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# ATTACHMENT TO GOD AND IMPLICIT SPIRITUALITY: CLARIFYING CORRESPONDENCE AND COMPENSATION MODELS

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This article empirically investigates two alternative, competing hypotheses regarding human attachment patterns and attachment patterns with respect to people's spiritual experiences of relationship with God. The *correspondence model* posits that attachment patterns with humans correspond to, or are reflected in attachment patterns in individuals' experiences of God. The *compensation model*, in contrast proposes that attachment patterns with humans do not correspond to God attachment patterns presumably because God functions as a substitute attachment figure for those with insecure human attachments. Overall, the evidence has been somewhat mixed, with some findings supporting correspondence and some supporting compensation. It is argued here that this is due to limitations of the conceptual models, more specifically, lack of clarity regarding the compensation model, and the limited way in which spirituality and religiousness has been conceptualized and measured. We propose a conceptual distinction between implicit spiritual functioning and explicit spiritual functioning, which reflect two separate ways of knowing and processing emotional information: explicit knowledge and implicit relational knowledge (Stern et al., 1998). Based on this distinction, we propose a conceptual model arguing that correspondence operates at implicit levels of spiritual experience, and that human attachment patterns are not associated with explicit spiritual functioning. Results overall provided strong support for this model.

Attachment and religion research in the past 15 years has focused on the question of continuities and discontinuities between attachment patterns in close human relationships and patterns of attachment with respect to religious/spiritual beliefs and experiences. The conceptual question at issue, proposed by Kirkpatrick and Shaver (1990), is whether people's religious beliefs and experiences correspond to their internal working models of human attachment figures, or, in contrast, whether religious beliefs and experiences compensate, or substitute for the lack of secure attachment relationships with primary caregivers. The purpose of the present study is to offer initial empirical support for an alternative theory to explain the differences between correspondence and compensation at the level of implicit knowledge.

## COMPENSATION AND CORRESPONDENCE: EMPIRICAL FINDINGS

On the surface, it appears that the empirical literature to date presents a rather inconsistent picture. On the one hand, a number of studies in the areas of attachment and object relations functioning suggest correspondence. For example, secure attachment in current relationships has been associated with perceptions of God as more loving, less distant and controlling (Brokaw & Edwards, 1994; Hall, Brokaw, Edwards, & Pike, 1998), and of one's relationship with God as more stable and emotionally close (Hall & Edwards, 2002). In addition, retrospective reports of secure attachment history have been associated with higher levels of orthodox Christian beliefs

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(Merck & Johnson, 1995). Two recent studies found evidence directly supporting correspondence between anxious attachment in romantic relationships and anxious attachment to God (Beck & McDonald, 2004; Rowatt & Kirkpatrick, 2002).

On the other hand, several studies have provided partial support for some form of compensation. Individuals with histories of avoidant attachment were found to be more likely to have experienced a sudden religious conversion during adolescence or adulthood (Granqvist, 1998; Granqvist & Hagekull, 1999; Kirkpatrick, 1999; Kirkpatrick & Shaver, 1990). In a four-year longitudinal study, women who reported insecure adult attachment styles in romantic relationships (both anxious and avoidant) were more likely to have "found a new relationship with God" than women who reported a secure attachment history (Kirkpatrick, 1997). In addition, women with an anxious attachment history were more likely to have had a religious experience or conversion during that time than women with avoidant and secure histories. In a second longitudinal study by Kirkpatrick (1998) using Bartholomew and Horowitz's (1991) four-category self-classification measure of romantic attachment, individuals classified as preoccupied and fearful exhibited a greater longitudinal increase in religiosity relative to those reporting positive self-models. Granqvist (2002) replicated this, finding that a significantly higher proportion (16.3%) of those with an insecure attachment history with mother reported an increase in the importance of their religious beliefs during their adulthood (after age 22) than those reporting a secure attachment history with mother (6.5%). Thus, there appears to be support for both compensation and correspondence models.

However, results of research using other religiosity variables have been less uniformly supportive of the compensation model. Kirkpatrick and Shaver (1990) found that maternal religiosity moderated the association between attachment history and, (a) intrinsic religiousness; (b) church attendance; (c) self-report of being a "born again" Christian; (d) belief in a personal God; and (e) experience of having a personal relationship with God. Among those who reported low maternal religiosity, avoidant individuals reported higher levels of religiousness than either secure or anxious/ambivalent individuals. In contrast, there was no effect of attachment status at the high maternal religiosity level. Granqvist (2002) replicated the essence of this finding; however, he

found that paternal religiosity moderated the association between attachment history with father and religiosity. While he also found evidence for compensation at low paternal religiosity, in contrast to Kirkpatrick and Shaver (1990), high paternal religiosity demonstrated some evidence for correspondence, in that a secure history with father was associated with higher levels of religiosity.

Based on these findings, Granqvist (2002) revised the correspondence and compensation hypotheses to what he called "socialized correspondence" and "emotional compensation." The socialized correspondence hypothesis suggests that among individuals with secure attachment histories, level of religiosity corresponds to parents' level of religiosity. Among individuals with insecure attachment histories, however, religious involvement is primarily used to regulate affect (interactive affect regulation) and to maintain a sense of felt security (emotional compensation).

In testing these hypotheses in a second study, Granqvist (2002) found that avoidant attachment history was weakly, but positively, associated with turning to and maintaining contact with God in order to regulate one's affect, evidence for emotional compensation. The correlations were slightly strengthened at low parental religiosity, and disappeared at high parental religiosity. Granqvist (2002) also found that participants who experienced a sudden religious conversion scored significantly higher on ambivalent history with mother than those who had experienced a gradual religious conversion. Among those who reported religious change, two clusters were identified. Cluster one was high on suddenness of change, age, compensation themes, and avoidant and ambivalent history with mother, and cluster two showed the opposite pattern. In another study (III), Granqvist (2002) essentially replicated these findings with attachment in romantic relationships, although the effects were not as strong. One noteworthy finding in this study was that an insecure attachment history with mother was positively associated with a decrease in religiosity over a year time period, contradicting Kirkpatrick's (1998) finding and the longitudinal compensation hypothesis.

