on the influence of a relationship with God during emerging adulthood. The literature on the development of one's identity during the period of emerging adulthood is presented first. The psychological concept of *Identity Achievement* was introduced previously and will be defined in this section. In this section, pertinent work on the contribution of early attachments on identity formation is explored. A definition of *Attachment Security* is provided. A summary of the findings on the reciprocal role of relationship formation on identity development is presented. This section also contains studies investigating the relationship between a religious belief system and the development of an identity. Next, a summary of the evidence from studies on emerging adulthood and object relationships is presented, including a definition of *Adaptive Object Relations*. The final section includes a summary of the existing psychoanalytic ideas on an attachment to God and a review of current empirical findings on an object relationship with God during emerging adulthood. Also in the final section, the broader psychological concept of *Attachment to God Security* is described.

Emerging identity

During emerging adulthood, many individuals attempt to understand who they are and how they relate to the world (Arnett, 2007). Due to sweeping demographic shifts over the past half-century, the developmental trajectory has changed. The period from late teens to early twenties shifted from a brief period of transition into adult roles to a more critical period of the life course, characterized by exploration of possible life

directions (Arnett, 2000). A defining feature of emerging adulthood is a great deal of demographic variability (e.g., level of income), reflecting the full scope of individual volition during these years (Wallace, 1995). Until age 18, a variety of critical demographic areas show little variation (including marriage, living situation, enrollment in school). From ages 18 to 29, however, these areas prove very difficult to predict based on age alone (Arnett, 2000). The demographic diversity and unpredictability of emerging adulthood is a reflection of the exploratory quality of the period.

Studies on 18-29-year-olds indicate emerging adults are a distinct group, in that they use more internal and individualistic qualities as criteria for adulthood; this includes taking responsibility for one's actions, independent decision making, and gaining financial independence from parents. The group (a) is becoming increasingly devoted to individualistic-oriented goals; (b) is experimenting with work, worldviews, and relationships; (c) lacks specific transitional roles that prepare them for adulthood; (d) is entering into highly intimate, nonmarital relationships; and (e) is engaging in high rates of risky behaviors, such as unprotected sexual intercourse and illegal drug use (Nelson & Barry, 2005). As they reach this new developmental stage, many emerging adults question who they are and whom they want to be.

In *Identity, Youth, and Crisis* (1968), Erikson describes identity formation as one of many normative crises, or a normal phase of increased conflict involving a fluctuation of ego strength with high growth potential. Normative crises are fundamentally different from neurotic or psychotic crises that involve a waste of defensive energy and deepened psychological isolation (Erikson, 1968). One normative crisis is an identity crisis, described as a turning point in development, allowing for recovery, growth, and

differentiating from his/her caregivers (Erikson, 1968). An identity crisis is a turning point in development, during which there exists a dialectic of identity versus role confusion. A commitment to beliefs or, conversely, an exploration of others' viewpoints, is the central area for defining identity. Part of emerging adults' struggle is the psychological desire to preserve a continuity of their identity over time but remain open to change (Harter, 1990). This period of identity integration is a formidable developmental task. Not resolving the identity crisis and achieving a resolved belief system may impact several life domains. Role confusion may adversely impact immediate and long-term goals, stability in relationships, and emotional self-reflection (Schlüter-Müller, Goth, Jung, & Schmeck, 2015).

Many emerging adults move away from home and engage with others from new and different cultures, family backgrounds, and religious beliefs. Emerging adults face differing perspectives and challenges to their identities. During this time, the emerging identity supports understanding early experiences with primary caregivers in the context of a larger culture. In Western cultures, emerging adulthood involves independent role exploration and the continued formation of an identity from adolescence (Arnett, 2007). When an emerging adult shares early childhood memories with others, one may realize how parent-child interactions may differ; these realizations increase their sense of intersubjectivity (Arnett, 2007). During this time, identity also defines potential social roles the emerging adult first encounters in young adulthood (Erikson, 1963).

Marcia's (1966) identity status model emerged from Erikson's (1963) theoretical writing on identity. As painful and challenging as identity changes may be, they are a natural, unavoidable, and critically important part of development (Marcia, 1980). Marcia

posited the ability to make commitments to beliefs as the central feature of optimal identity achievement, and that an identity crisis/exploration phase is essential in the process of undertaking identity commitments (see Table 1).

Identity Achievement is defined as a developmental milestone occurring when the dependency of identification with others ends; this happens after selectively rejecting and assimilating childhood identifications with new identifications (Marcia, 1980). Belief systems developed in childhood are gradually replaced by a new identity configuration that is greater than the sum of its parts (Erikson, 1968). A healthy and consolidated identity has flexible and adaptive functioning; it functions as the foundation of the self-reflecting process that allows for predictability and continuity of functioning within a person, across interactions, and over time (Schlüter-Müller et al., 2015).

The less developed the identity structure, the more confused the individual becomes of their distinctiveness, and the higher the likelihood is to rely on others for evaluation. Identity diffusion, according to this model, is specified as a lack of integration of the concept of the self and significant others (Kroger, Martinussen, & Marcia, 2009). During this phase, there is an expected movement out of the identity diffusion status into the identity achievement status (Waterman, 1999). While some emerging adults maintain rigid childhood belief systems, others continue to explore perspectives, and those who reach identity achievement integrate caregivers and personal viewpoints into their own identity structure (Marcia, 2006). Not achieving a resolved belief system may influence several life domains, including immediate and long-term goals, stability in relationships, and emotional self-reflection (Schlüter-Müller et al., 2015). Further, a lack of resolution of these crises often result in symptoms of personality disorders, such as low self-esteem,

Table 1

Definitions of Relevant Identity Variables

Identity Achievement	is found among, “individuals who have experienced a decision-making period and are pursuing self-chosen occupation and ideological goals.”
Identity Diffusion	is found among, “individuals who have no set occupational or ideological direction, regardless of whether or not they may have experienced a decision-making period.”

Note. Definitions developed by Marcia (1980; pp. 111).

a wavering sense of self, and volatile relationships (Marcia, 2006). Considerable work focuses on investigating symptoms related to identity diffusion, such as by Schlüter-Müller et al. (2015), who explored identity as related to personality pathology.

Characteristic symptoms of identity diffusion include chronic emptiness, superficiality, lack of impulse control, and poor anxiety tolerance. When the normal capacity for self-definition is not achieved, emotional breakdowns during physical intimacy, occupational choice, or competition occur. The lack of a stable self-definition is linked to a threatening sense of danger of fusion or the loss of identity in intimate relationships. During times of distress, self-reflection, mentalization, and affect-regulation may be compromised.

There is a large body of literature investigating the link between Marcia's identity status categories, identity achievement, and attachment styles; however, the strength of the relationships has varied across studies (Bartholomew & Horowitz, 1991). In one Finnish study on family structure and adolescent attachment, identity achievement was related to the paternal relationship, but not the maternal relationship (Faber, Edwards, Bauer, & Wetchler, 2003). The researchers attributed the mixed results to the boys' identification with the patriarchal culture; however, the age of the participants (13-17 years) may indicate that the adolescents were simply in the midst of the identity achievement process. Other sex-differences have been found during the identity formation phase related to preferred talents, sports, and other activities. In a sample of 572 adolescents and emerging adults from the United States, Italy, and Chile, findings indicate sex-differences in self-defining activities (Sharp, Coatsworth, Darling, Cumsille, & Ranieri, 2007).

The individual's cultural context influences the newly integrated identity,

including the religion with which one identifies (King, 2003). As an extension of adolescence, emerging adulthood is a culturally-constructed period of life, rather than universal and immutable (Arnett, 2000). Understanding the cultural backdrop toward developing a relationship with God sheds light on how an emerging adult navigates the formation of a religious identity. Erikson (1968) argued that religion is the most enduring institution that promotes fidelity and the successful resolution of the crisis of identity formation; religion provides a transcendent worldview to ground moral beliefs, as well as religious traditions to embody the ideological norms in a community of believers. In doing so, religious beliefs, morals, and values enable emerging adults to make sense of the world and understand their place in it. A critical part of development is committing to beliefs about oneself, and one's faith fosters identity achievement by providing and encouraging adherence to a set of beliefs (Marcia, 2006).

As the child matures emotionally and physically, religious faith accommodates the development of the expanding world of relationships. Further, navigating to the next developmental stage in faith formation represents increased complexity and comprehensiveness in cognitive, affective, and relational aspects of identity (Fowler, 1981). As emerging adults explore, mature, and form differentiated, secure identities, some become more cemented in their faith. When exposed to religious symbols and practices, the child may nurture a sense of relatedness to the transcendent (Fowler & Dell, 2004). In other cases, relating to faith and developing a two-way relationship with God is intolerable, or simply nonexistent. It is crucial to consider the nurturing environment for the development of faith.

Likewise, a significant psychological task of adolescence and young adulthood is

to choose a set of beliefs, or faith, to follow. Adolescents have “synthetic-conventional” faith, understood as a conforming, noncritical faith, whereas emerging adults have an “individuated-reflective” faith, or an “owned” faith (Fowler, 1981). In the latter, identity and worldviews constructed during development are critically examined, then revised or even jettisoned during the identity achievement process. Some can tease out their beliefs from those of their primary caregivers by the time they reach emerging adulthood, while others continue to search. Concurrently, emerging adults draw on the foundational early experiences when forming new, meaningful relationships.

Emerging attachment

Two schools of thought influence contemporary understanding of how individuals relate to others: attachment theory and object relations theory. The theories complement each other, in that one’s attachment style influences expectations of object relationships. For example, attachment insecurity stems from experiences and expectations that others are emotionally unavailable or otherwise not sensitively responsive to their needs (Stein, Siefert, Stewart, & Hilsenroth, 2011). In this section, attachment theory is explored and then the relationship between attachment theory and object relations theory is introduced.

The founder of attachment theory, Bowlby (1969), proposed that the human attachment behavioral system evolved because it facilitated the survival of offspring by keeping them in proximity with caregivers and protecting them from danger. When an attachment figure is consistently near and responsive, an infant feels more secure. The role of the caregiver is to be consistently aware of and responsive to the child’s communicative behaviors, physically and psychologically available, cooperative with the

ongoing course of the child's activity, and accepting the impositions this entails (Pittman, Keiley, Kerpelman, & Vaughn, 2011).

When an attachment figure is not physically near or emotionally responsive, infants experience fear or anxiety that triggers behaviors aimed at restoring proximity with their attachment figure (Hazan & Shaver, 1994). Ainsworth (1985) built on Bowlby's work by describing features of the secure and insecure attachment relationships between a child and caregiver. As part of the secure attachment relationship, the caregiver is established as a secure base, a safe haven for the child to return to under stress. The child only feels safe to explore the world if the secure base has been internalized (Main & Solomon, 1990). Consequently, the child attempts to maintain proximity with the caregiver and experiences separation anxiety when the caregiver departs or cannot be located. The developing infant's relationship with the primary caregiver always exists on a continuum between close physical contact and autonomous exploration (Kirkpatrick, 2005), and the infant is continually negotiating a balance between these two poles of experience.

Bowlby identified the mechanisms accounting for stability in the secure base relationship and for the longer-term consequences of that relationship as an internal working model, or mental representation, of the attachment relationship and of the self (Bowlby, 1973). These models inform a range of affects, cognitions, and behaviors relevant to life-long social interactions, social relationships, and self-construals (Pittman et al., 2011). Over time, the child develops an internal working model of the expectations of how others will respond to their needs as well as a sense of their agency in changing their environment. There are four distinct childhood attachment styles: secure, anxious,

avoidant, and disorganized, that roughly correspond to four adult attachment types: secure, preoccupied, dismissing, and fearful (see Table 2).

Because infant attachments to primary caregivers serve as a means of survival, all infants form attachments to their caregivers, whether these caregivers are nurturing or abusive, anxious, withdrawn, or inconsistent (Bowlby, 1969). After repeated interactions with their caregivers, infants develop a set of expectations regarding attachment patterns and behaviors (Bowlby, 1969). These sets of expectations lead to an attachment style, a specific emotional and behavioral response to separation and reunion, as well as reactions to the presence of strangers (Ainsworth, Blehar, Waters, & Wall, 2015). An attachment style originates in childhood but affects relationships over a lifetime.

Some measures of adult attachment, such as the Experiences in Close Relationships scale – Short form (ECR-S; Wei, Russell, Mallinckrodt, & Vogel, 2007), assess attachment-related thoughts and feelings across current adult relationships. Consistent with other self-report scales, the ECR-S operationalizes adult attachment across two domains: anxiety and avoidance. Attachment anxiety is a fear of rejection or abandonment, a need for approval, and an experience of significant distress when separated from significant others. Whereas attachment avoidance is a desire for emotional distance, intense fear of intimacy, excessive need for independence, and difficulty in disclosing personal information. Attachment insecurity occurs in individuals with high levels of attachment anxiety or avoidance (Shaver, Lavy, Saron, & Mikulincer, 2007), whereas those with *Attachment Security* disclose low levels of attachment anxiety or avoidance and have healthy attachment expectations of others (Wei et al., 2007).

Evidence on identity and attachment. Attachment theory has provided a

Table 2

Definitions of Relevant Attachment Variables

Attachment Dimension		Attachment Style Labels	
Anxiety about Abandonment	Avoidance of Intimacy	Childhood Literature (Parent/Child Bond)	Adulthood Literature (Adult Romance)
Low	Low	Secure	Secure
High	Low	Anxious	Preoccupied
Low	High	Avoidant	Dismissing
High	High	Disorganized	Fearful

Note. Table created by Beck (2006; pp. 45).

healthy identity achievement process and others do not (Lapsley, Rice, & FitzGerald, 1990). Early attachments yield representations of both the self and others that form the foundation of one's identity. The function of identity is to connect one's developmental history (including early attachments) to future goals and relationships, in the context of a broader culture (Pittman et al., 2011). Internal working models from past relationships serve as templates for new ones; therefore, individuals tend to assimilate new information when building relationships to conform to preexisting beliefs about the self and others (Bretherton & Munholland, 1999).

To evaluate the identity formation process methodically, Marcia developed the Extended Objective Measure of Ego-Identity Status (EOM-EIS-II; 1964). A part of the identity formation process is the presence or absence of a decision-making period (crisis) as well as the extent of personal investment (commitment) in two areas: occupation and ideology. Those with high Identity Achievement have completed a decision-making period and are pursuing an independently chosen occupation and ideological goals. These individuals show little or no continued evidence of "crisis." On the other end of the spectrum lies those with identity diffusion, who have not identified with occupational or ideological directions, and may or may not have experienced a decision-making period (see Table 1). Two additional categories are moratorium and foreclosure, which include those who fall between these two on the spectrum.

There is some controversy in the literature regarding the degree to which attachment style is considered stable. Many attachment theorists assert that attachment style is moderately consistent throughout a lifetime, and one may form attachments with a wide range of others, including siblings, therapists, romantic partners, and even adult

children (Fraley, 2002). In contrast, other empirical studies on attachment revealed that attachment styles change over the course of the lifespan. In a 25-year longitudinal study of women, secure, preoccupied, and avoidant women maintained stable internal working models, but experienced a decrease in preoccupied and an increase in secure prototype scores (Klohnen & John, 1998). The findings are consistent with cross-sectional data on the relative decrease in percentages of preoccupied and secure participants from young to middle adulthood (Mickelson, Kessler, & Shaver, 1997).

Individual differences in adult attachment styles empirically relate to a wide variety of specific aspects of relationship functioning, personality, and other psychological variables (Feeney, 1999). The differences between styles, as they exist along the continuum of self and other, provide a framework for understanding some of the characteristic personality types. Empirical evidence supports this notion. Secure individuals tend to be more comfortable with intimacy and to find relationships valuable in part due to their view of others as trustworthy and available; however, their feelings of self-worth also allow them to enjoy some degree of autonomy (Hesse, 1999).

Although there is a body of research on the relationship between parental attachment and identity, the results are contradictory. On one hand, secure attachments between peers and parents encouraged identity development through several mechanisms. There are links between parents with peer trust and identity commitment as well as parents with peer communication and exploration (Meeus, Oosterwegel, & Vollebergh, 2002). Further, both maternal and paternal sensitivity, as well as ratings by children (aged 6 to 10) of their mothers and fathers as supportive attachment figures, significantly predicted adult attachment security assessed at age 22 (Grossman & Grossman, 2005);

the study used ratings from the Adult Attachment Interview (AAI; George, Kaplan, & Main, 1985). Further, affective support and connectedness with parents provide an environment found to support identity achievement and promote better psychological adjustment (Noom, Dekovicâ, & Meeus, 1999).

However, other research did not find significant associations between three of the four identity status scales and parental attachment (Matos, Barbosa, De Almeida, & Costa, 1999). To further complicate matters, while adolescents in this study tended to report close emotional bonds with both parents, only relationships with mothers related to identity achievement in boys. Additionally, parental inhibition of exploration and individuality does not seem to relate to the identity dimensions. Notably, this study involved Portuguese late-adolescents; therefore, it is essential to consider potential age and cultural confounds.

One meta-analysis examined the nature of the association between identity development and parent-adolescent relationships (Meeus & de Wied, 2007). Few studies included were found to have clear links between these variables, which may be due to the changes in the parent-adolescent relationship that occurs at this developmental stage and to the variable cultural influences. In support of the parent-identity link, an additional meta-analysis revealed that attachment security was associated with identity commitment, but not to exploration (Arseth, Kroger, Martinussen, & Marcia, 2009). Attachment security was positively related to identity achievement and negatively to identity diffusion. However, the studies included in this meta-analysis were inconsistent in the operationalizations of attachment and identity (Arseth et al., 2009).

Religiosity. One way that primary caregivers influence identity formation is by introducing religion to the child. Primary caregivers play an essential role in the development of their child's religiosity, both in faith and in engagement in religious traditions. National survey data (Smith & Denton, 2005) indicates many American adolescents model their parents' religious beliefs, worship service attendance, and affiliation. Indirectly, parents introduce children to religious communities that reinforce the principles of their religion or religious behavior (Bartkowski, Xu, & Levin, 2008). Directly, parents often serve as role models of faith and shape their children's religious development through dialogue and instruction (Schwartz, 2006).

Emerging adults experience parental religiosity and a religious community at the same time as other socialization agents (e.g., religious view of friends or romantic partners); therefore, it is plausible that parental religious socialization of their emerging adult children would be reduced or increased by the influence of others. One longitudinal study focused on resilience in a group of high-risk children born into poor and troubled families. For the resilient individuals who fared well academically and interpersonally by age 18, religiosity functioned as one of the most crucial protective factors (Werner & Smith, 1992). It is important to note that the study defined "religiosity" as encompassing spirituality, including both internal religious connection and external religious behaviors. This finding implies that "religiosity" may be a moderating factor (i.e., a resilience factor) in the link between maladaptive early attachment experiences and later developmental outcomes.

For some, religiosity is a protective mechanism against several detrimental effects of risk factors, including familial adversity and stressful life events (Kim, McCullough, &

Cicchetti, 2009). Religiosity influences the relationship between parents and maltreated and nonmaltreated children in unique ways (Kim et al., 2009). Results showed that parents' religiosity is more influential for child adjustment outcomes when the parent-child relationship is healthy. In the nonmaltreated group, children who had parents who reported faith as highly important showed lower levels of externalizing and internalizing symptomatology; and children of parents with reported high church attendance showed lower levels of internalizing symptomatology (Kim et al., 2009).

While there is a large body of existing research on identity achievement and attachment experiences, there are several additional limitations. Many studies assess attachment in terms of adolescent self-reports of relationship qualities with specific others (i.e., parents or peers) at the exclusion of measuring working models of self and other (Pittman et al., 2011), such as a relationship with God. Considering the long period of emerging adulthood and the lengthening of the identity formation process (Arnett, 2007), research should also focus on this population to inform evaluation and treatment.

Emerging object relationships

Many emerging adults draw on significant early experiences when establishing an identity as well as forming new relationships. Similar to identity achievement, the development of relationships is a nuanced and cumulative process. Object relations is a theoretical-derived idea comprising aspects of interpersonal functioning (Klein, 1948). The concept of object relations was initially part of Freud's ego function, which is the highest level of human organization for behavior and thought (Bell, 2004).

According to object-relations theory, the infant explores the world and encounters various "objects," including his or her own body (Beck, 2006). The most influential

“objects” in the child’s world are the primary caregivers. Consequently, as cognitive and emotional development proceeds, the child creates “object representations;” object representations are internal schemas that aid the child in understanding the unfolding interpersonal world (Priel & Besseer, 2001). Object relational development involves many components, including the capacity to view others with complexity (with both positive and negative qualities), demonstrate a range of affect when describing the relationship, and more (Hilsenroth, Stein, & Pinsker, 2007). Therefore, *Adaptive Object Relations* are defined as several ego functions that organize a person's inner experience of social processes and the behavioral experience of interacting with others. One’s early relationships are internalized or introjected, and these introjected relationships may influence how the individual will experience later, meaningful relationships.

Similar to attachment theory, the result of early relational experiences is an internalized object relational world that contains aspects of mental functioning that regulate and mediate the experience of the individual and that of reality (Marcus, 1999). A healthy experience of relationships is vital for later social interaction and function in daily life. As they develop, the child can form either positive or negative representations of one’s self-as-object or other-as-object. If the child experiences consistent and supportive relationships with caregivers, the child may internalize overall healthy internal representations of self and others (relationships).

However, the development of adaptive object relations may be interfered with in several ways, whether by childhood trauma (Haviland, Sonne, & Wood, 1995), medical conditions such as brain disease (Damasio, 2012), or strained early experiences with the caregiver. Whether inconsistent, emotionally disconnected, or abusive, the child may

internalize generally negative representations of self-as-object (e.g., “I am a bad kid”) or other-as-object (e.g., “Daddy hates me”). While these experiences are partially unconscious, they often emerge in narratives of early childhood memories (Beck, 2006). These unfiltered scenes of childhood reveal how the child, and the eventual adult, experiences a self and relationships with others.

Evidence on relationships and attachment. In both attachment and object relations theories, experiences of reunion, separation, and loss play a role in the formation (and activation) of an internal working model (Steele & Steele, 1998). Further, both posit that lifelong relationship patterns are created in childhood and are apparent in how the individual later engages and functions in close relationships (Goldman & Anderson, 2007). Similarly, the quality of attachment to caregiver provides a set of expectations about how to engage with and interpret the feelings and needs of others (Sroufe & Fleeson, 1986). If the caregiving experience is not healthy, difficulties in both attachment and object relations may develop.

If one struggles to form attachments and develop adaptive object relations in childhood, many difficulties may arise. In addition to theoretical similarities, both attachment and object relations theories have informed conceptualizations of psychopathology. The polarity of attachment/relatedness to primary caregivers and separation/self-definition is fundamental to personality development; the process occurs in the dialectic transaction of two primary developmental lines—interpersonal relatedness and self-definition (Blatt & Blass, 1996). The polarity is considered inherent in two basic configurations of psychopathology. The first is anaclitic psychopathology, involving the dependent and hysterical personality disorders, characterized by issues of interpersonal

relatedness. The other is introjective psychopathology, involving the paranoid, obsessive-compulsive, and depressive personality disorders, characterized by issues of self-definition and self-worth (Blatt, 1995). Thus, the identification of this fundamental polarity establishes links between attachment patterns, the development of personality, and adult psychopathology.

While security of attachment and quality of object relations are strongly related, they are distinct constructs that are clinically useful to study together (Goldman & Anderson, 2007). By integrating attachment and object relations theories, a fuller developmental perspective to the internal working models (mental representation of self and significant others) of attachment emerges. Based on differences in the internal working models' content and structural organization, several developmental levels correspond with the attachment styles (Blatt & Levy, 2003). Considering how an individual attaches as well as their internal working model, therapists can tailor psychotherapeutic practices to meet their needs; the therapist may function as a new attachment figure and revise the patient's working models so that the earlier, injurious attachment experiences may be corrected (Farber et al., 1995). The present study evaluated if a relationship with God functioned as an adaptive surrogate relationship, allowing for a healthy view of others in those who rated themselves as insecurely attached.

Measuring relationships and attachment. Early synthetic thinkers such as Bowlby (1969), Mahler (1979), and Stern (1986) used empirical methods (including direct observations of mother-child interactions, ethological reports, animal research, and neurobiological studies) to collect empirical evidence. They documented the importance

of early attachment experiences in developing the capacity for interpersonal relatedness. Early research also established that an appropriate level of stimulation, affection, and freedom to explore are developmental prerequisites to building a foundation of trust and fostering self-regulation of affects (Bell, 2004). Measures that emerged from both object relations and attachment theories are explored.

One popular, reliable self-report instrument is the Bell Object Relations and Reality Testing Inventory (BORRTI; Bell, 1995). The measure evaluates a range of object relations and reality-testing functioning levels, including schizophrenic experiences. The self-report measure of explicit adaptive object relations has been used reliably in many studies. However, object representations are both conscious and unconscious influences on experience, therefore self-report assessment may only partially evaluate the representations that guide experiences in close relationships. Together, implicit and explicit measures of adaptive object relations capture a comprehensive picture of current functioning.

More recent object relations researchers have shown that representational processes can be measured indirectly using narrative data from a variety of sources that do not require explicit self-knowledge (Westen, Feit, & Zittel, 1999). To evaluate the object relational narratives comprehensively, a multi-item self-report measure of adult attachment and narrative measure of adaptive object relations has been used (Calabrese, Farber, & Westen, 2005). In the Calabrese et al. study, college students completed a self-report attachment scale and were prompted to write eleven narratives. These researchers used the SCORS-G to rate the narratives, as has been done in other research (e.g., Stein, Siefert, Steward, & Hilsenroth, 2011). The narratives included three forms of interactions

with the participant's father and mother (e.g., most painful; most typical; most comforting); two typical interactions with his/her significant other; and three interactions representative of the self (e.g., an incident typical of the self; an incident that shaped the identity; an incident where the participant felt bad about the self). As expected, many of the dimensions of object relations related to current involvement in a significant relationship as well as the parents' marital status. For example, participants whose parents had remained married tended to show improved psychological health across all of the object relations dimensions assessed. Object relational dimensions included were: the tendency to show greater mutuality in relationships, a greater understanding of psychological functioning, more effective management of aggressive impulses, and higher self-esteem.

Parental attachment has a long-lasting influence on relationship development: attachment style is predictive of social skills in older adolescents, which affects competence in romantic relationships (Engels, Finkenauer, Meeus, & Dekovic, 2001). In the Engels et al. study, the researchers used the self-report data to develop a structural equation model. Results indicate that higher levels of attachment security in older adolescents are associated with more adaptive object relations; this included higher levels of complexity and differentiation in object representations, increased ability to recognize and show emotional concern for others, and enhanced ability to read social situations. Also observed in the aforementioned study, higher levels of coherence of narrative, adaptive management of aggressive impulses, and positive self-representations were associated with higher levels of attachment security. The results may indicate the development of complexity in the relationship between attachment and peer relationships.

Parental involvement and facilitation may be more influential in an early adolescent's building of friendships than previously believed.

Current research has grounded the link between attachment to early caregivers and the development of adolescent and adult relationships in a variety of domains. Qualities of acceptance and encouragement of independence in the parental relationship contribute to better social competence, which then promotes a higher capacity for intimacy in romantic relationships (Scharf & Mayseless, 2001). There are long-term benefits to the development of healthy relationships, such as less depression (Maunder & Hunter, 2008) and fewer physical health problems (Holt-Lunstad, 2018). Similarly, those with secure attachments were found to form healthier relationships, have stronger social ties with others, live longer, and experience fewer physical and mental health problems (Stroebe & Stroebe, 1996; Ghafouri, Dehghani, Summers, & Shahboulaghi, 2020). Those with higher levels of attachment anxiety have more maladaptive expectations of others (Stein et al., 2011). It is to be expected that those with maladaptive early experiences with their first significant relationships may have difficulty expecting good, positive experiences with others.

Attachment to God

As emerging adults branch out, they form distinct relationships with their peers, fundamentally different from their relationships with their caregivers. Peer relationships are more symmetrical and egalitarian by nature (Buhrmester & Furman, 1986). Relationships with peers differ from caregivers; however, social skills learned at home, such as negotiation or giving positive/negative feedback, influence social interactions

with peers (Rice, Cunningham, & Young, 1997). Aside from a primary caregiver, peer, or therapist, a child may have other influential relationships.

Once children develop language and abstract thought, their caregivers might introduce them to another “object,” God. Over time, the child forms internal representations of both God (object representation) as well as the individual relationship with God (object relation). God functions as a mental representation of a spiritual relationship. Because children do not directly engage with God, the object-representation schema of God forms through the relationship of the primary caregivers, who introduce a schema-filtered version of God. The caregivers’ relationships with God, as well as the child’s relationship with the caregiver, impacts how the child is exposed to and relates to God (Grandqvist, 2016). The child’s understanding of God is then a co-construction between that of the child’s and his/her caregivers’. Therefore, God-representations build on the preexisting internal working models of self and caregiver.

In the Judeo-Christian tradition, God is often described as either a parent/child relationship or a spousal relationship. A strong theoretical case has been presented that some believers experience a relationship with God as a unique attachment bond from those with primary caregivers (Kirkpatrick, 1999). Over time, the child forms internal representations of both God (object representation) as well as the individual relationship with God (object relation). God functions as a mental representation of a spiritual relationship for the child.

A personal relationship with God serves similar functions to human attachment relationships (McDonald, Beck, Allison, & Norsworthy, 2005). An attachment to God includes using God as a safe haven when distressed, seeking closeness to God in rituals

and prayer, and using God as a secure base for exploring the environment (Beck & McDonald, 2004). If a child did not have a secure human attachment, one might form an attachment to God. However, the connection with God can be as complicated and conflicted as a parent-child relationship (Beck, 2006). Much like a primary caregiver, some people perceive God as an attachment figure. God can be a safe haven in times of crisis and a secure base from which to explore when out of harm's way (Rowatt & Kirkpatrick, 2002). Some may have a fraught relationship with God and harbor deep feelings of anger and resentment. However, others may have a secure attachment with God despite strained relationships with his/her caregivers. A complement to Attachment Security with primary caregivers, *Attachment to God Security* is the experience of low levels of attachment anxiety or avoidance, along with healthy attachment expectations of others.

Evidence of an attachment to God. The literature emphasizes the importance of parent and peer religious socialization during childhood and adolescence as a significant predictor of emerging adult spirituality and religiosity (Boyatzis, 2012). Along with parental exposure to the faith, acquiring an internalized religious consciousness (e.g., a personal connection with the faith) through daily prayer and organized religious involvement may occur (Levesque, 2002). Both parental introductions to the faith and activities seem to contribute to the development of a relationship with God.

To track the spiritual development of undergraduates, The Higher Education Research Institute embarked on a multiyear study through the University of California, Los Angeles (Astin & Astin, 2003). When responding to questions on the College Students Beliefs and Values, the team found that nearly three-fourths (74%) of the

freshmen felt a “sense of connection with God/Higher Power that transcends my personal self.” Similarly, more than half (56%) perceived God as “love” or as the “creator,” and about half (49%) experienced God as a “protector.” As part of a longitudinal study beginning in middle school and extending to adulthood, a personal relationship with a Higher Power appears to be the primary source of spiritual life in adolescence (Barkin, Luthar, & Miller, 2015). Further, a two-way relationship with God more frequently persists into adulthood than a one-way relationship. The Barkin et al. (2012), study identified positive implications for health and wellness in the adults (e.g., higher reports of satisfaction with life), higher engagement in the religious community, and greater compassion toward others.

Other research examined the associations between emerging adulthood, attachment styles, and the development of faith (Kirkpatrick, 1997). This early longitudinal study on college students yielded two valuable insights. First, positive mental models of both self and others related cross-sectionally to positive images of God and perceived relationships with God. Second, longitudinal analyses revealed that those with both negative models of self and positive models of others predicted positive religious change over time. In this case, religion moderated current adaptive object relations, but did not alter the participant’s negative internal working model.

A relationship with God has been found to promote psychological health. A meta-analysis reviewed 850 studies and found a range of associations between religious belief and mental health (Hackney & Sanders, 2003). Of the included studies, 80 percent demonstrated a positive relationship between belief in God and greater life satisfaction. The perceived relationship with God can be both nuanced and emotional, like a

relationship with a human attachment figure (Levin, 2002). Believers have been found to have overall better mental health, higher quality of life, greater well-being, and lower rates of depression, suicide, and anxiety (Weber & Pargament, 2014). Conversely, a study on young adult cancer survivors showed that those struggling with their faith in God were less likely to engage in pro-recovery behaviors (Park, Edmondson, Hale-Smith, & Blank, 2009).

The content of the Attachment to God Inventory (AGI) highlights the diversity of relationships believers have with God (Beck & McDonald, 2004). The scale captures both abandonment and anxiety in those insecurely attached to God. Those with high anxiety about abandonment have a relationship characterized by jealousy, angry protest/resentment, concerns over one's lovability, preoccupation/worry, and fears of potential abandonment. A relationship with God may also be complex and offer a source of unconditional acceptance or feelings of estrangement (Homan & Cavanaugh, 2013). Those with avoidance of intimacy have a relationship characterized by avoidance of emotionality, a reluctance to communicate, and compulsive self-reliance. Those with low anxiety and avoidance (i.e., the securely attached), have a relationship characterized as one without (or with few) of the problematic fears of abandonment in intimacy.