Integrating these various findings, Granqvist (2002) proposed a "two-level correspondence" model. The first level is "socialized correspondence" in which one's religious beliefs and values are similar to parents, but only for secure individuals. The second level or component, referred to as a "secondary effect," is internal working model (IWM)

correspondence, in which IWMs of self and others correspond to IWMs of God. Granqvist also concluded that individuals with insecure attachment histories engage in emotional compensation more than those with secure histories.

### *Limitations with Current Conceptual Frameworks*

Correspondence and compensation conceptualizations have been proposed as somewhat competing alternative hypotheses in terms of how religious beliefs and experiences reflect attachment processes. Either one's IWMs of self/other are associated with one's IWM model of God (correspondence hypothesis) or they are not, and God functions as a substitute or surrogate attachment figure in the context of an insecure attachment history (compensation hypothesis). There are three primary limitations to the conceptual frameworks of correspondence and compensation that have been offered. First, correspondence and compensation are not conceptually parallel hypotheses, and consequently, they are not mutually exclusive. While Granqvist (2002) has contributed significantly to clarifying these issues, his revised conceptual framework could be construed as suggesting that IWM correspondence and emotional compensation are mutually exclusive, and that IWM correspondence is a less important "secondary" effect than socialized correspondence. Furthermore, socialized correspondence applies only to secure individuals, not to insecure individuals. However, this does not appear to be the case for the conceptualization of IWM correspondence. As with the original correspondence and compensation hypotheses, the two levels of correspondence proposed by Granqvist are not conceptually parallel in that one model applies to all attachment statuses and the other does not. In addition, correspondence has been redefined as having to do with level of religiosity matching between parent and child, rather than the dynamics of IWM's in human relationships paralleling experiences of God and spirituality.

Second, three different variants of the compensation model have been proposed, at least implicitly, in the way the model is variously operationalized. This makes it difficult to evaluate the evidence for compensation as a general hypothesis. We need to clearly distinguish and test particular models, rather than "compensation" in general. The first model, *explicit religious compensation*, suggests that, concurrent-

ly, insecure individuals tend to exhibit higher levels of religiousness than secure individuals, where religiousness is typically operationalized with explicit measures such as church attendance, belief in a personal God, and discussion of religious matters. The second model suggests that insecure individuals tend to use their religion for the purposes of affect regulation more than secure individuals do, what Granqvist's (2002) has called "emotional compensation." We argue below that this model is actually a reflection of IWM correspondence at a motivational level; thus, we refer to this model as *motivational correspondence*. The third compensation model suggests that insecure individuals experience religious change over time more suddenly than secure individuals. We contend that this model is a variant of model two in that sudden conversions and religious changes are used to regulate affect, often in the midst of crises. We label this model as *religious change correspondence*. There is growing evidence for the second and third models; however, as noted above, the evidence for the first model is quite mixed, and we think for good reason, which we will discuss below. In sum, it can be seen that we attempt to define compensation more precisely in a way that is mutually exclusive with IWM correspondence, and to reconceptualize various "compensation" models as correspondence when the model reflects a working out of one's IWM's.

Third, conceptualizations of religiousness and spirituality (RS) have focused on behavior and conscious beliefs, which we refer to as explicit religiousness, that do not tap into motivational and experiential components of internal working models, which we define as implicit religiousness. For example, the primary evidence for explicit religious compensation in the literature is sudden conversion, finding a new relationship with God, and increased levels of religiousness, defined as frequency of prayer, church attendance, and reading religious literature. The underlying attachment motivation is not assessed in these more explicit measures of religiosity. Our theory suggests that increased (explicit) religiosity can be played out in a way that is connected to underlying motivations that are consistent with the respective insecure attachment dynamics. That is, we might expect clingy, dependent and inconsistent religious involvement for anxious individuals. After an initial sudden conversion for avoidant individuals, likely to occur after a crisis (Kirkpatrick, 1999) which may break through typical avoidant defenses, we might

expect a focus on conceptual theological knowledge while dismissing the need for close relationships with God and fellow believers. This would explain “compensatory” religious involvement in a way that corresponds with individuals’ internal working models. We propose a multidimensional approach to religiousness that distinguishes between implicit and explicit modes of spiritual knowing, and links these to implicit and explicit relational knowing based on converging evidence from multiple fields. We will propose that implicit relational knowledge is the foundation for the emotional appraisal of meaning in the spiritual domain, including one’s experience of relationship with God, rather than explicit, symbolic knowledge about God or religion. This model highlights underlying consistencies in dynamic internal working models that resolve some of the conceptual limitations noted above and reconcile the seemingly inconsistent pattern of findings. In order to provide a theoretical foundation for our hypotheses, we provide a brief overview of implicit relational knowing, internal working models and the notion of implicit relational knowledge, within the context of a broader theory of relational spirituality (Hall, 2004).

### IMPLICIT AND EXPLICIT FORMS OF RELATIONAL AND SPIRITUAL KNOWING

There are now multiple lines of research that demonstrate that there are two fundamentally distinct systems for processing information, including emotional information that has to do with our well-being. These modes of knowing have been variously termed procedural, enactive, or implicit knowing on the one hand, and verbal, symbolic, reflective, linguistic, rational, and explicit knowing on the other (Bucci, 1997; Lyons-Ruth; 1999, Westen, 1998). The research literature indicates that emotional information processing (EIP)—processing having to do with the *meaning* of an event for one’s well-being—follows the same processing rules as all information processing. That is, EIP is based on a parallel processing architecture rather than a single linear, sequential architecture (e.g., Bucci, 1997, Westen, 1998). This parallel architecture is the neurobiological basis for the notion that we process a vast amount of information outside of awareness, in multiple parallel pathways that allow complex, and often times competing motivations.

Support for these two modes of knowing can be found in the fields of emotional information pro-

cessing (e.g., Bucci, 1997), neurobiology (e.g., Schore, 1994; Siegel, 1999), cognitive-developmental (e.g., Fischer & Granott, 1995), attachment research (Collins & Read, 1994), and relational psychoanalytic theory (Stern et al., 1998). Bucci’s (1997) Multiple Code Theory of EIP proposes three general levels, or “codes,” of emotional information processing. The first two levels, subsymbolic and nonverbal symbolic, are what have been referred to as *implicit knowledge*. This is knowledge that is carried in the code of emotion, as viewed by current emotion theory; that is, it includes physiological, cognitive appraisal, motor expression, motivational, and subjective feeling components (Scherer, 1984). Moreover, implicit knowledge does not exist in the symbolic, verbal code, and it develops without a clear, linear articulation of how we arrive at such knowledge.