Evidence on attachment and an attachment to God. Research has revealed two conflicting outcomes in the relationship between working models of attachment to caregivers and attachment to God: correspondence and compensation (Beck, McDonald, Allison, & Norsworthy, 2005). The *correspondence hypothesis* is that the attachment style of an individual is consistent across types of bonds: caregivers, lovers, and God (McDonald et al., 2005). Freud (1913) first suggested a connection between a divine

father and one's earthly father. He stated that a child models God after one's father; a personal connection to God is dependent upon a relation to a physical father, and God exists purely as an exalted father figure. Further research on Freud's theory found that God can serve a projected paternal love-object that provides support, like a father (Beit-Hallahmi & Argyle, 1975). In a correspondent way, secure attachment in current relationships is associated with perceptions of God as more loving, less distant, and controlling.

Child attachment styles translate to adult relationships with God in specific ways (see Table 3). Individuals with a secure working model of attachment may perceive God in a correspondent way as accepting and supportive, with low expectations of abandonment. In contrast, those who are anxiously attached may have a correspondent relationship with God, characterized by a need to earn God's affection. Among those with avoidant attachments to primary caregivers, God may also be remote and uninvolved.

Research has investigated the correspondent hypothesis in several ways. In some cases, anxious attachment in romantic relationships is associated with anxious attachment to God. For instance, emotionally cold families experience avoidance, but not anxiety in the relationship with God (dismissing attachment) (Beck, 2006). However, authoritarian families experience avoidance and anxiety in the relationship with God (fearful attachment) (Beck, 2006). A caregiver's own relationship with faith may contribute to the child's early experience. By evaluating a national sample of adolescents, it was demonstrated that parents' religiosity (measured by feelings about religion and religious practices) was inversely related to later substance abuse and positively associated with

Table 3

Definitions of Relevant Attachment to God Variables

Attachment Anxiety	a fear of interpersonal rejection or abandonment, an excessive need for approval from others, and distress when one's partner is unavailable or unresponsive.
Attachment Avoidance	fear of dependence and interpersonal intimacy, an excessive need for self-reliance, and reluctance to self-disclose.
Avoidance of Intimacy with God	a need for self-reliance, a difficulty with depending upon God, and unwillingness to be emotionally intimate with God.
Anxiety over Abandonment by God	fear of potential abandonment by God, angry protest, jealousy over God's seemingly differential intimacy with others, anxiety over one's lovability in God's eyes, and, finally, preoccupation with or worry concerning one's relationship with God.

Note. Definitions developed by Beck and McDonald (2004, pp. 94).

good physical health of the children (Caputo, 2004). Likewise, in a national sample of early elementary school-age children, higher frequencies of fathers' and mothers' church attendance were related to lower levels of internalizing and externalizing symptomatology of the children (Bartkowski et al., 2008).

Several possible mechanisms for the link between parents' religiosity and a nurturing environment exist. Security in attachment with caregivers may facilitate a well-developed faith identity as well. Secure attachment has been found to relate positively with faith maturity (TenElshof & Furrow, 2000). Parents' religiosity may contribute to parents' effective monitoring as well as frequency of warm and supportive behaviors to result in positive behavioral and emotional outcomes among children and adolescents (Bartkowski & Wilcox, 2000). Additionally, a study on African American children demonstrated parents' religiosity was related to positive parenting practices as well as cognitive and social competence, and negatively associated with internalizing symptomatology (Brody, Stoneman, & Flor, 1996).

The *compensation hypothesis* emphasizes that a relationship to God compensates for a deficient caregiver and/or adult romantic bonds (Kirkpatrick & Shaver, 1990). Like Ainsworth's (1985) theory that surrogate parents could compensate for earlier insecure attachments, God may compensate as a surrogate relationship for insecurely attached emerging adults. Evidence of compensatory attachment has been found specifically in insecurely attached adults; some report profound, religious conversion experiences, and a subsequent improvement in relationships (Granqvist & Kirkpatrick, 2004). Other research did not find a compensatory relationship with God, as predicted (Miner, 2009). To note, the latter research involved a median split on the Attachment to God Scale (Beck

& McDonald, 2004) dichotomizing the sample as attached or not attached; however, the split might have overestimated the size of the insecure groups and underestimated the size of the secure group, skewing the results. Evidence for both compensatory and correspondence hypotheses has been found, which indicates a need for further understanding of how an attachment to God moderates primary caregiver relationships and later significant relationships.

A healthy relationship with God may influence early maladaptive attachment patterns by providing safety and security not provided by loved ones. A connection with faith has been shown to be a protective factor for maltreated children. Child reports of the importance of faith were related to decreased levels of internalizing symptomatology among maltreated girls (Kim, 2008). However, the relationship did not hold up with maltreated boys. In contrast, children's church attendance related to decreased levels of externalizing symptomatology for nonmaltreated boys, but not for maltreated boys. In this case, church attendance did not fully attenuate the effects of maltreatment on boys' externalizing behaviors. In some cases, when risk factors outweigh the protective factors' benefits, children's adjustment deteriorates despite the presence of protective factors (Zielinski & Bradshaw, 2006).

There is a diversity of individual experiences involved in forming an attachment with God. While some characterize a relationship with God as secure and fulfilling, others express concerns over one's lovability and fears of potential abandonment (Beck & McDonald, 2004). In some cases, an attachment to God is correspondent with primary caregivers. Others demonstrated a secure attachment with God despite strained relationships with his/her caregivers. Individuals with insecure attachment bonds may be

attracted to or seek an attachment to God as a source of security (Beck & McDonald, 2004). A relationship with God may influence early maladaptive attachment patterns by providing a safe and secure attachment not provided by loved ones.

Evidence on relationships and an attachment to God. In addition to traditional self-reports, rating narratives of primary caregivers is an implicit strategy to investigate specific aspects of the relationships (Ackerman, Clemence, Weatherill, & Hilsenroth, 1999). The relationship between ratings of narratives from Social Cognition and Object Relations Scale-Global Rating Method (SCORS-G; Hilsenroth, Stein, & Pinsker, 2007) and two measures of adult attachment: the Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991) and the Experiences in Close Relationships Questionnaire-Revised (ECR-R; Fraley et al., 2000) has been conducted (Stein et al., 2014).

Results indicate that emerging adults with high levels of attachment anxiety (i.e., fearful and preoccupied) may have low self-esteem and more maladaptive expectations about relationships. However, no significant relationships between the RQ's dismissing or avoidant attachment styles and the SCORS-G variables were observed. In this study, the SCORS-G ratings were of the patient's relational functioning at the time of evaluation during the interview and in psychotherapy (when available). Instead, the process of rating written early memories of primary caregivers (as well as God) may decrease social desirability and defensiveness induced by the interview format.

Research on God's functioning as a surrogate for those with insecure attachments demonstrated mixed results as well. Further, one's object relational development often relates to his/her image of God for those who believe in a Higher Power (Brokaw &

Edwards, 1994). Object relational development was predicted to positively relate to images of God as loving and benevolent and negatively to images of God as wrathful, controlling, or irrelevant. The hypothesis was partially supported, with several significant correlations; most notably, the loving image of God is associated with higher ego functioning.

In a similar study, one's attachment to God predicted psychological adjustment for those who are securely attached; however, those with insecure parental attachment, but secure religious attachment, demonstrated statistically significantly higher anxiety and lower overall well-being than the securely attached (Miner, 2009). However, God did not compensate for insecure caregiver attachments, as Miner predicted. The conflicting results across studies indicate a need for further investigation an attachment with God influences the relationship between early caregiver attachments and developmental outcomes (e.g., development of an identity, experiences of later relationships).

A recent, qualitative study on emerging adults' spiritual relationship with God found interesting results (Kimball, Boyatzis, Cook, Leonard, & Flanagan, 2013). The study separately assessed participants' attachment relationships with parents, peers, and God to explore the sufficiency of the correspondence and compensation models of attachment. A team of trained judges in the Kimball et al. (2013) study rated narratives describing relational experiences with God produced by 119 (60 males, 59 female), Christian college graduates. Results of this study indicated some emerging adults with low parental security articulated reciprocal experiences of secure, intimate attachments with God. The findings suggest refinement in the research to include a spiritual

relationship with God that serves an influential role on specific outcomes, as distinct from parental attachments.

In the context of emerging adulthood, a time of transitioning from adolescence to adulthood, an attachment to God might also be considered as a transitional object. A representation of God would ideally function in childhood and adulthood both as a transitional object that one could bring to mind when separated from primary caregivers. Allowing for God as a transitional object provides a space for an individual in three ways (LaMothe, 2010). First, the individual treats and recognize God, an omnipotently constructed object, as a person. Second, the individual surrenders to the imagined personal recognition and treatment in the object-subject relationship. Third, the individual is able to practice repairs of personal disruptions with the object-subject by doing so with God.

Catholicism

While there is a small body of research on a secure attachments to God for those who identify with a wide-range of faiths (Brokaw & Edwards, 1994; Miner, 2009), the ways in which religious subgroups, such as Baptists and Methodists, engage in a relationship with God differs considerably. For instance, cultural traditions, images of God, and relationships with God vary greatly across religious subgroups. Belief systems endure, in part, because private fantasy life and images of individuals or God are reflective of cultural traditions (Beit-Hallahmi & Argyle, 1975). Relatedly, different presentations in psychological symptoms (e.g., depression as compared to adjustment disorder) are found between religious denominations (Flics & Herron, 1991). The paucity

of clinical material and research on faith subgroups indicates a profound gap in our understanding of potential faith-based approaches to mental health (Koenig, 1998).

Catholics represent a vast majority of the U.S. population; the 2011 Global Christianity Report clearly outlines who falls under the Catholic denomination as those in full communion with the bishop of Rome (Skirbekk et al., 2011). Within this sizable group are an ample number of emerging adults (18-29 years old), who are in the midst of a critical developmental period involving both identity achievement and relationship development. According to Catholic tradition, the sacrament of Confirmation is a rite that signifies and effects a strengthening in one's relationship to their faith (Gabrielli, 2013). This is believed to occur through the grace-filled power of the Holy Spirit. The preparation for and achievement of Confirmation typically occurs during adolescence.

Catholic faith differs from others in that it emphasizes the development of a two-way relationship with a specific, paternal image of God. In this relationship, one prays and believes that God intervenes in one's life in a benevolent manner. In the Judeo-Christian tradition, a relationship with God is often described as a parent/child relationship or a spousal relationship (such as for those in the religious life) (Beck, 2006). Focusing specifically on Catholics will provide a greater understanding of relationship development with primary caregivers and God in this subgroup. Individual Catholics, however, have a wide range of relationships with their spiritual "Father." Future studies will then be able to compare those who have a relationship with God to those with relationships with other religious figures (i.e., the Virgin Mary).

Chapter III

Statement of the Problem

Emerging adulthood is a critical time of identity and relationship development. Over the past fifty years, the duration of this developmental phase has extended to include those between the ages of 18 and 29 (Arnett, 2007). During this time, an emerging adult is often influenced by early relationships with primary caregivers. The security of attachment to caregivers has been found to contribute to forming relationships and an integrated identity either in an adaptive or maladaptive fashion (Marcia, 1980). During childhood, primary caregivers may introduce the child to an additional relationship: one with God. For some emerging adults, attachment security with God may also contribute to relationship development (Kimball et al., 2013) and identity achievement (Fraley, 2002).

Identity formation is a dynamic and typical process. During this time, identity crises are considered normative developmental processes that usually result in a consolidated identity with flexible and adaptive functioning (Erikson, 1968). Marcia built on Erikson's work by developing a paradigm of identity outcomes based on combinations of high versus low exploration and commitment (1968). This research was highly influential in understanding the identity process. However, the paradigm has been criticized for its overemphasis on identity outcomes and its underemphasis on the process of identity formation (Schwartz, 2001). While there is a large body of literature investigating the links between Marcia's identity status categories, identity formation, and attachment styles, the strengths of the relationships have varied across studies (Bartholomew & Horowitz, 1991).

Empirical research supports the developmental advantage of a secure attachment representation. A large body of research has identified a range of benefits of attachment security with primary caregivers. Those with early secure attachments tend to live longer, form healthier relationships, have stronger social ties with others, and experience fewer physical and mental health problems (Ghafouri, Dehghani, Summers, & Shahboulaghi, 2020; Stroebe & Stroebe, 1996). One study was conducted to understand better the influence of attachment styles on forming later relationships, which highlighted the positive effects of early, secure relationships; however, they had other perplexing results (e.g., a secure attachment was found to be related to maladaptive preoccupation) (Stein et al., 2011). A larger, more diverse group may better represent typical relationships between attachment and adaptive object relations limited by the statistical power and sample of the Stein et al. study. To reduce social desirability, it may be more effective to evaluate an individual's early memories of primary caregivers as a measure of adaptive object relations.

While there is considerable research on adolescent identity achievement, there are conflicting results on the influence of primary caregivers on the process (Faber et al., 2003). In some cases, an adolescent's view remains mostly undifferentiated from primary caregivers, whereas in other cases, adolescents have completed the formation process and emerged with differentiated beliefs (Faber et al., 2003). This state of transition was thought of as exclusive to the younger adolescent age group, but is now shown to continue into emerging adulthood (Arnett, 2000). By researching emerging adults, research may better capture those who are still in the process of achieving a differentiated identity. By doing so, research can more comprehensively investigate if an attachment to

God positively influences the relationship between attachment with primary caregivers and identity development.

One way to extend this research would be to study emerging adults' early memories of primary caregivers and God. Individuals selectively retain and recall early memories; the memories function as both a reinforcement and reflection of the individual's experience of relationships (Fowler, Hilsenroth, & Handler, 1995). Early memories are a reliable projective measure of a wide range of psychological phenomena, including adaptive object relations (Nigg, Lohr, Westen, Gold, & Silk, 1992). Therefore, early memory work is a unique and powerful projection tool and a way of evaluating unconscious processes (Fowler, Hilsenroth, & Handler, 1995). A similar study conducted did not include a comprehensive measure of one's attachment with God as compared to other significant relationships (Stein et al., 2011). By measuring one's attachment to God, early memories of primary caregivers and God, identity achievement, and object relationships, a more nuanced picture might be painted of the attachment to identity and relationship development.

Aspects of object relations relate to an individual's image of God (Brokaw & Edwards, 1994). These researchers discovered that a loving image of God was associated with higher ego functioning. Of note, the study did not include a comprehensive measure of one's attachment with God as compared to other significant relationships. Recent research on attachments to primary caregivers and God is extensive and the findings are contradictory. Depending on the early environment, an attachment to God may correlate with, or compensate for, parental attachment. As of yet, it is not clear what explains the difference between those who have an attachment to God that correlates with primary

caregiver relationships and those who have compensatory attachments with God (McDonald et al., 2005). Some work has highlighted the interrelationship of attachments to caregivers and with God. For example, emotionally cold families experience avoidance, but not anxiety in the relationship with God (Dismissing attachment; Beck & McDonald, 2004; see Table 2). However, authoritarian homes experience avoidance and anxiety in the relationship with God (Fearful attachment; Beck & McDonald, 2004). Of note, the homogenous sample of undergraduate students from highly religious households statistically significantly reduced variability in the data. Further, the measures included were exclusively self-report surveys.

This study aimed to include a diverse sample and implicit measures that capture unconscious perspectives of relationships to address the limitations of past research that focused on conscious experiences of relationships. It is not clear if some experience God in a way reflective of primary caregiver relationships (correspondence hypothesis), while others have a distinct relationship with God, that may compensate for problematic early childhood experiences (compensation hypothesis). As related to the correspondence hypothesis, the influence of primary caregivers on the religiosity of their children has been investigated, but with limitations. For example, parents have been shown to influence the religiosity of their children by introducing them to their religious communities (Bartkowski, Xu, & Levin, 2008) and by serving as role models of faith (Schwartz, 2006). However, “religiosity” is often defined as encompassing spirituality, including both internal religious connection and external religious behaviors (Werner & Smith, 1992). A religious connection, such as an attachment to God, may separate from religious behaviors and should be independently investigated. Further, the partial support

of the correspondence hypothesis in some research may also be because parental bonds may serve a closer parallel to a God attachment than a romantic attachment style (McDonald et al., 2005).

For those with attachment insecurity, a relationship with God may positively influence the potentially maladaptive trajectory (compensation hypothesis). While early attachment interactions influence an individual's perceived relationship with God, God may provide a source of surrogate attachment. If one is able to attach to God securely, the relationship may help repair negative representations of self and others (Grandqvist & Kirkpatrick, 2013). At this stage of the research, it is critical to explore the relationship to God as well as primary caregivers with an encompassing, object relational measure on a larger sample with both explicit and implicit measures (e.g., emerging adults' memories involving meaningful relationships). By doing so, the current study will extend prior research that relied on solely self-report experiences of object relations.