Subsymbolic processing operates according to the principles of parallel distributed processing (PDP), as opposed to the sequential, single-channel mode of verbal processing (Bucci, 1997). In general, PDP is the way we process a massive amount of information in a format, or channel that is not in words. The PDP system processes different types of contents, in different formats, in multiple systems or channels that operate simultaneously in parallel (not affecting each other) and in interaction. The PDP system processes elements of information that are not discrete, and it does not use categories to organize information. Furthermore, higher-level units of information are not built on discrete lower order units of information in a linear way, and the explicit processing rules of this system cannot be identified. Examples can be seen in many domains of functioning. For example, it is difficult for the professional baseball player to break down the sequence of body movements involved in hitting a 90 mile-an-hour fast ball into distinct units and to translate this into words. He relies on PDP processing for this type of knowledge. Similarly, we rely on this type of information to infer the emotional states of others in emotionally significant relationships, just as therapists rely on this type of information in inferring the emotional states of clients.

Nonverbal symbolic processing is a mode of processing that links subsymbolic and symbolic forms of processing. Bucci (1997) suggests that this code is the first step in symbolizing emotional information; that is information that has to do with our well-being. Subsymbolic information is “chunked” into categories based on similarities and often take the

form of images. This information is not yet in the verbal code, but it is symbolized to some extent. It is parallel to what is variously referred to by neuroscientists and emotion researchers as basic or categorical emotions (Siegel, 1999). For example, sadness is emotional information—an automatic, implicit appraisal of the meaning of events with respect to one's well-being—that is symbolized to some extent, yet it does not fundamentally exist in the "code" of explicit verbal information.

The third type of EIP, verbal, symbolic processing is an explicit form of processing that is verbal and linear, and over which we have more direct control. There is a large research literature documenting that these implicit and explicit forms of processing and memory involve different neural mechanisms (e.g., Bucci, 1997; LeDoux, 1996; Schacter, 1996; Siegel, 1999). In the field of emotional information processing, there is now strong evidence that there are at least dual, and most likely multiple codes of emotional information processing.

### *Implicit Relational Knowledge*

Implicit knowledge exists in many domains; however, for our purposes, we are interested primarily in implicit knowledge in the relational domain that becomes organized as IWM's, and how this implicit knowing translates into the spiritual domain. In the domain of attachment relationships, implicit memory of relationships is what the Process of Change Study Group (PCSG) has referred to as "*implicit relational knowing*" (Stern et al., 1998). This is the implicit knowledge we have about interpersonal relations, that is, "how to be with someone" as the PCSG puts it. This type of knowing integrates affect, cognition, and behavioral dimensions. It is typically sub or preconscious, although not necessarily dynamically unconscious, and exists in a fundamentally different processing system than the symbolic, verbal system. However, implicit knowledge of relationships can be represented verbally and consciously (although not fully) through the verbal code in the process of "referential activity," which involves linking implicit knowledge and words through images (Bucci, 1997).

Thus, it is important to highlight here that although implicit relational knowledge fundamentally exists in a code or "language" that is nonverbal, it is not necessarily inaccessible to conscious awareness (i.e., dynamically unconscious). There is significant theoretical and research support for the idea

that people can become consciously aware of and report on their implicit relational knowledge through the translation process that Bucci (1997) calls referential activity. Clearly, implicit relational knowing cannot be fully captured in words or consciousness, but it can be to some extent. The entire framework of attachment-based and psychodynamic therapy is based on the notion that clients can become aware of implicit relational knowledge and translate it into words. This, indeed, is a core part of the healing process in that it gives the relational dyad more direct access to the client's gut-level knowledge of how to be with other emotionally significant people, which enables it to be transformed. We illustrate this below with a case example.

Repeated experiences of "how to be with someone" that are enacted in primary attachment relationships, and share a common affective core, are conceptually encoded in the mind as non-propositional meaning structures. They are the memory basis for implicit relational knowledge; that is, our "gut-level" sense of how significant relationships work. For example, infants experience constantly changing appearances of the primary caregiver, which are initially processed subsymbolically. This information is then chunked into functionally equivalent classes (nonverbal, symbolic processing), which enables the infant to recognize mother, predict her behavior (Bowlby, 1969), and maximize emotional communication (Siegel, 1999). This processing is broad and incorporates actions, sensations, and affects that are experienced in a relational context, although they may not be able to be verbally articulated, even in adulthood. These functionally equivalent classes of meaning structures then form what Bowlby (1973) called internal working models (IWM's). Others have proposed similar concepts such as "representations of interactions that are generalized" or RIGS (Stern, 1985), emotion schemas (Bucci, 1997), mental models (Siegel, 1999), and object representations in object relations theory (e.g., Scharff & Scharff, 1998). While there are minor conceptual distinctions between these concepts, they are all representations of relational experiences that are encoded in implicit memory.

These IWM's then form an adaptive filter for processing emotional information in a particular relational context. These "filters" are adaptive in that they facilitate goal-directed attachment motivations such as emotional communication and felt security. The implicit relational knowledge embedded in

one's IWM shapes the emotional appraisal of meaning and subsequent patterns of relationships. For example, there is evidence to suggest that these IWM's shape individuals' cognitive, emotional, and behavioral responses to others (Collins & Read, 1994), presumably by directing the initial orientation and elaborative appraisal-arousal neurobiological processes in ways that maximize felt security, given one's implicit knowledge of how an emotionally-significant caregiver relates.

The significance of these two distinct modes of knowing for one's sense of self and others, including God, is that implicit relational knowledge is foundational because this way of knowing is processed automatically, and is not under the direct control of linear, verbal knowledge. That is, while symbolic knowledge is important, and can become part of implicit knowledge, explicit knowledge *per se* cannot directly transform implicit relational knowledge. This can only be done through the same code of emotional information processing: experiencing new ways of being with another. A clinical example may help illustrate these concepts. A client of the first author (T.H.) who I will refer to here as Chelsea (pseudonym) had a history of severe abuse by her father. During the beginning stages of therapy, she would often become highly anxious and scared of me during the session, and would often dissociate during session. She was afraid I had some ulterior motive and would bait her to trust me and then hurt her, just as her father did many, many times. This was her implicit relational knowledge of how relationships with male authority figures work. It also reflected Chelsea's fearful or disorganized attachment type that acted as an adaptive filter (for the original situation with her father) to keep her safe. At first, she was not able to articulate *why* she felt scared of me. Her anxiety and fear were the result of implicit processing of implicit memories of abuse from her father. However, while she was not able at first to determine how she arrived at this feeling, she was consciously aware of feeling scared of me and she could tell me how she felt. Moreover, as therapy progressed, she became more aware of why she felt anxiety and fear with me at times. For example, on one occasion, there was some confusion over my role in dealing with the insurance and she became very upset. While her distress was partly due to my avoidance of the issue, which we processed, on her part she was able to link this to her experience of her father using money issues against her.

So, over time, Chelsea developed a more full-orbed awareness of her implicit relational knowledge, and consequently, was able to verbalize to me more nuances about it.

The reason Chelsea was able to become more aware of this knowledge was that she had new, secure experiences with me that shifted her deep, gut-level sense (implicit relational knowledge) of how emotionally significant relationships work. And this (the new experiences with me) happened in part because of her ability to more directly access her implicit relational knowledge. So we can see her the dialectic between new relational experiences on the one hand, and conscious access and articulation to implicit relational knowledge on the other hand.

In one place in her journal that Chelsea shared with me, she was writing about a particular interaction we had when she was struggling with the effects some traumatic memories were having on her. She wrote, "That's when Todd seemed to understand something that I didn't at the moment. He said something like 'It would make sense that it could take some time for me to be comfortable with him and even myself after that memory.' I don't remember what I said or much more of what he said; I only remember his tone of voice and the look on his face. I can only remember being caught in the moment. Feeling this 'kindness' like I've never known before. I felt overwhelmingly grateful for his kindness—gentle, sincere, 100% kindness."<sup>1</sup>

You can see from her journal entry that the "therapeutic action" here was not primarily a verbal proposition that I said to her. Rather, it was primarily implicit non-verbal, relational information communicated to her through my tone of voice and facial expression. However, it is important to point out that the non-verbal information matched my words, which then became translated into a deeper, more integrated form of relational knowing. We hope this illustrates two main points: 1) how and why implicit relational knowledge is foundational for how we relate to other emotionally significant people in our lives (including God as we propose and empirically test below); and 2) that people can become conscious of, and verbally report on implicit relational knowledge, even if they cannot capture this knowledge fully. This latter point has implications for measurement issues in research, which we address below.

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<sup>1</sup>This quote is shared with the explicit permission of the client.

### *Implicit Spiritual Knowledge*

A number of theorists have addressed the issue of the relationship between psychological and spiritual development (e.g., Benner, 1998; Carter, 1974; Hall & Edwards, 1996; Pingleton, 1984; Shackelford, 1978). These authors all point to what Benner brings clearly into focus with the concept of the “psychospiritual unity of personality,” meaning that the internal dimension of persons is not separable into “spiritual” and “psychological” components. In other words, the processes (i.e., the emotional appraisal of meaning) that govern one’s experience of relationship with God, a typical understanding of “spirituality,” are the very same (“psychological”) processes, outlined in the implicit relational theory above, that govern one’s relationships with self and others. It is difficult to conceptualize “spiritual” processes that are not mediated by the way we automatically and nonconsciously process emotional information. Psychological processes, on the other hand, have spiritual roots, such as the longing to transcend one’s self in relationship with God (Benner, 1998).

From this perspective, it is not possible to separate implicit relational processes from “spiritual processes,” or, stated differently, to separate “psychological” and “spiritual” domains of functioning. They are inextricably intertwined. The consequence of the inseparability of these two “domains” is that, in terms of the framework presented above, implicit experiences form the *foundation* of the emotional appraisal of meaning in any aspect of spiritual functioning, including one’s experience of relationship with God, rather than explicit, symbolic, knowledge of God or theology. The ways in which implicit relational knowledge is foundational in general apply to the “spiritual” domain as well. Thus, we would expect one’s internal working models, or patterns of relationship, as defined by an implicit relational framework, to reliably influence one’s spiritual functioning and development in predictable ways.

### IMPLICIT INTERNAL WORKING MODEL CORRESPONDENCE

This theoretical perspective suggests that the dynamic motivations underlying one’s use and experience of relationship with God and religion corresponds to, or is reflected in, one’s internal working model of attachment. We would expect that insecure individuals would use God and religion for interactive affect regulation (Schoe, 2003) more than

secure individuals would. Even though insecure individuals seek to use God and religion to help them regulate their affect, it seems plausible that they would continue to have difficulty regulating their own affect (auto affect regulation) precisely because their implicit internal working models reflect a negative sense of self and/or emotionally significant others. In other words, interactive affect regulation may provide temporary emotional compensation, but does not necessarily change the structure of IWM’s. Thus, IWM correspondence still operates simultaneously with “compensatory” affect regulation at an implicit level. Byrd and Boe’s (2001) finding that anxious attachment was associated with petitionary prayer, perhaps a “clingy” way of relating to God to stave off underlying feelings of rejection, provides some empirical support for this notion. This underlying dynamic is entirely consistent with the internal working model, and should be viewed as correspondence in our view.

Thus, we propose that IWM correspondence is the broadest conceptual framework for understanding attachment and religion, and that this operates at the level of implicit spiritual experience. Under the conceptual framework of *Implicit IWM correspondence*, there are three specific models. The first is *experiential correspondence*, in which internal working models of self and others correspond to one’s experience of relationship with God, and of the spiritual dimensions of relationships within one’s spiritual community.