Emerging adults venture out in the world and are influenced by significant early relationships, which may include one with God. Therefore, the present study aimed to answer the research questions: in a sample of emerging adults raised in Catholic homes, who have completed Confirmation before age 18: 1) can an attachment to God positively influence the relationship between attachment insecurity and adaptive object relations?; and 2) can an attachment to God positively influence the relationship between early attachment experiences and identity achievement?

Variable List:

Independent variable: *Attachment Security* levels were measured as continuous scores of attachment avoidance and attachment anxiety reported on the Experiences in

Close Relationships Scale-Revised (ECR-R; Fraley, Waller, & Brennan, 2000). Scores for attachment anxiety and attachment avoidance were calculated by computing means of the participants' responses to the anxiety and avoidance subscales, respectively. A global score for Attachment Security was calculated by computing a mean of all of the participants' responses to yield one adaptive attachment continuous score.

Proposed Mediating variable: *Attachment to God Security* levels were measured as continuous scores of attachment avoidance and attachment anxiety reported on the Attachment to God Inventory (AGI; Beck & McDonald, 2004). A global score for Attachment to God Security was calculated by computing the mean of the participants' responses to yield one adaptive attachment to God continuous score.

Dependent variables: In the primary analyses, *Explicit Adaptive Object Relations* levels were measured as a continuous, total score from the "Object Relations" subscale reported on the Bell Object Relations and Reality Testing Inventory (BORRTI; Bell, 1995).

Identity achievement was measured as a continuous, total score of Identity Achievement as reported on the Extended Objective Measure of Ego-Identity Status-II (EOM-EIS-II; Bennion & Adams, 1986).

In the exploratory analyses, *Implicit Adaptive Object Relations* levels were measured as continuous scores of the complexity of representation of people (COM), affective quality of representations (AQR), emotional investment in relationships (EIR), and self-esteem (SE) (Hilsenroth, Stein, & Pinsker, 2007). A global score for Adaptive Object Relations was calculated by computing the mean of participants' responses on all

of the subscales (COM, AQR, EIR, and SE; SCORS-G; Hilsenroth, Stein, & Pinsker, 2007) to yield one Adaptive Object Relations continuous score.

Possible Covariates:

1. Demographics (ethnicity and sex) were measured using researcher-developed categorical questions on the Demographics Questionnaire.
2. Social desirability levels were measured as continuous scores of social desirability, as reported on the Marlowe-Crowne Social Desirability Scale (Reynolds, 1982).

Primary Hypotheses:

In a sample of 200 emerging adults raised in Catholic homes (Confirmed before the age of 18):

Hypothesis I. There will be a statistically significant positive relationship between Attachment Security and Explicit Adaptive Object Relations, as found in the Stein et al. (2011) study.

Hypothesis II. There will be a statistically significant positive relationship between Attachment Security and Attachment to God Security.

Hypothesis III. The relationship between Attachment Security and Explicit Adaptive Object Relations will be partially mediated by Attachment to God Security, with the total effect of Explicit Adaptive Object Relations on Attachment Security mediated by higher Attachment to God Security.

Hypothesis IV. There will be a statistically significant positive relationship between Attachment Security and Identity Achievement.

Hypothesis V. The relationship between Attachment Security and Identity Achievement will be partially mediated by Attachment to God Security, with the total

effect of Identity Achievement on Attachment Security mediated by higher Attachment to God Security.

Exploratory Question:

Is the relationship between Attachment Security and Implicit Adaptive Object Relations partially mediated by an attachment to God?

Chapter IV

Methods

Participants

Research participants consisted of $N = 200$ emerging adults (ages 18-29), who identified as Catholic, were raised in Catholic homes, who received the sacrament of Confirmation before the age of 18, and were living in the New York metro area. Internal Review Board (IRB) approval for recruitment was obtained from two public and two private Catholic universities. Participants were recruited directly through flyer distribution, online social media postings on Catholic emerging adult sites, and electronic mail via listservs for the two participating universities. Participants recruited through the Psychology Experience Credits (PEC) programs in the two public universities received course credit in exchange for their participation. In exchange for their 60-minute online participation, participants were given the opportunity to enter into a lottery to win one of three \$50 gift cards to Amazon. While 946 participants completed the study consent, only 200 participants continued to complete the remaining study measures.

Demographics. The survey contained several single-item demographic questions including the participant's sex (male or female) and ethnicity (African, African American, African Caribbean, Central American, South American, Western European, Eastern European, Middle Eastern, East Asia, South Asian, Central Asian, Native American, White American, or Other) (see Appendix A; Table 4). The sample varied in racial/ethnic backgrounds, with the largest group identifying as "White American" (61.5%). Additional demographic questions related to a Catholic upbringing. These included whether one or both parents identified as Catholic during the participant's

Table 4

Demographic Statistics of Sample

Variable	<i>n</i>	%
Sex		
Female	160	80.0
Male	40	20.0
One or both parent(s)/caregiver(s) Catholic		
Both parents/caregivers	147	73.5
One parent/caregiver		
Mother or mother-figure	36	18.0
Father or father-figure	17	8.5
Choice for Confirmation		
Personal	105	52.5
Parent's/Caregiver's	95	47.5
Race/Ethnicity		
White American	123	61.5
Latino/a, (incl. Central and South American)	27	13.5
African (incl. African American, African Caribbean, and Caribbean)	17	8.5
European (Western and Eastern)	13	6.5
Other (incl. Middle Eastern)	12	6.0
Asian (East, South, and Central)	8	4.0

Note. *n* = number of participants; % = percentage of sample.

childhood (one parent: mother or mother figure, one parent: father or father-figure, or both parents) and if he/she chose to be Confirmed in the Catholic faith (yes, it was my choice or no, it was my parent's/guardian's choice).

Measures

Object relations. Explicit Adaptive Object Relations were assessed using the Bell Object Relations and Reality Testing Inventory (BORRTI). Bell (1995) developed the scale to help clinicians identify patients with disturbed ego functioning by testing both "Adaptive Object Relations" and "Reality Testing." The 90-item self-report scale has been found to be valid and reliable; in a sample of 336 inpatients, Cronbach's alphas ranged from .79 to .90 for each of the seven subscales (Huprich & Greenberg, 2003). Participants select either "True" or "False." The scale yields two dimensions: "Object Relations" and "Reality Testing" questions such as, "I have at least one stable and satisfying relationship" are found on the Object Relations subscale, and "Sometimes I think I have been possessed by the devil," are found on the Reality Testing subscale. An Explicit Adaptive Object Relations score was calculated as a total score from the "Object Relations" subscale, whereby a higher score indicates more Explicit Adaptive Object Relations. In the current study sample, the Cronbach's alpha estimate for the current study sample was a .87.

In regard to the exploratory question, Implicit Adaptive Object Relations were assessed using the Social Cognition and Object Relations Scale-Global Rating Method (SCORS-G). Hilsenroth, Stein, and Pinsker (2007) based their method of rating object relations narratives on the SCORS-G (Westen, 1995). The SCORS-G includes eight, 7-

point rating scales scored by a team of trained raters. In this study, the rated narratives prompts were adapted from the Early Memory Test (EMT; Mayman, 1968; Appendix C). The instructions ask participants to relax, allow his/her thoughts to go back to early childhood and write his/her earliest memory, next earliest memory, earliest memories of a mother-figure, earliest memory of a father-figure, and earliest memory of God. Open-ended follow-up questions ask for impressions of themselves in the memory, his/her impressions of others in the memory, and the mood or feeling tone associated with the memory (Shedler, Mayman, & Manis, 1993). In a sample of 177 outpatients who completed protocols as part of routine clinical care, interrater reliability coefficient alphas for the SCORS-G ranged from .80-.89 (Stein et al., 2015). All eight scales were coded for each narrative, but four were used in this study (COM, AQR, EIR, and SE). Higher-level scores on the COM, AQR, EIR, and SE scales indicate more Implicit Adaptive Object Relations in each respective domain. Interrater reliability results for the two coders in the current study are reported in the Procedure section.

Attachment security. Attachment Security was assessed using the Experiences in Close Relationships Scale-Revised (ECR-R; Appendix D). Brennan, Clark, and Shaver (1998) created the original adult romantic attachment scale, which was derived from a factor analysis of previously existing attachment measures. It is uniquely useful among adult attachment measures as referentially specific; that is, it consists of four subtests, each specifying the type of relationship assessed: maternal, paternal, friendly, and romantic. For the present study, only the romantic subscales were used. Fraley, Waller, and Brennan (2000) modified the scale based on factor loadings.

Attachment Security was operationalized and measured using the anxiety and avoidance subscales. Participants respond to both subscales using a 7-point Likert scale (1 = Strongly Disagree, 4 = Neutral, 7 = Strongly Agree). The 36-item self-report measure demonstrated a high level of internal consistency in a sample of undergraduates, with coefficient alphas of .95 and .93 for the Anxiety and Avoidance subscales, respectively (Sibley & Liu, 2004). Items on the Anxiety subscale include statements such as, “I need a lot of reassurance that I am loved by my partner,” whereas items on the Avoidance subscale include, “I want to get close to my partner, but I keep pulling back.”

A global score for Attachment Security was calculated by computing the mean of participants’ total scores on each of the subscales (Anxiety and Avoidance) and combining them to yield one adaptive attachment continuous score. Higher global scores indicate higher levels of Attachment Security. In prior research, both attachment anxiety and avoidance styles were significantly correlated with symptomologies relevant to their domain; individuals who scored higher on either anxiety or avoidance demonstrated a greater number of depressive symptoms, with distinct presentations (Fraley, Heffernan, Vicary, & Brumbaugh, 2011). To examine attachment security more thoroughly, two approaches were employed: a median split and quartile split. In the current study sample, the Cronbach’s alpha estimate was .82.

Median split. A median split was calculated for attachment anxiety as well as attachment avoidance to form high-low groups (anxiety *Mdn* = 4.00; avoidance *Mdn* = 5.67), with scores on the median included in the low groups. The four groups based on attachment categories were then created (anxious = 16%; avoidant = 19.5%; disorganized = 34%; secure = 29.5%).

Quartile split. To more narrowly focus on high avoidance and/ or anxiety, a very high attachment anxiety, a very high attachment avoidance, a disorganized attachment (both very high anxiety and very high avoidance), and an attachment security (neither very high anxiety nor very high avoidance) was created. This was done by calculating the Z-score and selecting those in the outermost quartiles. The four groups based on attachment categories were created and the percentage of total participants for each category was calculated (anxious = 9.5%; avoidant = 9.5%; disorganized = 5.5%; secure = 6%).

Attachment to God. Attachment to God Security was assessed using the Attachment to God Inventory (AGI; Appendix E). Beck and McDonald (2004) developed the scale to extend the original ECR to measure one's attachment to God. The AGI has clinical utility when used alongside the ECR; a secure attachment to God was identified as a protective factor in those suffering from eating disorders (Homan & Boyatzis, 2010). The 28-item self-report measure demonstrated a good internal consistency and factor structure in a sample of undergraduates and graduates, with coefficient alphas of .87 and .86 for the Anxiety and Avoidance subscales, respectively (Beck & McDonald, 2004). For the avoidance dimension, items include, "I just don't feel a deep need to be close to God." For the anxiety domain, items include, "Sometimes I feel that God loves others more than me." Participants respond using a 7-point Likert scale (1 = Disagree strongly, 4 = Neutral/Mixed, 7 = Agree strongly). A global score for Attachment to God Security was calculated by computing the mean of participants' total scores on each of the subscales (Anxiety and Avoidance) and combining them to yield one Attachment to God Security continuous score. Higher global scores indicate lower levels of Attachment to

God Security. Both subscales demonstrate minimal overlap in their construct measurement, sharing only 1.4% ($r = .12$) of their variance (Beck & McDonald, 2004). In the current study sample, the Cronbach's alpha estimate was .86.

Median split. As was done on the ECR-R, a median split was calculated for attachment to God anxiety as well as attachment to God avoidance to form high-low groups, with scores on the median included in the low groups (anxiety $Mdn = 4.71$; avoidance $Mdn = 4.32$). The four groups based on attachment categories were created and the percentage of total participants for each category was calculated (anxious = 23%; avoidant = 24.5%; disorganized = 25%; secure = 27.5%).

Quartile split. To more narrowly focus on high avoidance and/ or anxiety, a very high attachment anxiety, a very high attachment avoidance, a very high attachment insecurity (both very high anxiety and very high avoidance), and an attachment security (neither very high anxiety nor very high avoidance) group were created. This was done by calculating the Z-score for Attachment to God Security and selecting those in the outermost quartiles. The four groups based on attachment categories were created and the percentage of total participants for each category was calculated (anxious = 10%; avoidant = 12.5%; disorganized = 3%; secure = 5%).

Identity achievement. Identity Achievement was assessed using the Extended Objective Measure of Ego-Identity Status II (EOM-EIS-II; Appendix F). Marcia (1964) developed the first global measure of Identity Achievement status as a semi-structured interview. The scale was modified to a self-report survey to improve the instrument's assessment ability (Bennion & Adams, 1986). The 64-item self-report measure demonstrated a good internal consistency in a sample of undergraduates, with an alpha

coefficient of .78 (Schwartz, 2004). Participants respond using a 5-point Likert scale (1 = Strongly Disagree, 3 = Neutral, 5 = Strongly Agree), indicating the presence or absence of “exploration” or “commitment” for each statement, yielding a global Identity Achievement score. The mean total score of all 64 items was used to measure the general level of global identity status, with higher scores indicating greater Identity Achievement. In the current study sample, the Cronbach’s alpha estimate was .91.

Social desirability. Social desirability was assessed using the Marlowe-Crowne Social Desirability Scale (MC-SDS; Appendix G). Crowne and Marlowe (1960) initially developed the MC-SDS as the first measure of social desirability for use with community rather than clinical populations. A 13-item shorter version was developed and found to be reliable and valid on a sample of 608 undergraduate students; results yielded a coefficient alpha of .76 for an overall score (Reynolds, 1982). Scale questions include, “It is sometimes hard for me to go on with my work if I am not encouraged,” and “I sometimes feel resentful when I don't get my own way.” Participants select either “True” or “False” for each prompt. The mean total score of the 13 items was used as a measure of social desirability, with higher scores indicating higher levels of social desirability. In the current study sample, the Cronbach’s alpha estimate was .63.

Procedure

Participants were recruited for the voluntary study using online social media posting, electronic mail, and face-to-face communication during meetings of Catholic young adult organizations. Participants were provided a link to the online study through Qualtrics. Each participant was provided a uniform resource locator (URL) with the website address to access an electronic version of the questionnaire. For recruiting

purposes, the study was titled "Young Adult Catholic Experiences," and the stated goal was to understand better the life experiences of young adults raised in Catholic homes.

Participants logged into the survey and were asked preliminary inclusion criteria questions (i.e., between the ages of 18 and 29, currently identifying as Catholic, raised in a Catholic home, and received the sacrament of Confirmation before the age of 18). If the inclusion criteria were not met, the participant could not advance to the measures and was not entered into the lottery. If the participant met the criteria, the consent form was provided (see Appendix G). Upon signing the consent form, a series of measures were presented. First additional demographics questions (i.e., sex), then the Early Memory Test (EMT). As part of the EMT, the participant was prompted to write narratives for the first four earliest memories: earliest memory, second earliest memory, earliest memory of mother or mother-figure, and earliest memory of father or father-figure. The participant was asked related questions (see Appendix C). There was a 350 character (about 75 words) minimum requirement built into each early memory prompt response.

Following the EMT describing mother and father, the participant completed the Marlow-Crowne Social Desirability Scale (MCSDS), Experiences in Close Relationships Scale-Revised (ECR-R), Extended Objective Measure of Ego-Identity Status II (EOM-EIS-II), Attachment to God Inventory (AGI), and Bell Object Relations and Reality Testing Inventory (BORRTI). After completing the questionnaires, the participant completed the last EMT narrative (earliest memory of God).

Two attention checks were built into the study (see Appendix J). If the participants provided correct answers to each of the attention checks, they were allowed to proceed; if the participants provided incorrect answers, they were screened out. Once

the survey (which took about an hour) was completed, the participants were provided a digital debriefing statement (see Appendix I). Participants who completed the study were invited to provide an email address to enter the lottery for a chance to win one of three \$50 Amazon gift cards. Participants were randomly selected for the three prizes, then each participant was informed and provided a personalized gift card via email.

Early Memory Test Coding. The protocol responses were coded for Implicit Adaptive Object Relations after the data were collected, according to the categories specified on the SCORS-G (Hilsenroth, Stein, & Pinsker, 2007). All eight scales are coded on a continuous Likert Scale ranging from 1-7 for each narrative, but four were used in this study (COM, AQR, EIR, and SE). In order to establish inter-rater reliability, two advanced graduate students in clinical psychology learned the SCORS-G coding procedure developed by Hilsenroth, Stein, and Pinsker (2007) and practiced on 10 sample protocols (i.e., 40 responses) not used in hypothesis testing.

To test inter-rater reliability on the data set, two sets of 10 early memories were coded. The kappa correlation coefficient between the two sets of ratings ranged from .87-.88, indicating good interrater reliability. The raters coded an additional set of 10 to check for maintained reliability ($\alpha = .87-.94$). In order to ensure that coding proficiency remained consistent throughout the scoring of all protocols, after every 25 protocols coded independently, the two raters independently coded 20 more protocols, and the interrater reliability was rechecked. All kappa coefficients were between .87 and .98 suggesting that interrater reliability remained good to high throughout the coding process.

Data Analytic Plan. The Statistical Package for the Social Sciences (SPSS) version 17.0 was used for data analyses. Prior to hypothesis testing, data were screened

for entry accuracy, missing values, and outliers. Cronbach's alphas were calculated to assess the internal consistency of all measures. The normality of each variable was evaluated and transformed as needed. A histogram and scatterplot of the variables was conducted to determine if assumptions of linearity and homoscedasticity were satisfied.

The variables of sex, ethnicity, and social desirability were assessed as potential covariates (Wiese & Cawthon, 2009). Social desirability was analyzed using an independent samples *t*-test. Sex and ethnicity were analyzed using a one-way ANCOVA as related to the dependent variables of Explicit Adaptive Object Relations and Identity Achievement.

Hypotheses I-III required Hayes' (2012) mediation analysis (SPSS PROCESS macro, model #4). Hypothesis I evaluated the direct effect of the relationship between Attachment Security and Explicit Adaptive Object Relations. Hypothesis II evaluated the direct effect of the relationship between Attachment Security and Attachment to God Security. Hypothesis III evaluated the indirect effect of Attachment Security on Explicit Adaptive Object Relations through Attachment to God Security. The indirect effect was tested using bootstrapping with 5,000 samples.

Hypotheses IV and V required Hayes' (2012) mediation analysis (SPSS PROCESS macro, model #4). Hypothesis IV evaluated the direct effect of the relationship between Attachment Security and Identity Achievement. Hypothesis V evaluated the indirect effect of Attachment Security on Identity Achievement through Attachment to God Security. The indirect effect was tested using bootstrapping with 5,000 samples.

The exploratory question required Hayes' (2012) mediation analysis (SPSS PROCESS macro, model #4) to evaluate the indirect effect of Attachment Security to Implicit Adaptive Object Relations (COM, AQR, EIR, SE scores; SCORS-G) through Attachment to God Security. The indirect effect was tested using bootstrapping with 5,000 samples.

Chapter V

Results

The following section presents an overview of the results of the current study, including preliminary analyses as well as hypothesis testing.

Preliminary Analyses

Missing data. While 946 participants completed the study consent, only 200 participants continued to complete the remaining study measures. After excluding the 746 participants, missing data were minimal, with 0.4% of items left unanswered by participants across scales. This percentage was entirely comprised of two participants who discontinued before completing the EOM-EIS-II (Marcia, 1964); and the AGI (Beck & McDonald, 2004).

Descriptive statistics. Means, standard deviations, skewness, and kurtosis of all variables were computed and measured to assess normality of the data. All study variables were normally distributed (skewness and kurtosis between -2.00 and +2.00). Descriptive statistics are displayed in Table 5.

Covariates. The variables of sex, ethnicity, and social desirability were assessed as potential covariates. Sex and ethnicity were analyzed using a one-way ANCOVAs as related to the dependent variables of Explicit Adaptive Object Relations and Identity Achievement. Ethnicities were grouped into six major categories (i.e., Asian, African, European, Latino/a, White American, and Other) for covariate testing. Categories were selected based on the highest frequencies in order to minimize the influence of outliers. Social desirability was analyzed using a one-way ANOVA. Associations between study variables (i.e., Explicit Adaptive Object Relations, Identity Achievement) and potential

Table 5

Descriptive Statistics of Variables

Measure	<i>N</i>	<i>M (SD)</i>	Skew (<i>SE</i>)	Kurtosis (<i>SE</i>)
ECR-R	200	3.40 (0.03)	-0.06 (0.17)	-0.62 (0.34)
AGI	198	4.59 (0.86)	0.17 (0.17)	-0.39 (0.34)
EOM-EIS-II	198	4.85 (0.63)	0.69 (0.17)	0.91 (0.34)
BORRTI	200	1.64 (0.11)	-0.63 (0.17)	1.08 (0.34)
MCSDS	200	1.47 (0.20)	-0.36 (0.17)	-0.56 (0.34)

Note. *N* = sample size; sample sizes differ due to missing data. *M* = Mean; *SD* = Standard Deviation; ECR-R = Experiences in Close Relationships Scale-Revised (Fraley et al., 2000); AGI = Attachment to God Inventory (Beck & McDonald, 2004); EOM-EIS-II = Extended Objective Measure of Ego-Identity Status II (Marcia, 1964); BORRTI = Bell Object Relations and Reality Testing Inventory (Bell, 1995). MCSDS = Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960).

covariates are displayed in Table 6. As shown in the table, neither ethnicity ($\alpha > .08$), sex ($\alpha > .34$), nor social desirability ($\alpha > .15$), had a statistically significant effect on either Identity Achievement or Explicit Adaptive Object Relations; therefore, they were not included in further analyses.

Inter-variable correlations. Means, standard deviations, and bivariate correlations among the variables are displayed in Table 7. All correlations were conducted using Pearson's r . The presence of significant inter-variable correlations for the variables was consistent with previous literature, suggesting that the measures are complementary.

Hypothesis Testing

All primary analyses and those conducted for the exploratory question were conducted using SPSS version 17.0 software and Hayes PROCESS Analysis version 3.5 (Hayes, 2017).

Hypothesis I. Hypothesis I evaluated the direct effect of the relationship between Attachment Security and Explicit Adaptive Object Relations in a sample of 200 Catholic, non-clinical emerging adults from the New York Metro area. This hypothesis was tested using mediation models with the PROCESS bootstrapping procedures (Hayes, 2017). Hypothesis 1 was tested using a mediation model (Model 4; PROCESS V3.5; Hayes, 2017) that was also used to examine Hypotheses II and III. The model was significant, $R^2 = .11$, $F(1,38) = 23.87$, $p < .001$. This model explained 11% of the variance in Explicit Adaptive Object Relations. The direct effect of Attachment Security predicting Explicit Adaptive Object Relations was found to be significant. As hypothesized, Attachment Security was found to be a significant predictor of Explicit Adaptive Object Relations,

Table 6

Test for Covariates on Outcome Variables

Outcome Variable	<i>F</i>	<i>Sig.</i>
Identity Achievement	1.14	.34
Race/Ethnicity	2.53	.08
Sex	1.14	.34
Social Desirability	2.09	.15
Adaptive Object Relations	-0.01	.55
Race/Ethnicity	2.23	.11
Sex	1.14	.34
Social Desirability	2.29	.13

Note. $N = 198$; sample sizes differ due to missing data; $F = F$ -value; $Sig =$ Significance level; Identity Achievement = mean score of the EOM-EIS-II; Extended Objective Measure of Ego-Identity Status II (Marcia, 1964); Adaptive Object Relations = mean score of the BORRTI; Bell Object Relations and Reality Testing Inventory (Bell, 1995); Social Desirability = mean score of the MCSDS; Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960).

Table 7

Inter-variable Correlations

Variable	<i>N</i>	1	2	3
1. Attachment Security	200			
2. Attachment to God Security	198	.33**		
3. Identity Achievement	198	.35**	.55**	
4. Adaptive Object Relations	200	.39**	.35**	.41**

Note. Attachment Security = mean score of the ECR-R; Experiences in Close Relationships Scale-Revised (Fraley et al., 2000); Attachment to God Security = mean score of the AGI; Attachment to God Inventory (Beck & McDonald, 2004); Identity Achievement = mean score of the EOM-EIS-II; Extended Objective Measure of Ego-Identity Status II (Marcia, 1964); Adaptive Object Relations = mean score of the BORRTI; Bell Object Relations and Reality Testing Inventory (Bell, 1995).

** $p < .01$.

$b = 0.04$, $t(192) = 4.629$, $p < .001$. Thus, hypothesis I was supported (see Figure 1).

Hypothesis II. Hypothesis II evaluated the relationship between Attachment Security and Attachment to God Security. Inter-correlations between the variables are displayed in Table 7. The next set of analyses evaluated the direct effect of Attachment Security (combined low attachment anxiety and low attachment avoidance) on Attachment to God Security. This was tested using a mediation model (Model 4; PROCESS V3.5; Hayes, 2017). The direct effect of Attachment Security predicting Attachment to God Security was found to be significant. As hypothesized, Attachment Security was a significant predictor of Attachment to God Security, $b = 0.29$, $t(196) = 4.88$, $p < .001$. Thus, this hypothesis was supported (see Figure 1).

Hypothesis III. Hypothesis III evaluated the indirect effect of Attachment Security on Explicit Adaptive Object Relations through Attachment to God Security. The indirect effect was tested using a mediation model (Model 4; PROCESS V3.5; Hayes, 2017), with 5,000 bootstrapped samples. The indirect effect was found to be significant, $b = 0.01$, $SE = 0.00$, 95% CI [0.0030,0.0100]. Thus, the relationship between Attachment Security and Explicit Adaptive Object Relations was partially mediated by Attachment to God Security; the total effect of Explicit Adaptive Object Relations on Attachment Security was mediated by higher Attachment to God Security, as displayed in Figure 1. This relationship explained 11% of the variance in Attachment Security.

Hypothesis IV. Hypothesis IV evaluated the direct effect of Attachment Security on Identity Achievement. This was tested using a mediation model (Model 4; PROCESS V3.5; Hayes, 2017). The direct effect of Attachment Security predicting Identity Achievement was found to be significant, $R^2 = .33$, $F(1,38) = 48.68$, $p < .01$. This

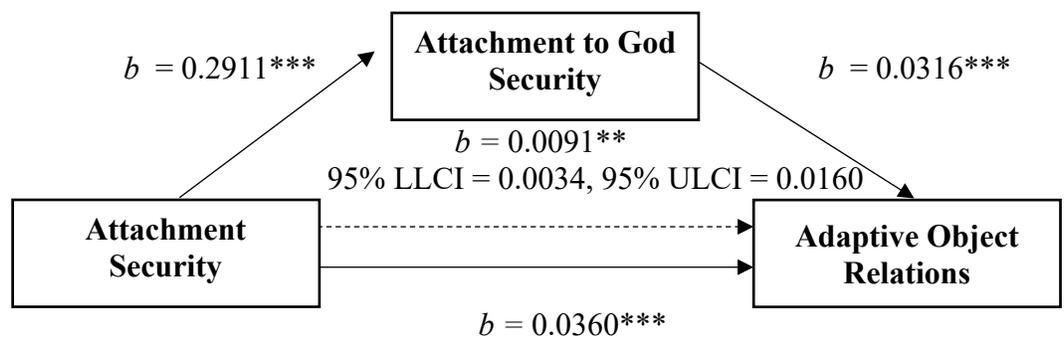


Figure 1. Graphic representation of the mediation model of the effect of Attachment Security on Explicit Adaptive Object Relations (as measured by the BORRTI (Bell, 1995) mediated by Attachment to God Security.
Note. $N = 198$. b = unstandardized coefficient. Dashed line = indirect effect; solid lines = direct effects. $^{***} p < .001$, $^{**} p < .01$.

relationship explained 33% of the variance in Attachment Security. As hypothesized, Attachment Security was a significant predictor of Identity Achievement, $b = 0.12$, $t(195) = 3.00$, $p < .001$. Thus, hypothesis IV was supported (see Figure 2). The direct effect of Attachment Security on Identity Achievement was found to be significant (see Hypothesis II).

Hypothesis V. Hypothesis V evaluated the indirect effect of Attachment Security on Identity Achievement through Attachment to God Security. The indirect effect was tested using a mediation model (Model 4; PROCESS V3.5; Hayes, 2017), 5,000 bootstrapped samples. The indirect effect was found to be significant, $b = 0.10$, $SE = 0.03$, 95% CI [0.0500,0.1600]. Thus, the relationship between Attachment Security and Identity Achievement was partially mediated by Attachment to God Security, with the total effect of Identity Achievement on Attachment Security mediated by higher Attachment to God Security, as displayed in Figure 2.

Exploratory Question

The exploratory question asked whether Attachment to God Security partially mediated the relationship between Attachment Security and Implicit Adaptive Object Relations (COM, AQR, EIR, SE scores; SCORS-G).

The Implicit Adaptive Object Relations variable was normally distributed (skewness and kurtosis between -2.00 and +2.00). The overall global score had a weak reliability ($\alpha = .52$), however the inter-rater reliabilities (Kappa scores) for the individual scales were good (as noted previously). Descriptive statistics are displayed in Table 8. A priori analyses showed that the potential covariates of sex, ethnicity, and

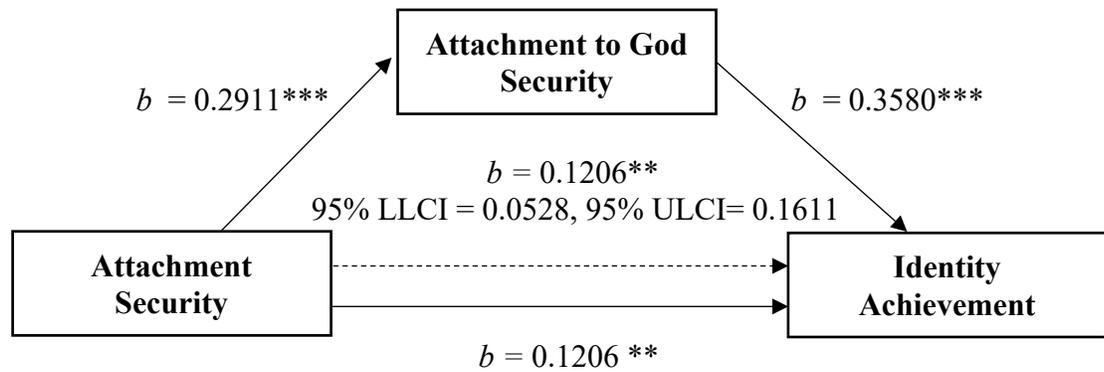


Figure 2. Graphic representation of the mediation model of the effect of Attachment Security on Identity Achievement mediated by Attachment to God Security. Note. $N = 198$. b = unstandardized coefficient. Dashed line = indirect effect; solid lines = direct effects. $^{***} p < .001$, $^{**} p < .01$

social desirability were not statistically significant in the model, and therefore, were not included in further analyses.

Inter-variable correlations. Correlations among the SCORS variables are displayed in Table 9. All correlations were conducted using Pearson's r . The presence of significant inter-variable correlations for affective quality of representations, emotional investment in relationships, and self-esteem was consistent with previous literature, suggesting that the variables are complementary. However, among the SCORS-G subscales, the only statistically significant relationships with other measures was between an "Affective Quality of Relationships" and "Attachment Security (see Discussion)."

Mediation model. The exploratory question required Hayes' (2012) mediation analysis (SPSS PROCESS macro, model #4) to evaluate the indirect effect of Attachment Security on Implicit Adaptive Object Relations (COM, AQR, EIR, SE total score; SCORS-G) through Attachment to God Security. The overall model of Attachment Security predicting Implicit Adaptive Object Relations, mediated by Attachment to God Security, was not found to be statistically significant, $R^2 = .05$, $F(1,48) = 1030$, $p = .31$. However, Attachment Security was a statistically significant predictor of Implicit Adaptive Object Relations, according to ratings from the SCORS-G, $b = 0.29$, $t(46) = 2.311$, $p < .05$, as displayed in Figure 3.

The indirect effect was tested using a mediation model (Model 4; PROCESS V3; Hayes, 2017), using bootstrapping with 5,000 samples. The indirect effect was not found to be statistically significant, $b = 0.44$, $SE = 0.12$, 95% CI [-0.1400, 0.3400]. Thus, the relationship between Attachment Security and Implicit Adaptive Object Relations partially mediated by Attachment to God Security, with the total effect of Implicit

Table 8

Descriptive Statistics of SCORS-G

Measure	<i>n</i>	<i>ICC</i>	<i>M (SD)</i>	Skew (<i>SE</i>)	Kurtosis (<i>SE</i>)
SCORS-G	50	0.52	3.40 (0.03)	-0.07 (0.34)	-0.61 (0.67)

Note. *n* = number of observations, sample sizes differ due to missing data. *ICC* = intra-class correlation coefficient; *M* = Mean; *SD* = Standard Deviation; SCORS-G = Social Cognition and Object Relations Scale-Global rating method (Hilsenroth, Stein, & Pinsker; 2007).