The second model is *motivational correspondence*, in which individuals’ motivation for affect regulation corresponds to their internal working models. Insecure individuals tend to use their relationship with God and religiousness for interactive affect regulation (Schoe, 2003). While secure individuals undoubtedly use their religion for affect regulation at times, it is not the predominant motivation behind their religious involvement and relationship with God, as it is for insecure individuals. Secure individuals are more capable of auto affect regulation (Schoe, 2003) and thus more free and autonomous (Main, Kaplan, & Cassidy, 1985) to pursue religion for its own sake. This can be viewed as an attachment perspective on Allport’s (1950) classic concepts of extrinsic and intrinsic religious motivation.

The third model is *religious change correspondence*, in which the way one comes to religion, and the stability of one’s religiousness over time corresponds to one’s internal working models. Theory

and empirical findings (e.g., Granqvist, 2002; Kirkpatrick, 1997; Kirkpatrick & Shaver, 1990) suggest that insecure individuals are more likely to experience sudden religious conversions and change, presumably because such changes represent strategies for regulating felt security and affect (Griffin & Bartholomew, 1994), and for coping with crises. Explicit religious compensation as we have defined it does not fit under the conceptual rubric of Implicit IWM correspondence, and we believe the evidence will ultimately not support this model.

### PURPOSE OF CURRENT STUDY

The purpose of the present study is to test (a) *experiential correspondence* and (b) *motivational correspondence* in implicit religious/spiritual (RS) functioning, and (c) *explicit religious compensation* in explicit religious/spiritual functioning. To assess the wide range of RS functioning, a number of measures of spirituality were included. Measures were chosen on the basis of their ability to contribute a specific, unique aspect to the entire picture of RS functioning. Such aspects include spiritual community, prayer, religious commitment, attachment to God, and purpose in life. Measures will be described more fully below. Four latent factors were used to measure implicit indicators of spiritual functioning (avoidant attachment to God, anxious attachment to God, unforgiveness, and spiritual community). One latent factor was used to measure explicit religious/spiritual functioning (explicit religious commitment).

### Hypotheses

Our hypotheses are as follows:

1) *Experiential correspondence*: We predicted that adult attachment status (in romantic relationships) will correspond to implicit measures of spiritual functioning. At a general level, it was predicted that insecure attachment is associated with increased levels of spiritual difficulties and impairment. More specifically, using Bartholomew and Horowitz's (1991) four category model of romantic attachment, we predicted that:

1a) Preoccupied and fearful attachment statuses (negative views of self) will be higher than secure and dismissing statuses (positive views of self) on unforgiveness. The defensive attachment status is grouped with secure here because dismissing individuals tend to maintain a positive sense of self-worth by defen-

sively denying the importance of close relationships (Griffin & Bartholomew, 1994). Thus, it is predicted that their lack of felt need for others leads to higher levels of forgiveness (than negative views of self), although this may represent a more superficial "dismissive" type of forgiveness.

1b) Secure attachment (positive views of self and other) was predicted to be higher than preoccupied, fearful, and dismissing on spiritual community because secure individuals are more likely to both desire and experience close, supportive relationships with their spiritual community.

1c) It was expected that dismissing attachment, an avoidant strategy for regulating affect, would be higher than preoccupied and fearful, which would both be higher than secure, on avoidant attachment to God.

1d) We also tested for interaction effects with parental religiosity, predicting there would be no effects, indicating that experiential correspondence operates regardless of level of parental religiosity during childhood.

#### 2) *Motivational correspondence*:

2a) We predicted that preoccupied and fearful attachment statuses (negative views of self) will be higher than secure and dismissing statuses (positive views of self) on anxious attachment to God. It was predicted that the groups with negative views of self would use their religion more to regulate their affect as reflected in the subscales comprising Anxious Attachment to God. In addition, due secure individuals' higher levels of felt security with God, and due to dismissing individuals defensive denial of the value of close relationships, which is theoretically associated with less anxiety, these two groups are predicted to score lower on Anxious Attachment to God.

2b) Again, we tested for interaction effects with parental religiosity, predicting there would be no effects, indicating that experiential correspondence operates regardless of level of parental religiosity during childhood.

3) *Explicit religious compensation*: In general, our hypothesis was that attachment status would not predict explicit religious commitment/involvement as measured by the latent explicit religious commitment factor. Given the mixed findings in the literature regarding explicit religious compensation, and that interactions with parental religiosity have been found, we tested for interaction effects with parental religiosity with no specific hypotheses.



## METHOD

### *Participants and Procedures*

The sample consisted of 483 undergraduate students from a protestant university. The mean age of participants at was 18.06,  $SD = 1.45$ , range = 16-48. There were 69% female participants and 31% male. The sample was predominantly Caucasian (84.5%), with Hispanics, Asian Americans, and African Americans representing 8.5%, 9.1% and 1.2%, respectively. The sample was almost entirely protestant Christian (91%) with the single largest denomination being non-denominational (39%).

During the beginning of fall 2003, data was collected from students in general education courses as one option for class participation credit. Participants were informed of the confidential and voluntary nature of the study. Questionnaires were handed out by instructors at the beginning of class and were completed in class. Completed questionnaires were then returned to instructors at the end of that same class session and later collected by research assistants.

### *Measures*

Factor analyses with this population were conducted on all of the measures discussed below. In each analysis, we used the extraction method of Principal Axis Factoring and an oblique (Oblimin) rotation method with Kaiser Normalization. The criterion for minimum pattern loading was .30.

**Attachment classification.** The Experiences in Close Relationships (ECR), a 36-item measure of adult romantic attachment, was selected to categorize subjects into one of four attachment styles (Brennan, Clark, & Shaver, 1998). The measure was developed from a factor analysis of more than 1,000 participants who completed over 300 items drawn from self-report measures of adult attachment. Based on the analysis, two orthogonal dimensions were suggested, Anxiety and Avoidance. Each dimension is measured with 18 items and uses a 7-point, anchored Likert-type scale (1 = *disagree strongly*, 4 = *neutral/mixed*, 7 = *agree strongly*). Subscale scores for anxiety and avoidance are obtained by reverse scoring a number of items so that high scores indicate greater anxiety or avoidance. Subjects are instructed report the degree to which they agree or disagree with statements regarding their feelings in relationships, beliefs about relationships, the feedback they receive from those with whom they are in close relationship, and their social behavior.

We followed Brennan et al's (1998) discriminant function procedures for classifying subjects into one of four categories according to their level of avoidance and anxiety. Low levels of avoidance and anxiety indicate secure attachment, while low levels of avoidance and high levels of anxiety indicate preoccupied attachment. High levels of avoidance and low levels of anxiety indicate dismissive attachment, while high levels of avoidance and anxiety indicate fearful attachment. Significant correlations in the expected directions with other measures of adult attachment provide evidence for validity (Brennan, et al., 1998; Brennan, Shaver, and Clark, 2000). Brennan et al. (1998) reported that subscales' internal reliability (coefficient alpha) was .91 for Anxiety and .94 for Avoidance. Brennan et al. (2000) reported that both subscales' retest reliabilities were .70.

**Indicators of Implicit Spiritual Functioning.** Spiritual Assessment Inventory (SAI; Hall & Edwards, 1996, 2002). Four subscales from the Spiritual Assessment Inventory designed to measure 1) disappointment with God (Disappointment), 2) instability in relationship with God (Instability), 3) awareness of God's presence and communication (Awareness), and 4) capacity to work through difficult experiences with God (Realistic Acceptance) were included as self-report indicators of implicit spiritual functioning in this study. Coefficient alphas of .89, .71, .82, respectively, demonstrated good internal consistency for the first three scales. The coefficient alpha for RA was slightly low at .61. Factorial and construct validity has been demonstrated in numerous studies (Hall & Edwards, 1996, 2002).

Transgression-Related Interpersonal Motivations Inventory (TRIM; McCullough, Rachal, Sandage, Worthington, Brown, & Hight, 1998). The TRIM, a five-point Likert scale, is actually a measure of *unforgiveness* with two factors: revenge (5 items) and avoidance (7 items). We conceptualized forgiveness (or the direct measure of unforgiveness) as an indicator of implicit spiritual functioning since one's experience of forgiveness is based on one's implicit relational knowledge. All 12 items loaded on these two theoretically-derived factors in our sample, each with high internal consistency reliabilities (.84 for revenge and .85 for avoidance).

Tendency to Forgive (TTF; Brown, 2003). This four-item Likert scale (5-point) all loaded on a single factor. The alpha coefficient was .80 in our sample, demonstrating good internal consistency. The measure focuses on the tendency to ruminate or hold

grudges. When combined with the TRIM, it remained a separate factor, thereby producing three forgiveness factors: revenge, avoidance, and rumination.

Purpose in Life (PIL; Crumbaugh & Maholick, 1964). This well-known 20-item Likert (7-point) measure of the degree to which a person possesses a will to meaning in life was retained as a single factor, though five items did not load at the .30 level. Due to its wide use, all 20 items were used, producing a moderately high alpha coefficient of .81 in our sample. We conceptualized one's sense of purpose and meaning in life as an indicator of implicit spiritual functioning, since it reflects an implicit, automatic appraisal of the meaning of events on a global level, and thus is not under the direct control of explicit processes.

Attachment to God Inventory (AGI; Beck & McDonald, 2004). This scale resulted in a two-factor structure that exactly replicated the two theoretically-derived factors of anxious and avoidant attachment to God statuses. The alpha coefficients in our sample were .86 for anxious and .83 for avoidant attachment to God, demonstrating good internal consistency. Based on our discussion above, we conceptualized attachment as an indicator of implicit spiritual functioning as it clearly reflects implicit relational knowledge applied to one's relationship with God.

Congregational Items (Fetzer Institute/National Institute of Aging Working Group, 1999). Two items from this multidimensional measure were used to assess perceived level of congregational support, resulting in one factor. This brief Congregational Support factor demonstrated good internal consistency in our sample with an alpha coefficient of .81. We conceptualized congregational support as an indicator of implicit spiritual functioning because it reflects one's implicit relational knowledge within a community context.

*Spiritual Community Scale (SCS)*. This eight-item scale was developed for this study and resulted in two factors: a six-item spiritual friendship factor (coefficient alpha = .73) and a three-item spiritual participation factor. Only the spiritual friendship factor loaded clearly in the higher order factor analysis and was used in the study. As with congregational support, we conceptualized the two factors of spiritual community as indicators of implicit spiritual functioning for similar reasons as noted above for the congregational support scale. In fact, as detailed below, these two measures loaded together on a second-order factor.

*Indicators of Explicit Spiritual Functioning*. Religious Commitment Inventory (RCI-10; Worthington et al., 2003). A two factor solution emerged from the 10-item Religious Commitment Inventory: a three-item Religious Centrality factor (RC) and a three-item Reflection on Faith (RF) factor. Adequate internal consistency was demonstrated in the coefficients alphas (.75 for religious centrality and .70 for reflection on faith). We conceptualized these two factors as indicators of explicit spiritual functioning since people have more direct, intentional control over the degree to which they reflect on their faith and make it central to their lives. (We would not argue that people have full control over these aspects, but certainly more than for implicit relational knowledge as reflected in the scales above.)

*Spiritual Practices Scale (SPS)*. This 6-point Likert scale was created for this study and consists of a six-item Spiritual Comfort Seeking subscale and a four-item Spiritual Practices Frequency subscale. These two subscales emerged as independent factors. Only the Spiritual Practices Frequency subscale was used in this study because the Spiritual Comfort Seeking subscale did not load in the higher order factor analysis of all the scales. The coefficient alpha for Spiritual Practices Frequency was .68. For similar reasons as those noted above for the Religious Commitment Inventory, we conceptualized the spiritual practices frequency scale as an indicator of explicit spiritual functioning.

*Second order factors*. In order to reduce the number of dependent variables and to create more robust and empirically distinct criterion measures, we conducted a second order factor analysis on all the subscales, using a principal axis factoring extraction, and an oblique (oblimin) rotation method. Based on the Scree Test (Cattell, 1966) applied to the eigenvalues and the interpretability of the factor structure, five factors were extracted. Table 1 reports the pattern matrix for the five factors. The cutoff for pattern loadings used was .30. The eigenvalues for the first five factors were 4.11, 1.85, 1.19, 1.13, and 1.03, respectively. The five factors accounted for 58.2 percent of the total variance.