Table 9
Inter-variable Correlations with SCORS-G

Measure	<i>n</i>	1	2	3	4	5	6	7
1 ECR-R	50							
2. AGI	50	.47**						
3. EOM-EIS-II	50	.45**	.59**					
4. SCORS-G	49	.08	-.03	-.05				
5. COM	49	-.27	-.07	.09	.43**			
6. AQR	49	.38**	.18	-.02	.70**	-.15		
7. EIR	49	.07	-.09	-.11	.88**	.26	.56**	
8. SE	49	-.12	-.19	-.08	.48**	.09	.14	.28*

Note. ECR-R = Attachment Security; Experiences in Close Relationships Scale-Revised (Fraley et al., 2000); AGI = Attachment to God Security from the Attachment to God Inventory (Beck & McDonald, 2004); EOM-EIS-II = Identity Achievement from the Extended Objective Measure of Ego-Identity Status II (Marcia, 1964); SCORS-G = Adaptive Object Relations from the SCORS-G (Hilsenroth, Stein, & Pinsker; 2007); Subscales from the SCORS-G: COM = Complexity, AQR = Affective Quality of Relationships; EIR = Emotional Investment in Relationships; SE = Self-Esteem.

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

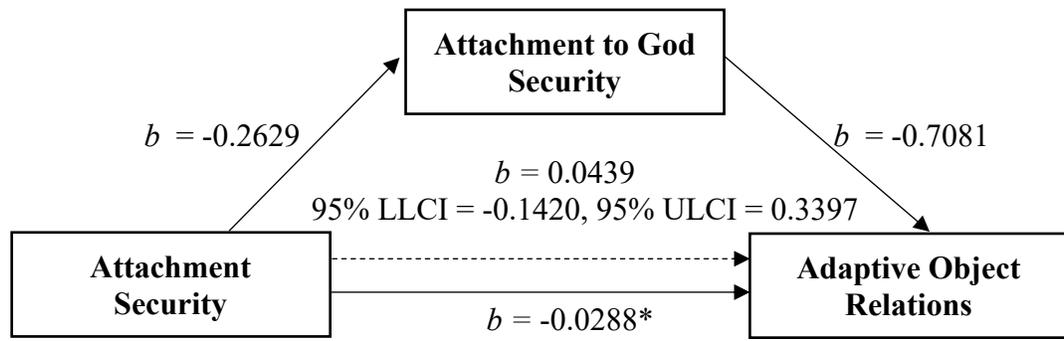


Figure 3. Graphic representation of the mediation model of the effect of Attachment Security on Implicit Adaptive Object Relations (as measured by the SCORS-G (Hilsenroth et al., 2007) mediated by Attachment to God Security. Note. $N = 49$. b = unstandardized coefficient. Dashed line = indirect effect; solid lines = direct effects. *** $p < .001$, ** $p < .01$, * $p < .05$.

Adaptive Object Relations on Attachment Security mediated by higher Attachment to God Security was not found.

Post Hoc and Exploratory Analyses

Post hoc analyses. Additional post hoc analyses were conducted to better understand the statistically significant mediating role of Attachment to God Security on the relationship between Attachment Security and Explicit Adaptive Object Relations, particularly for those with attachment insecurity (Hypothesis II). To do so, Attachment Security and Attachment to God Security variables were converted from continuous to categorical attachment groups of “Anxious,” “Avoidant,” and “Disorganized (highly anxious and avoidant), and “Secure.”

Median split. The first set of analyses focused on whether Attachment Security (low attachment avoidance and low attachment anxiety; median split) has a statistically significant positive relationship with Attachment to God Security. First, the median score of attachment anxiety ($Mdn = 4.00$) and attachment avoidance ($Mdn = 5.67$) were computed. Then, high and low groups for each variable were created, using the median as the split. Those with scores on the median were placed in the low group.

Quartile split. The next set of analyses evaluated if Attachment Security (low attachment avoidance and low attachment anxiety groups; first quartile) has a statistically significant positive relationship with Attachment to God Security. This was tested by first calculating the *Z*-scores of attachment anxiety and attachment avoidance. Then, high and low groups, respective to the first and fourth quartiles for each variable, were created using the *Z*-scores.

Categories. Finally, the participants were assigned to the four categorical

attachment groups (median and quartile, respectively; see Table 10); “Anxious,” $n = 32, 19$; “Avoidant,” $n = 39, 19$; “Disorganized,” $n = 68, 11$; “Secure,” $n = 59, 12$). The means of the Attachment Security categories (“Anxious,” $M = 4.90, 4.63$; “Avoidant,” $M = 4.79, 4.48$; “Disorganized,” $M = 4.70, 5.02$; “Secure,” $M = 5.01, 5.43$) were identified. An analysis of simple effects showed that categories had a significant effect on Attachment to God Security $F(1,28) = 7.37, p < 0.001$. Pairwise comparisons showed the “Secure” attachment mean was significantly higher compared to “Anxious” ($p < .05$), “Avoidant” ($p < .01$), and “Disorganized” ($p < .001$) categories.

Overall results. Analyses using both median split and quartiles were virtually identical. One-way ANOVAs showed a statistically significant difference in the quartile Attachment Security categories ($F(3,14) = 9.87, p < .01$). Further, an analysis of simple effects showed that quartile categories had a significant effect on Attachment to God Security $F(1,28) = 4.91, p < 0.001$. Pairwise comparisons for the quartile categories showed the “Secure” attachment mean was significantly higher compared to “Anxious,” ($p < .05$), “Avoidant”, ($p < .01$), and “Disorganized” ($p < .01$) categories. However, other significant findings between the categories for the median and quartile groups were not observed. Relatedly, post hoc comparisons using the Tukey HSD test indicated that the mean score for each of the attachment categories did not significantly differ from one another ($p = .95$). Further, interaction effects of Attachment Security and Attachment to God Security on Identity Achievement or Explicit Adaptive Object Relations were not observed ($F(9,15) = 1.13, p = .34$).

Exploratory attachment analyses. The second set of analyses aimed to better understand the mediating role of Attachment to God Security on the relationship between

Table 10

Descriptive Statistics of Attachment Categories

Category	n^1	$M (SD)^1$	n^2	$M (SD)^2$
Anxious	32	4.90 (0.10)	19	4.64 (0.16)
Avoidant	39	4.79 (0.09)	19	4.48 (0.17)
Disorganized	68	4.70 (0.07)	11	5.02 (0.19)
Secure	59	5.01 (0.09)	12	5.43 (0.16)

Note. n^1 = sample size of median category; M^1 = Mean of median category; SD^1 = Standard Deviation of median category; n^2 = sample size of quartile category; M^2 = Mean of quartile category; SD^2 = Standard Deviation of quartile category; categories made from responses to ECR-R (Experiences in Close Relationships Scale-Revised; Fraley et al., 2000).

Attachment Security and Implicit Adaptive Object Relations (Exploratory question). To do so, both Attachment Security and Attachment to God Security variables were converted from continuous to categorical attachment groups of “Anxious,” “Avoidant,” and “Disorganized (highly anxious and avoidant), and “Secure.”

The first set of analyses used the median split of the Attachment Security and Attachment to God Security variables. The second set of analyses used the outermost quartiles of the *Z*-scores of the variables (“Anxious,” $n = 10, 3$; “Avoidant,” $n = 13, 4$; “Disorganized,” $n = 8, 2$; “Secure,” $n = 10, 2$; median and quartile groups, respectively). In the median groups, the interaction effects of Attachment Security and Attachment to God Security on Implicit Adaptive Object Relations were not observed ($F(8,14) = 1.15, p = .36$). Further analyses on the quartile groups were not conducted due to the small *N*.

Additional analyses more thoroughly investigated the influence of Attachment Security and Attachment to God Security on each area of Implicit Adaptive Object Relations; these include the complexity of representation of people (COM), affective quality of representations (AQR), emotional investment in relationships (EIR), and self-esteem (SE) (SCORS-G; Hilsenroth et al., 2007). To do so, Attachment Security and Attachment to God Security categorical attachment groups (as described above) were used. As before, the first set of analyses used the median split of the variables, while the second set of analyses used the outermost quartiles of the *Z*-scores of the variables. The interaction effects of Attachment Security and Attachment to God Security on Implicit Adaptive Object Relations were not observed.

To explore the indirect effect of Attachment Security on each area of Implicit Adaptive Object Relations through Attachment to God Security, Hayes’ (2012)

mediation analysis (SPSS PROCESS macro, model #4) was used. A model was created for Complexity, Affective Quality of Relationships, Emotional Investment in Relationships, and Self Esteem. Upon analyzing each area of Implicit Adaptive Object Relations, the direct effect of Attachment Security on Affective Quality of Relationships was statistically significant with a meaningful effect size, $R^2 = .22$, $b = 2.03$, $t(46) = 2.44$, $p < .05$. Further, the effect size of Attachment Security predicting Attachment to God Security was not statistically significant, but had a meaningful effect size $R^2 = .16$, $b = 0.06$, $t(46) = 0.61$, $p = .66$, CI [3.71, 6.02]. However, the indirect effect was not found to be statistically significant $b = 0.04$, $t(46) = 0.66$, $p = .51$, CI [-0.14, 0.34]. Further, the remainder of the direct effects of Attachment Security: on Complexity, $R^2 = .01$, $b = 0.13$, $t(46) = 2.44$, $p = .62$, on Emotional Investment in Relationships, $R^2 = .04$, $b =$, $t(46) = 0.44$, $p = .19$, and on Self Esteem, $R^2 = .00$, $b = -0.14$, $t(46) = -0.29$, $p = .78$, were not statistically significant and did not have meaningful effect sizes.

Effect size. Post hoc analyses for the exploratory question investigated whether sample size was adequate for the mediation model. A meaningful effect size of $R^2 = .14$ was found for the full model, indicating that the analysis were underpowered.

Results Summary

This study empirically investigated the relationships among Attachment Security, Attachment to God Security, Identity Formation, and Explicit Adaptive Object Relations in a sample of 200 Catholic emerging adults.

Primary analyses investigated if an attachment to God influenced the relationships between Attachment Security and 1) Identity Formation, and 2) Explicit Adaptive Object Relations. In the first model (Hypotheses I-III), analyses revealed that Attachment

Security (ECR-R; self-report) was a positive predictor of Explicit Adaptive Object Relations (BORRTI; self-report), Attachment Security was a positive predictor of Attachment to God Security (AGI; self-report), and Attachment to God Security was a positive predictor of Explicit Adaptive Object Relations. As hypothesized, the relationship between Attachment Security and Explicit Adaptive Object Relations was partially mediated by Attachment to God Security, with the total effect of Explicit Adaptive Object Relations on Attachment Security mediated by higher Attachment to God Security. In other words, a secure relationship to God influenced the relationship between early attachment experiences and current, explicit relationships.

As related to the second model (Hypotheses IV and V), analyses showed a positive relationship between Attachment Security and Identity Achievement (EOM-EISII, self-report). The relationship between Attachment Security and Identity Achievement was partially mediated by Attachment to God Security, with the total effect of Identity Achievement on Attachment Security mediated by Attachment to God Security, as hypothesized. In other words, a secure relationship to God influenced the relationship between early attachment experiences and committing more to independently chosen occupations and ideological goals (i.e., Identity Achievement).

Post hoc analyses further investigated the influence of Attachment to God Security on Identity Achievement and Explicit Adaptive Object Relations, particularly for those with attachment insecurity. A main effect was found for Attachment Security categories on Attachment to God security. To investigate the nature of the influence of each category, pairwise comparisons were conducted; those showed a secure attachment style had a significantly higher mean compared anxious, avoidant, and disorganized

categories (when split by the median as well as outer-most quartiles). However, there was no significant overall simple effect of the attachment categories on Attachment to God Security. Further, ANOVAS were conducted and no interaction effects were observed for the Attachment Security or Attachment to God Security groups on the outcome variables.

The exploratory analyses investigated the mediating role of an attachment to God on a third relationship: Attachment Security and Implicit Adaptive Object Relations (COM, AQR, EIR, SE scores; SCORS-G; observer-coded). Attachment Security directly predicted Implicit Adaptive Object Relations. The overall model of Attachment Security predicting each area of Implicit Adaptive Object Relations (COM, AQR, EIR, SE scores; SCORS-G) mediated by Attachment to God Security, was not found to be statistically significant; however, a meaningful effect size of $R^2 = .14$ was found. When each area of object relations was investigated, a meaningful direct effect of Attachment Security on Attachment to God Security and a meaningful effect of Attachment Security on the Affective Quality of Representations was found. Upon further analysis, only certain paths of the model were found to be influential. Within this third model, the relationship between attachment experiences predicted a secure attachment to God. Additionally, attachment experiences were directly related to adaptive implicit experiences of current, object relationships. However, secure attachments to God were not shown to influence current, object relationships. Finally, the direct effect of Attachment Security was statistically significant on one area of Implicit Adaptive Object Relations, the Affective Quality of Relationships. In other words, there was a relationship only between early attachment experiences and one's current, implicit experience of relationships.

Chapter VI

Discussion

This section includes a summary of the purpose of the study, followed by a discussion of the findings. Next, the limitations of the study and future directions for research are considered. Finally, the contribution to the literature and clinical implications are proposed related to the concept of an attachment to God.

Purpose of the Study

The primary aim of this study was to expand the literature on how an attachment to God can influence attachment experiences with primary caregivers, object relationships, and identity formation. Emerging adulthood is a tenuous developmental period, rife with identity exploration, instability, and relationship development (Arnett, 2007.) The study focused specifically on a sample of 200 emerging adults raised in Catholic homes, who completed Confirmation before age 18.

Emerging adults with healthy early experiences with primary caregivers (attachments) have fundamentally different trajectories from those with unsupportive foundational interactions. Research has shown that securely attached individuals experience healthier relationships, stronger social ties, and have fewer physical and mental health problems (Ghafouri, Dehghani, Summers, & Shahboulaghi, 2020; Stroebe & Stroebe, 1996). These early interactions also guide how one conceptualizes, perceives, and experiences others (object relations) (Stein et al., 2011). It makes sense, then, that those with *Attachment Security* disclose low levels of attachment anxiety or avoidance and often have healthy attachment expectations of others (Wei et al., 2007).

When engaging with new individuals outside of their families, emerging adults are confronted with varying viewpoints and relational experiences at a time when their identity may be highly dynamic (Marcia, 1980). Therefore, *Identity Achievement* occurs when the dependency of identification with others ends. Identity functions as a frame to differentiate the self from others, promoting autonomy of the self (Schlüter-Müller, Goth, Jung, & Schmeck, 2015). There is also a highly influential relationship between attachment insecurity and maladaptive object relational experiences of others (Stein, Siefert, Stewart, & Hilsenroth, 2011). In this study, *Adaptive Object Relations* was defined as several ego functions that organize a person's inner experience of social processes and the behavioral experience of interacting with others. Research has also explored many parallels between attachment experiences to primary caregivers, and attachments to surrogate attachment figures (including an attachment to God). Therefore, *Attachment to God Security* has been defined as the experience of low levels of attachment anxiety or avoidance, along with healthy attachment expectations of others.

This study proposed three research questions seeking to answer if a secure attachment to God partially influences the relationship between early attachment experiences, identity formation, and object relationships for Catholic emerging adults. The first research question asked whether a secure attachment to God might partially explain the relationship between early attachment experiences and explicit adaptive object relationships (as measured by self-report). The second research question asked whether a secure attachment to God explained the relationship between early attachment experiences and identity achievement. The third exploratory research question investigated implicit experiences (as measured by observer-rated narratives). The current

study enhanced previous findings on attachment, identity formation, and experiences of relationships by introducing the value of an attachment to God and providing a more nuanced picture of Catholic emerging adults' current psychological functioning. These findings, as well as non-significant results, are discussed in detail below.

Summary and Explanation of Findings

Attachment to God security and identity achievement. Consistent with previous investigations on attachment security (Arseth, Kroger, Martinussen, & Marcia, 2009; Lapsley, Rice, & FitzGerald, 1990), secure attachments with primary caregivers were associated with a secure attachment to God as well as the achievement of identity formation. As expected, this study showed that higher attachment security predicted a secure attachment to God. Also, a secure attachment to God predicted more the development of a formed identity. Further, a secure attachment to God did partially explain the positive relationship between secure early attachment experiences and the achievement of a healthy identity.