The first factor was labeled Avoidant Attachment to God, and consisted of the SAI-Awareness, AGI-Avoidant, and SAI-RA subscales (the second subscale produced a negative loading because it is scored in the opposite direction). Factor two was labeled Unforgiveness, and was comprised of the three unforgiveness subscales: TRIM-Avoidance,

TABLE 1

*Pattern Matrix for Second Order Principal Axis Factor Analysis of Implicit and Explicit Religiousness Subscales*

	Factor				
	Avoidant God Attachment	Unforgiveness	Explicit RS Commitment	Anxious God Attachment	Spiritual Community
SAI-A	0.67				
AGIAVOID	-0.62				
SAI_RA	0.36				
TRIM_AV		0.80			
TRIM_REV		0.41			
TTF_RUM		0.39			
REFLECT			-0.93		
SPS_FREQ			-0.54		
RELCENTR			-0.46		
AGIANX				0.65	
SAI_I				0.49	
SAI_D				0.45	
sCS_SF					0.64
PIL				-0.31	0.35
CONGSUPP					0.34

*Note.* Extraction Method: Principal Axis Factoring.  
Rotation Method: Oblimin with Kaiser Normalization.

TRIM-Revenge, and TTF-Rumination. The third factor, labeled Explicit Religious Commitment, was comprised of all the explicit religiousness measures: the RCI-Reflection on Faith, Spiritual Practices-Frequency, and RCI-Religious Centrality subscales. Factor four was labeled Anxious Attachment to God, and included the AGI-Anxiety, SAI-Instability, and SAI-Disappointment subscales. Factor five, Spiritual Community, was comprised of the Spiritual Friendship (from the Spiritual Community Scale), PIL, and Congregational Support (from the Fetzer Multidimensional Measure of Religiosity). The higher order factor analysis corroborated the conceptual distinction between explicit religiousness measures, which all loaded onto one factor, and the implicit religiousness measures, which loaded onto four conceptually distinct factors.

It is important to explain here our choice of the terms “indicators of implicit and explicit spiritual functioning,” rather than the term “implicit measures,” which is connected to our use of self-report measures. By implicit we do not mean that these

measures are methodologically implicit measures, such as the Implicit Association Test (Greenwald, McGhee, & Schwartz, 1998) or the Adult Attachment Interview (George, Kaplan, & Main, 1996), but rather that they are self-report measures that tap into implicit relational knowledge. The use of the term implicit also conveys the essential aspect of spirituality that we seek to investigate: the experiential components, separate from explicit and behavioral components, that are processed non-consciously but can become consciously accessible as we discussed above and illustrated with the case example.

While self-report measures are not traditionally designed to assess implicit functioning, self-report measures can be seen as indicators of implicit aspects of experience. Shaver and Mikulincer (2002) argue that,

social psychologists and others who use self-report measures view them as convenient surface indicators of differences in attachment-related cognitions, emotions, and behavioral tendencies which are partly unconscious, indicators that can be examined in relation to more direct measures of unconscious processes to see whether those

processes work the way attachment theory leads us to expect. (p. 137) (*Italics in original*)

Therefore, self-report measures can be seen as valid indicators of implicit processes if their relationship to implicit measures can be empirically supported. Such support comes from a study by Berat, Mikulincer, Shaver, and Segal (2005) investigating the convergence of a self-report measure of attachment (similar to the ECR which we use) and the Rorschach, widely considered a valid measure to of unconscious/implicit processes. Their findings "support the contention that self-reports of attachment anxiety and avoidance are associated with theoretically predictable implicit aspects of attachment psychodynamics" (p. 77). This provides initial justification for the use of self-report measures as a means to tap implicit processes. Additional studies are needed to further validate the adequacy of other self-report measures of attachment and spirituality.

While Mikulincer et al. (2005) provide support for the use of the ECR by way of association, they did not empirically test the convergence of self-report indicators of implicit *spiritual* functioning with implicit measures of spiritual functioning. This is partly because there are currently no established implicit measures of spirituality, although initial work in this area has begun (Granqvist & Main, 2004; Proctor et al., 2009; Teal 2006). Until the field advances, we must extrapolate from self-report measures since they are the only available means of accessing implicit aspects of spirituality. Several of the authors are currently working on an implicit measure of spirituality based on the coherence analysis used in the Adult Attachment Interview. Thus, while we acknowledge the measurement limitations of our study, we believe the results advance the field given the current state of measuring implicit spiritual processes, and we hope others will build on this study in future research using implicit measures of spirituality.

## RESULTS

A 4 x 2 x 2 between-subjects multivariate analysis of covariance was performed on five dependent variables: Avoidant Attachment to God, Anxious Attachment to God, Unforgiveness, Spiritual Community, and Explicit Religious Commitment. Independent variables were attachment status (secure, fearful, preoccupied, and dismissing), maternal religiosity in childhood (low and high) and paternal religiosity in childhood (low and high). Covariates included gender

and religious denomination. MANCOVA was used to conduct the analyses. The total  $N$  was 416 for the MANCOVA.

Multivariate normality was investigated by computing expected normal probability plots for the criterion variables. The plots indicated a normal distribution for all the criterion variables. An index plot of the leverage values of the dependent variables revealed four cases with leverages substantially larger than the rest of the cases. These four cases were deleted. Box's test of equality of covariance matrices [Box's  $M = 43.12$ ;  $F = .937$  (45, 3788.68) ns] indicated that the assumption of observed variance-covariance matrices of the dependent variables being equal across groups was met. Bivariate scatterplots among the dependent variables suggested the linearity assumption was met. Multicollinearity among the dependent variables was evaluated by examining intercorrelations, tolerances, and condition indices. Intercorrelations ranged from .20 to .45, and tolerances ranged from .72 to .80, well above the recommended cutoff of .50 (Pedhazur, 1997) (see Table 2). There were no high condition indices strongly associated with the variance of two or more variables (Tabachnick & Fidell, 2001).