For the Catholic emerging adults, the secure attachment to God may explain part of the relationship between early attachments and identity commitment, as parent attachments have been shown to do, by functioning as a secure base when forming peer relationships and allowing for an exploration of identity with those peers (Meeus, Oosterwegel, & Vollebergh, 2002). The findings differ from those by Matos, Barbosa, De Almeida, and Costa (1999), who did not find significant relationships between three of the four identity status scales and parental attachment; the study sampled Portuguese late-adolescents; therefore, potential age and cultural confounds may have been at play. Further, past research showed religiosity is more influential for secure children's

adjustment outcomes, with lower levels of externalizing and internalizing symptomatology as compared to their insecurely attached peers (Kim et al., 2009). Therefore, the relationship with God as a secure, surrogate attachment figure may be more influential on identity achievement than religiosity alone. Future studies should more thoroughly assess the mechanism by which the attachment to God influences identity formation, whether through an internalization of religious teaching or otherwise.

Attachment to God security and adaptive object relations. Results from the current study indicated that those with higher levels of attachment security are more likely to hold positive expectations for relationships, which is consistent with the studies it replicated (Calabrese, Farber, & Westen, 2005; Stein et al., 2011). A secure attachment to God influenced the relationships between attachment security and the formation of the identity (described above), as well as attachment security and explicit measures of adaptive object relations.

When measuring adaptive object relations with an implicit measure (SCORS-G; Hilsenroth, Stein, & Pinsker, 2007), a secure attachment to God did not influence the relationship between attachment security to primary caregivers and implicit adaptive object relations. However, while the overall model of implicit object relations had a large, meaningful effect size, only certain paths were found to be influential; therefore, the study should be replicated with a larger sample. There was one notable finding, however: Of the four areas of Implicit Adaptive Object Relations investigated and measured in the study, there was a significant relationship between early attachment experiences and one's current, implicit experience of relationships (Affective Quality of Relationships). The different results regarding the implicit and explicit experiences of relationships may

also be related to differences in the measurement of the construct as well as the distinct aspects of object relational functioning captured.

There are several differences in the current study's measures of Adaptive Object Relations that might have influenced the results (e.g., rating perspective, areas of object relations evaluated). As compared to the EMT, the BORRTI is a self-report, explicit measure based on a flexible theoretical framework; it acknowledges the potential for a wide range of functioning within the same person. Therefore, the introduction instructs the participant to respond according to the "most recent experience" when answering. For emotionally stable people, this statement may be interpreted as an overall impression (Bell, 1995); whereas, for those with an unstable ego state (e.g., periods of time with trauma, history of substance use), this may reflect the most recent set of experiences. Further, the BORRTI measures specific components of ego functioning, including social incompetence (i.e., difficulty making friends), insecure attachment (i.e., sensitivity to rejection), and egocentricity (i.e., a tendency to perceive others in relation to oneself) (Bell, 1995) that is different from the implicit measure used in the study.

In contrast, the EMT, and the accompanying SCORS-G ratings, is an observer-rated, implicit measure that reflects an overall object relational world; this study included the complexity of representation of people, the affective quality of representations, emotional investments in relationships, and self-esteem. Further, the self-report format of the BORRTI captures conscious, explicit processes that may be different from those captured in the observer-coded SCORS-G intended to evaluate unconscious, implicit processes (Fowler, Hilsenroth, & Handler, 1995).

As theorized in some literature, God may have functioned as an additional attachment figure, as a safe haven in times of crisis and a secure base from which to explore (Rowatt & Kirkpatrick, 2002). However, research has revealed two conflicting relationships regarding attachment to caregivers and attachment to God: correspondence and compensation (Beck, McDonald, Allison, & Norsworthy, 2005). The study's results seem to support elements of the correspondence hypothesis (McDonald et al., 2005), specifically in the relationship between Attachment Security and one area of Implicit Adaptive Object Relations, the Affective Quality of Relationships. This might be influenced by the sample of the study, who are self-identified as Catholic, emerging adults. Future studies might include a comparison group of emerging adults raised in Catholic homes who no longer identify as Catholic to better understand if the continued identification with the Catholic religion influences one's attachment to God.

In past research, securely attached, socially competent children were more effective in engaging than with their peers (Estrada, Arsenio, Hess, & Holloway, 1985). Further, the affective quality of mother-child relationships was shown to have a direct influence on cognitive and social outcomes, including intelligence and relationship development. It seems as that secure attachments to loved ones involve healthy affective relational experiences; these formative, positive experiences then promote continued healthy experiences of others. In the current study, relationships were not found between Attachment Security and the other Implicit Adaptive Object Relations areas, but an attachment to God had a meaningful effect size as a mediator of the relationship. To more fully investigate the role of God as a correlate or compensatory to primary caregiver

attachments, further work should be done by comparing the securely and insecurely attached groups.

From a developmental perspective, God might also be considered as a transitional object for self-identified Catholic emerging adults. A representation of God might be functioning as a transitional object that one could bring to mind when separated from primary caregivers as one engages in new relationships. If one treats and recognizes God as an omnipotently constructed object, then the representation might be similar one formed as a person (LaMothe, 2010). When developing an identity or forming relationships, one would be able to bring the other (God) to mind, along with the values a relationship God represents. Second, the individual might believe in the personal, two-way object-subject relationship, which is a guiding principle of the Catholic faith. The perceived relationship, if adaptive, may allow one to bring to mind healthy ways of engaging with others. Third, if one is able to practice repairing disruptions in the relationship with God, then doing so with others might be easier (LaMothe, 2010).

Overall, the current study enhanced previous findings on attachment, identity formation, and adaptive object relations by introducing the value of an attachment to God and providing a more nuanced picture of Catholic emerging adults' current psychological functioning in this domain. A secure relationship to God contributed to the core finding, supported here and in the literature, that attachment security is associated with more adaptive experiences of relationships and identity development. While unsurprising, these findings were fundamental in assessing the unique contributions of an attachment to God.

Contribution to the Literature and Clinical Implications

Despite the large population of Catholic emerging adults in the United States, little is known about the role of a secure attachment to God in this group. This study aimed to expand empirical understanding of the subgroup's attachment to God with the goal of guiding clinical diagnosis and facilitating faith-informed psychotherapy. A Catholic emerging adult may be able to experience an attachment to and personal relationship with God, bringing God to mind when committing to an identity and forging new relationships.

Attachment theorists agree one may form secure attachments with a wide range of others, including siblings, therapists, etc. (Fraley, 2002). These additional, influential attachments may be powerful for insecurely attached adults and beneficial for any adult. To this point, a secure attachment to God may be considered as a potentially therapeutic relationship, even though it is not a typical, human relationship. Catholic teaching often describes God as a loving, safe parent/child relationship or even a spousal relationship (e.g., those in religious life). For some, a relationship with God functions as a unique attachment bond that develops concurrently with primary caregiver attachments (Kirkpatrick, 1999). For some of those with insecurity, God may function as an attachment figure, available when needed and capable of providing support and assistance.

From an attachment perspective, psychotherapy may influence patients' internal working models to promote a healthier and more flexible attachment style (Davila & Levy, 2006). Often, emerging adults who have early attachment security have had a history of early relational experiences in which they felt supported, validated and free to

explore the world and themselves; whereas, those with attachment insecurity do not. Emerging adults with insecure attachments to primary caregivers might be able to draw on a secure attachment to God to healthily explore their identity. The formation of a cohesive identity can promote lasting predictability and continuity of functioning within a person (Schlüter-Müller et al., 2015). The positive influence of a secure attachment to God may partially explain the recent findings that belief in a Higher Power is related to overall better mental health, higher quality of life, greater well-being, etc. (Weber & Pargament, 2014).

Notably, not all relationships with God are healthy or secure; the perceived relationship can be both nuanced and emotional, like with a human attachment figure (Levin, 2002). A relationship with God may also be complex and offer a source of unconditional acceptance or foster feelings of estrangement (Homan & Cavanaugh, 2013). The therapist may be mindful of ways in which the spiritual relationship may manifest during the course of therapy, whether is adaptive or maladaptive; the therapist might adjust therapeutic interventions whilst paying closer attention to how the spiritual relationship might impact the ability to benefit from therapy optimally (e.g., impacting the therapeutic alliance, use of interventions). Further, religious conversion experiences have been found to lead to improvements in relationships (Granqvist & Kirkpatrick, 2004); one could argue that these moments cement the two-way nature of the relationship with God. Much like internalizing a therapist, a believer is able to bring God to mind when navigating the interpersonal world. Relatedly, this study provides a more complex view of how a person's object relations within a given attachment style impacts his/her ability to maintain mutually satisfying relationships outside the therapy (Fowler,

Ackerman, Speanburg, Bailey, & Blagys, 2004). This approach aligns well with prior work indicating that the relationship with a Higher Power (a spiritual presence rather than a religion-derived “God” presence) is associated with better mental health, life satisfaction, and decreased antisocial behavior (Barkin, Luthar, & Miller, 2015).

The results highlight the potentially beneficial role of a secure attachment to God as a surrogate attachment figure for self-identified Catholic emerging adults. Further, the current study highlights the integral part that attachment plays in predicting increased identity achievement and adaptive experiences of relationships.

Limitations and Future Directions

This study had several limitations. First, participants were recruited through university settings and listservs and this was considered a non-clinical sample who self-identified as Catholics. Scores on the measures of Attachment Security, Attachment to God Security, Identity Achievement, and Adaptive Object Relations might look very different for a clinical sample, with higher rates of attachment insecurity and impaired object relations (Gilbert, McEwan, Catarino, Baiao, & Palmeira, 2014; Stein, Slavin-Mulford, Sinclair, Siefert, & Blais, 2012). Additionally, participant’s Catholic affiliation likely skewed the results towards support of the correspondence theory, whereby self-reported attachment to God corresponds to self-rated attachment status.

Additionally, the majority of study participants identified as female (80%); whereas nationally, Catholic females represent less of the population (54%) (Skirbekk et al., 2011). Further, while participants represented a diverse range of racial/ethnic backgrounds, the majority identified as “White Americans” (61.5% of the sample); this is comparable to national figures (59%), but likely does not capture the experiences of non-

White Catholics (Skirbekk et al., 2011). Additionally, the vast majority of emerging adults who completed the study were recruited from two public state universities in the New York metro area. Due to this, the participants represent a specific geographic location, and may not adequately represent Catholics who are not pursuing higher education.

The replication of this study with a diverse, clinical population in different geographic locations could provide further information about the role of an attachment to God as a positive influence for Catholic emerging adults who experience clinically significant distress, identifies as non-White, or represent different levels of education (Stein et al., 2011). For example, participants with more schooling might experience and communicate more complexity in relationships when crafting narratives (Stein et al., 2015). In this case, education level might confound the outcome variables of healthy perspectives of relationships, when measured by a narrative writing task.

While Catholic emerging adults are encouraged to form a potentially valuable two-way relationship with God (Beit-Hallahmi & Argyle, 1975), they are also taught to do so with the Virgin Mary and the saints. It would be valuable to explore if these relationships also influence identity and relationship development in this group; this may be done by modifying an attachment to God measure to include any religious figure to whom the participant feels a personal attachment. Further, modifying the early memory task to include a prompt on additional religious attachment figures might shed light on the potential influence of these figures in the lives of emerging adults. If an attachment to Mary or to the saints functions as a resilience factor, therapeutic or religious interventions could focus more specifically on developing the attachment that is most meaningful to

the individual. Relatedly, the study focused on one subgroup of the population, self-identified Catholic emerging adults. Targeting different age- and faith- subgroups may highlight similarities and differences related to attachment, identity, and object relational experiences (Koenig, 1998). Research on other subgroups might identify if an attachment to God may function as positive influence for those with attachment insecurity.

From a developmental perspective, the Catholic culture may have influenced the emerging adults' identities, specifically by impacting the religious beliefs one endorses (King, 2003). Relatedly, the Catholic teaching of a paternal, two-way relationship with an influential God defines this subgroup (Beit-Hallahmi & Argyle, 1975). In other faith and age subgroups, relating to faith and developing a two-way relationship with God is considered valuable as well and should be explored. For example, a personal relationship with a Higher Power has been shown to be the primary source of spiritual life in adolescence (Barkin, Luthar, & Miller, 2015). Research on identifying the specific mechanisms across developmental periods and faiths might shed light on similarities and differences in the phenomenology as well as the clinical implications of a relationship with a Higher Power.

The exploratory question, of whether an attachment to God has a mediating role in the relationship between Attachment Security and Implicit Adaptive Object Relations, was underpowered. Therefore, a larger sample of coded narratives might shed light on whether the mediating role of an attachment to God can be found between attachment security with primary caregivers and adaptive object relations using the implicit data. Research in this domain might also look at each of the areas of adaptive object relations separately, including the complexity of representation of people (COM), affective quality

of representations (AQR), emotional investment in relationships (EIR), and self-esteem (SE). By doing so, the study might tease out which dimension(s) of adaptive object relations are impacted by attachment to God security. Overall, further research might provide a more nuanced account of the influence of an attachment to God on emerging adults' relationships.

Another limitation is related to participant engagement in the study. Of the 946 participants who completed the study consent, only 200 participants continued to complete other study measures. Based on feedback emailed to the primary investigator, many opted to discontinue before completing the first section (writing the early memory narratives) because the task was considered too time-consuming. Almost all of those who did complete the narratives went on to complete the remainder of the study. Based on this information, those who are more altruistic or conscientious might have been more likely to have participated (Bekkers, 2007); individuals with these traits likely have distinct sets of beliefs (identity) and perceptions of relationships (object relations) from those who do not. One suggestion for future studies is to increase the incentives for full participation (i.e., a \$20 gift card upon completion) to reduce the amount of missing data.

Lastly, a limitation was that all outcome measures in the first two tested models of the study were self-report; thus, they might be influenced by the respondents' mood state when they completed the measures (Bell, 1995). For example, responses on attachment measures could change depending on how the respondent feels about current relationships at the time of taking the survey (Sibley et al., 2004).

Specifically, the current study's use of the ECR-R (Fraley et al., 2000), a self-report attachment measure, may have been a limitation. While the ECR-R was

intentionally selected for its strong internal consistency across many different samples and its ability to measure Attachment Security on a continuum, some limitations were associated with its use (Fraley et al., 2000). It may have been more suitable to select an observer measure of attachment, such as the Adult Attachment Interview (AAI; Main, Kaplan, & Cassidy, 1985), to capture implicit, unconscious attachment representations less impacted by the biases noted, above. The ECR-R was developed to assess current feelings and behaviors in the context of romantic or other close relationships (Hazan & Shaver, 1987). It may have been more meaningful to measure parental attachment for the emerging adults who do not identify as being in committed romantic relationships. The AAI might address both limitations; the measure is a semi-structured interview aimed at assessing attachment defenses associated with adult recollections of early childhood relationships with their parents (Main, Kaplan, & Cassidy, 1985).

Conclusion

In summary, this project provided valuable information regarding the influential role of a secure attachment to God on forming an identity and adaptively experiencing relationships with others. Specifically, the results more fully explained the influence of early attachment security on identity and relationship formation in the Catholic emerging adults' subgroup; for those with insecure attachment experiences, a secure attachment to God may promote identity achievement as well as a healthier understanding of relationships. Findings showed that a secure attachment to God played a positive, influential role in the relationship between secure attachments and identity achievement. A similar finding was that a secure attachment to God played a positive, statistically significant mediating role in the relationship between secure attachments and adaptive,

explicit experiences of object relations.

It is important to note that further research on the influence of an attachment to God on implicit experiences of object relationships is needed. The present study's model testing these variables was not statistically significant, which did not align with the results on explicit adaptive object relations. A meaningful effect size for this analysis suggests the test of statistical significance was underpowered, however. This limitation, as well as several others, suggest several avenues for future research.

Overall, results indicate an attachment to God influenced the relationships of attachment security with identity achievement and attachment security with explicit adaptive object relations. While it may be perceived as an unusual attachment experience, an attachment to God has been found to be a powerful experience for faithful Catholic emerging adults. This study can contribute to the literature and inform the psychotherapeutic treatment of this population.

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Appendix A

Demographics

Pre-screen questions:

1. Are you between the ages of 18 and 29?
 - a. Yes
 - b. No

2. Were you raised in a Catholic home?
 - a. Yes
 - b. No

3. Did you complete confirmation in the Catholic Church by the age of 18?
 - a. Yes
 - b. No

Study questions:

1. What is your sex?
 - a. Male
 - b. Female

2. Was one or both parent/caregiver Catholic?
 - a. One parent/caregiver
 - b. Both parents/caregivers

3. If only one, which?
 - a. Father or father-figure
 - b. Mother or mother-figure

4. Did you choose to be confirmed or did your parents/caregiver force you to be confirmed?
 - a. It was my choice.
 - b. It was my parents'/caregiver's choice.

5. Which most closely resembles your ethnicity?
 - a. African
 - b. African American
 - c. African Caribbean
 - d. Latino/a Caribbean
 - e. Central American
 - f. South American
 - g. Western European
 - h. Central European
 - i. Eastern European
 - j. Middle Eastern

- k. East Asian
- l. South Asian
- m. Central Asian
- n. Native American
- o. White American
- p. Other

Appendix B

The Experiences in Close Relationship Scale-Revised (Fraley, Waller, & Brennan, 2000). The statements below concern how you feel in emotionally intimate relationships. We are interested in how you *generally* experience relationships, not just in what is happening in a current relationship. Respond to each statement by indicating how much you agree or disagree with the statement.

Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree	No Answer
1	2	3	4	5	6	7	99

1. I'm afraid that I will lose my partner's love.
2. I often worry that my partner will not want to stay with me.
3. I often worry that my partner doesn't really love me.
4. I worry that romantic partners won't care about me as much as I care about them.
5. I often wish that my partner's feelings for me were as strong as my feelings for him or her.
6. I worry a lot about my relationships.
7. When my partner is out of sight, I worry that he or she might become interested in someone else.
8. When I show my feelings for romantic partners, I'm afraid they will not feel the same about me.
9. I rarely worry about my partner leaving me.
10. My romantic partner makes me doubt myself.
11. I do not often worry about being abandoned.
12. I find that my partner(s) don't want to get as close as I would like.
13. Sometimes romantic partners change their feelings about me for no apparent reason.
14. My desire to be very close sometimes scares people away.
15. I'm afraid that once a romantic partner gets to know me, he or she won't like who I really am.
16. It makes me mad that I don't get the affection and support I need from my partner.
17. I worry that I won't measure up to other people.
18. My partner only seems to notice me when I'm angry.
19. I prefer not to show a partner how I feel deep down.
20. I feel comfortable sharing my private thoughts and feelings with my partner.
21. I find it difficult to allow myself to depend on romantic partners.
22. I am very comfortable being close to romantic partners.
23. I don't feel comfortable opening up to romantic partners.
24. I prefer not to be too close to romantic partners.
25. I get uncomfortable when a romantic partner wants to be very close.
26. I find it relatively easy to get close to my partner.
27. It's not difficult for me to get close to my partner.
28. I usually discuss my problems and concerns with my partner.
29. It helps to turn to my romantic partner in times of need.

30. I tell my partner just about everything.
31. I talk things over with my partner.
32. I am nervous when partners get too close to me.
33. I feel comfortable depending on romantic partners.
34. I find it easy to depend on romantic partners.
35. It's easy for me to be affectionate with my partner.
36. My partner really understands me and my needs.

Appendix C

Early Memory Test (Shedler, Mayman, & Manis, 1993).

In this section, we will ask you to recall some different memories. Before you move on to this, make sure you are in a quiet place where you can concentrate. Take a moment to relax. Let your thoughts go back to your childhood, think as far back as you can, and try to recall your very earliest memory from your childhood. Try to remember a specific incident or event, not just a fragmentary impression.

When you have recalled this earliest memory from your childhood please write about it.

What is your earliest memory?

What is your next earliest memory?

What is your earliest memory of a mother or mother-figure?

What is your earliest memory of a father or father-figure?

Additional, investigator-created questions:

Did you write about your mother or a mother-figure? (mother, mother-figure)

If a mother-figure, who did you write about? _____

Did you write about your father or a father-figure? (father, father-figure)

If a father-figure, who did you write about? _____

In this section, we will again ask you to recall an early memory. Before you move on to this, make sure you are in a quiet place where you can concentrate. Take a moment to relax. Let your thoughts go back to your childhood, think as far back as you can, and try to recall your very earliest memory of God from your childhood. Try to remember a specific incident or event, not just a fragmentary impression.

When you have recalled this earliest memory of God from your childhood please write about it.

What is your earliest memory of God?

Appendix D

Attachment to God Inventory (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 what is happening in that relationship currently. Respond to each statement by indicating how much you agree or disagree with it.

1 = Disagree strongly

2

3

4 = Neutral/Mixed

5

6

7 = Agree 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.
- _____ 5. I am jealous of 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.
- _____ 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.
- _____ 14. My prayers to God are often matter-or-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.
- _____ 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.

- _____ 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.
- _____ 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.

Appendix E

Extended Objective Measure of Ego-Identity Status II (Bennion & Adams, 1986).

Read each item and indicate to what degree it reflects your own thoughts and feelings. If a statement has more than one part, please indicate your reaction to the statement as a whole. Indicate your answer by writing the number of your choice in the space provided.

1 = Strongly disagree 2 = Moderately disagree 3 = Disagree 4 = Agree 5 = Moderately agree 6 = Strongly agree

_____ 1. I haven't chosen the occupation I really want to get into, and I'm just working at what is available until something better comes along.

_____ 2. When it comes to religion I just haven't found anything that appeals and I don't really feel the need to look.

_____ 3. My ideas about men's and women's roles are identical to my parents'. What has worked for them will obviously work for me.

_____ 4. There's no single "lifestyle" which appeals to me more than another.

_____ 5. There are a lot of different kinds of people. I'm still exploring the many possibilities to find the right kind of friends for me.

_____ 6. I sometimes join in recreational activities when asked, but I rarely try anything on my own.

_____ 7. I haven't really thought about a "dating style." I'm not too concerned whether I date or not.

_____ 8. Politics is something that I can never be too sure about because things change so fast. But I do think it's important to know what I can politically stand for and believe in.

_____ 9. I'm still trying to decide how capable I am as a person and what work will be right for me.

_____ 10. I don't give religion much thought and it doesn't bother me one way or the other.

_____ 11. There're so many ways to divide responsibilities in marriage, I'm trying to decide what will work for me.

_____ 12. I'm looking for an acceptable perspective for my own "lifestyle", but haven't really found it yet.

_____ 13. There are many reasons for friendship, but I choose my close friends on the basis of certain values and similarities that I've personally decided on.

_____ 14. While I don't have one recreational activity I'm really committed to, I'm experiencing numerous leisure outlets to identify one I can truly enjoy.

_____ 15. Based on past experiences, I've chosen the type of dating relationship I want now.

_____ 16. I haven't really considered politics. It just doesn't excite me much.

_____ 17. I might have thought about a lot of different jobs, but there's never really been any question since my parents said what they wanted.

_____ 18. A person's faith is unique to each individual. I've considered and reconsidered it myself and know what I can believe.

_____ 19. I've never really seriously considered men's and women's roles in marriage.

It just doesn't seem to concern me.

_____ 20. After considerable thought I've developed my own individual viewpoint of what is for me an ideal "lifestyle" and don't believe anyone will be likely to change my perspective.

_____ 21. My parents know what's best for me in terms of how to choose my friends.

_____ 22. I've chosen one or more recreational activities to engage in regularly from lots of things and I'm satisfied with those choices.

_____ 23. I don't think about dating much. I just kind of take it as it comes.

_____ 24. I guess I'm pretty much like my folks when it comes to politics. I follow what they do in terms of voting and such.

_____ 25. I'm not really interested in finding the right job, any job will do. I just seem to flow with what is available.

_____ 26. I'm not sure what religion means to me. I'd like to make up my mind, but I'm not done looking yet.

_____ 27. My ideas about men's and women's roles have come right for my parents and family. I haven't seen any need to look further.

_____ 28. My own views on a desirable lifestyle were taught to me by my parents and I don't see any need to question what they taught me.

_____ 29. I don't have any real close friends, and I don't think I'm looking for one right now.

_____ 30. Sometimes I join in leisure activities, but I really don't see a need to look for a particular activity to do regularly.

_____ 31. I'm trying out different types of dating relationships. I just haven't decided what is best for me.

_____ 32. There are so many different political parties and ideals. I can't decide which to follow until I figure it all out.

_____ 33. It took me a while to figure it out, but now I really know what I want for a career.

_____ 34. Religion is confusing to me right now. I keep changing my views on what is right and wrong for me.

_____ 35. I've spent some time thinking about men's and women's roles in marriage and I've decided what will work best for me.

_____ 36. In finding an acceptable viewpoint to life itself, I find myself engaging in a lot of discussions with others and some self-exploration.

_____ 37. I only pick friends my parents would approve of.

_____ 38. I've always liked doing the same recreational activities my parents do and haven't ever seriously considered anything else.

_____ 39. I only go out with the type of people my parents expect me to date.

_____ 40. I've thought my political beliefs through and realize I can agree with some and not other aspects of what my parents believe.

_____ 41. My parents decided a long time ago what I should go into for employment and I'm following through their plans.

_____ 42. I've gone through a period of serious questions about faith and can now say I understand what I believe in as an individual.

_____ 43. I've been thinking about the roles that husbands and wives play a lot these days, and I'm trying to make a final decision.

- _____ 44. My parents' views on life are good enough for me, I don't need anything else.
- _____ 45. I've had many different friendships and now I have a clear idea of what I look for in a friend.
- _____ 46. After trying a lot of different recreational activities I've found one or more I really enjoy doing by myself or with friends.
- _____ 47. My preferences about dating are still in the process of developing. I haven't fully decided yet.
- _____ 48. I'm not sure about my political beliefs, but I'm trying to figure out what I can truly believe in.
- _____ 49. It took me a long time to decide but now I know for sure what direction to move in for a career.
- _____ 50. I attend the same church as my family has always attended. I've never really questioned why.
- _____ 51. There are many ways that married couples can divide up family responsibilities. I've thought about lots of ways, and now I know exactly how I want it to happen for me.
- _____ 52. I guess I just kind of enjoy life in general, and I don't see myself living by any particular viewpoint to life.
- _____ 53. I don't have any close friends. I just like to hang around with the crowd.
- _____ 54. I've been experiencing a variety of recreational activities in hope of finding one or more I can really enjoy for some time to come.
- _____ 55. I've dated different types of people and know exactly what my own "unwritten rules" for dating are and who I will date.
- _____ 56. I really have never been involved in politics enough to have made a firm stand one way or the other.
- _____ 57. I just can't decide what to do for an occupation. There are so many possibilities.
- _____ 58. I've never really questioned my religion. If it's right for my parents it must be right for me.
- _____ 59. Opinions on men's and women's roles seem so varied that I don't think much about it.
- _____ 60. After a lot of self-examination, I have established a very definite view on what my own lifestyle will be.
- _____ 61. I really don't know what kind of friend is best for me. I'm trying to figure out exactly what friendship means to me.
- _____ 62. All of my recreational preferences I got from my parents and I haven't really tried anything else.
- _____ 63. I date only people my parents would approve of.
- _____ 64. My folks have always had their own political and moral beliefs about issues like abortion and mercy killing and I've always gone along accepting what they have.

Appendix F

Marlowe-Crowne Social Desirability Scale (Reynolds, 1982).

Listed below are a number of statements concerning personal attitudes. Reach each item and decide whether the statement is true or false as it pertains to you.

1. It is sometimes hard for me to go on with my work if I am not encouraged.
(True, False)
2. I sometimes feel resentful when I don't get my own way.
(True, False)
3. On a few occasions I have given up doing something because I thought too little of my ability.
(True, False)
4. There have been times when I felt like rebelling against people in authority even though I knew they were right.
(True, False)
5. No matter who I'm talking to, I'm always a good listener.
(True, False)
6. There have been occasions when I took advantage of someone.
(True, False)
7. I'm always willing to admit it when I make a mistake.
(True, False)
8. I sometimes try to get even, rather than forgive and forget.
(True, False)
9. I am always courteous, even to people who are disagreeable.
(True, False)
10. I never make a long trip without checking the safety of my car.
(True, False)
11. I have almost never felt the urge to tell someone off.
(True, False)
12. I have never felt that I was punished without a cause.
(True, False)
13. I have never deliberately said something to hurt someone's feelings.
(True, False)

Appendix G

Consent Form

Long Island University, Brooklyn Campus Informed Consent Form for Human Research Subjects

You are being asked to volunteer in a study called “Young Adult Catholic Experiences,” conducted by Mary E. Pioli, M.A., under the supervision of Philip S. Wong, Ph.D., Professor of Psychology at Long Island University, Brooklyn Campus. The purpose of this research is to examine participants' life experiences as related to their Catholic faith.

If you are between the ages of 18 and 29, were raised in a Catholic home, and received the sacrament of Confirmation before the age of 15, you are eligible to participate in this study. As a participant, you will be asked to first respond to a series of questions about yourself, about your life experiences, and about your faith. Your total participation in this study will be about 45 to 60 minutes. There are minimal risks associated with participation in this research. This means that you are no more likely to experience low levels of harm or discomfort than you would experience in everyday life. In exchange for your participation, you will receive an opportunity at the end of the survey to enter a raffle drawing to win one of three \$50.00 Amazon.com gift cards, which will be randomly drawn at the completion of data collection and distributed via email. In participating, you will also be making a potentially valuable contribution to the field of psychology research.

If you experience any psychological or emotional discomfort while completing the questionnaires, you can discontinue the survey at any time. Should you withdraw from the study, the responses you have already entered will be retained. In the unlikely event that these questions are very distressing to you, you can call LifeNet at 1-800-LIFENET (1-800-543-3638), which is available to New York City residents, or the National Suicide Prevention Lifeline at 1-800-273-8255, which is available nationally.

Your identity as a participant will remain confidential. Your name will not be included in any forms, questionnaires, or write-ups of the research results. You will be assigned a study identification number and your survey responses will remain anonymous. The information will be electronically stored on Qualtrics.com, accessible only to the investigator and the faculty sponsor. Data collected will be destroyed three years after the completion of the study. Results will be reported only in the aggregate. If you are using a public computer, then clearing your cache may also help protect your privacy.

If you have questions about the research you may contact the investigator, Mary Elizabeth Pioli, M.A. at LIUStudy.RelationshipwithGod@gmail.com or the faculty sponsor, Philip S. Wong, Ph.D. at 718-488-1164. If you have questions concerning your rights as a subject, you may contact the Human Subjects Institutional Review Board Administrator, Dr. Lacey Sischo, at (516) 299-3591.

Your participation in this research is voluntary. Refusal to participate or discontinue participation at any time will involve no penalty or loss of benefits to which you are otherwise entitled. Withdrawal will not affect your relationship with LIU or with any other organization or institution. Accepting the terms of this consent form below indicates that you have fully read the above text and have had the opportunity to contact the investigator to ask questions about the purposes and procedures of this study. It also acknowledges your receipt of this consent form and your willingness to participate.

By selecting "I Consent to Participate" below, I confirm that I am 18 years or older and fully understand the information above.

Appendix H

Recruitment Flyer

WERE YOU RAISED CATHOLIC? ARE YOU 18 -29 YEARS OLD?
TAKE AN **ONLINE** STUDY TO BETTER UNDERSTAND YOUR EXPERIENCE.

The study is designed to better understand the life experiences of young adults raised in Catholic homes. It is a *great opportunity* to learn about yourself.

Due to the focus of the study, you are eligible to participate if you:

- were raised in a Catholic home (at least one caregiver identified as Catholic),
- are between the ages of 18-29,
- **AND** received the sacrament of Confirmation before the age of 18.

The online study includes a series of surveys and short-answer questions about memories that you will complete. The study should take from 45-60 minutes to complete.

If you participate, you are eligible to win one of three \$50 Amazon gift cards.

To participate, go to:

(https://survey.co1.qualtrics.com/jfe/form/SV_9nbmLUyLNON3AzP).

(Participation is voluntary. Chances of winning are 1 in 100.)

If you have any questions about the study, please contact Mary Elizabeth Pioli, (Student Principal Investigator) at LIUStudy.RelationshipwithGod@gmail.com.

Appendix I

Debriefing Form

Long Island University, Brooklyn Campus Debriefing Form

Thank you for your time and willingness to participate in the study on “Young Adult Catholic Experiences.” The aim of this project was to better understand participants' life experiences as related to their Catholic faith. Your participation has helped us take important steps toward gaining knowledge that will provide valuable information for the field of Clinical Psychology. We thank you for your efforts.

If you have any concerns or reactions related to this project, you may contact the investigator, Mary E. Pioli, M.A., LIUStudy.RelationshipwithGod@gmail.com or the faculty sponsor, Philip S. Wong, Ph.D. at 718-488-1164.

If your participation in this study made you aware of any emotional concerns that you would like to discuss with a mental health professional (such as a counselor), you may contact LifeNet at 1-800-LIFENET (1-800-543-3638), which is available to New York City residents, or the National Suicide Prevention Lifeline at 1-800-273-8255, which is available nationally. Thank you again for your time.

Sincerely,

Mary E. Pioli, M.A., Student Principal Investigator
Philip S. Wong, Ph.D., Faculty Sponsor
Department of Psychology
Long Island University, Brooklyn Campus

Appendix J*Debriefing Form*

1. I have never used a computer. (True/False)
2. I do not own a cellphone. (True/False)