The attachment groups differed significantly on a linear combination of the DV's (Wilks' Lambda = .796,  $F(15, 1046.65) = 6.01$ ,  $p < .0001$ ). Table 3 reports the mean self-report ratings of the criterion indicators of implicit and explicit spiritual functioning across attachment groups. As shown in Table 3, univariate ANOVAs indicated significant differences among attachment groups for three of the four indicators of implicit spiritual functioning: unforgiveness,  $F(3, 383) = 13.44$ ,  $p < .0001$ , Anxious Attachment to God,  $F(3, 383) = 22.18$ ,  $p < .0001$ , and Spiritual Community,  $F(3, 383) = 4.69$ ,  $p < .003$ . Contrary to prediction, no differences between attachment groups were found for Avoidant Attachment to God. As predicted, no differences between attachment groups were found for the indicator of Explicit Religious Commitment. Neither interaction term (attachment group with maternal and paternal religiosity, respectively) was significant for any of the five criterion measures.

A priori planned comparisons were examined to test hypothesized differences between attachment groups on each criterion measure. Posthoc Tukey pairwise comparisons were conducted to provide a more conservative protection against Type I error. As shown in Table 1, planned comparisons revealed

**TABLE 2**  
*Dependent Variable Intercorrelations, Means, and Tolerances*

	Avoidant God Attachment	Unforgiveness	Explicit RS Commitment	Anxious God Attachment	Spiritual Community
Avoidant God Attachment	I				
Unforgiveness	.20**	I			
Explicit RS Commitment	-.45**	-.29**	I		
Anxious God Attachment	.23**	.40**	-.23**	I	
Spiritual Community	-.42**	-.27**	.39**	-.28**	I
Mean	2.13	2.99	4.05	3.01	4.20
SD	0.59	0.70	0.66	0.89	0.47
Tolerance	0.72	0.79	0.73	0.80	0.74

Note: \*\* =  $P < .01$

**TABLE 3**  
*Mean Factor Scores of Implicit and Explicit Religiousness Across Attachment Groups*

Model	Secure	Fearful	Preoccupied	Dismissing		
Self	Positive	Negative	Negative	Positive		
Other	Positive	Negative	Positive	Negative		
<b>n.</b>	100	125	103	88		
Measures						
Implicit Religiousness					Univariate <i>F</i> s (3,383)	Eta <sup>2</sup>
<b>Experiential Correspondence</b>						
Unforgiveness	2.73 <sub>b</sub>	3.20 <sub>a</sub>	13.22 <sub>a</sub>	2.76 <sub>b</sub>	18.54**	0.12
Spiritual Community	4.35 <sub>a</sub>	4.15 <sub>b</sub>	4.11 <sub>b</sub>	4.19 <sub>b</sub>	5.68*	0.04
Avoicant Attachment to God	2.03	2.16	2.18	2.14	1.51 <i>ns</i>	0.01
<b>Motivational Correspondence</b>						
Anxious Attachment to God	2.64 <sub>b</sub>	3.21 <sub>a</sub>	3.38 <sub>a</sub>	2.73 <sub>b</sub>	19.04**	0.12
Explicit Religiousness						
<b>Explicit Religious Compensation</b>						
Explicit Religious Commitment	4.06	4.07	4.06	4.04	0.04 <i>ns</i>	0.000

Note Means with different subscripts differ significantly at  $p < .05$

\*\* =  $P < .0001$

that, as predicted, fearful and preoccupied attachment groups scored higher than secure and dismissing groups on unforgiveness. As predicted, the secure attachment group scored higher on spiritual community than fearful, preoccupied, or dismissing groups. The latter three groups did not differ from each other. Results indicated that as predicted, fearful and preoccupied attachment groups scored higher than secure and dismissing groups on Anxious Attachment to God. Also as predicted, no differences among attachment groups were found on Explicit Religious Commitment.

## DISCUSSION

The goal of our study was to address the question of the association between attachment patterns with humans and attachment patterns with God, and more generally, spiritual experiences. As we noted, early research proposed two alternative, competing hypotheses: compensation, in which attachment patterns with humans do not correspond to God attachment patterns presumably because God functions as a substitute attachment figure; and, *correspondence*, in which attachment patterns with humans corresponds to, or are reflected in attachment patterns with God. Overall, the evidence has been somewhat mixed, with some findings supporting correspondence and some supporting compensation. We believe this is due to limitations of the conceptual models, more specifically, lack of clarity regarding the compensation model, and the limited way in which spirituality and religiousness has been conceptualized and measured.

We suggested that a conceptual distinction needs to be made between implicit spiritual functioning and explicit spiritual functioning. This distinction draws on robust research findings from multiple fields delineating two separate ways of knowing and processing emotional information: explicit and implicit relational knowledge (Stern et al., 1998). Implicit spiritual functioning focuses more on automatic, presymbolic, emotional information processing, whereas explicit spiritual functioning focuses more on symbolized beliefs and behaviors. Based on this distinction, we proposed a model of *Implicit IWM Correspondence*, and *Explicit Religious Compensation*. Under the rubric of *Implicit IWM Correspondence*, we defined three distinct models, two of which have essentially been considered compensation models in the past. We argued that these models, emotional compensation and longitudinal

compensation, are better understood as reflections of the underlying dynamics of internal working models, and thus represent correspondence at their core. We proposed and tested two models of Implicit IWM Correspondence: *experiential correspondence*, and *motivational correspondence*. In addition, we conceptualized one compensation model, *explicit religious compensation*, in such a way as to be orthogonal to IWM correspondence.

Our overall results provided strong support for this theoretical model of implicit IWM correspondence and explicit religious compensation. We found group differences on three of the four measures of implicit spiritual functioning, and as predicted, no differences between attachment groups on the indicator of explicit spiritual functioning. Furthermore, the specific hypothesized group differences on the three indicators of implicit spiritual functioning were supported. Thus, we found predictable differences between attachment groups in terms of the manifestation of spiritual functioning on indicators that tap into implicit relational and spiritual knowledge.

The specific group differences present some interesting patterns. Both the secure and dismissing attachment groups reported higher levels of forgiveness than fearful and preoccupied groups. Individuals with preoccupied attachment in Bartholomew and Horowitz (2001) classification system are thought to maintain a negative sense of self, but positive view others. In the AAI tradition, these individuals tend to become flooded with negative affect when discussing emotionally significant relationships (Hesse, 1999). Thus, when processing perceived interpersonal injuries, these individuals are prone to become overwhelmed with negative affect, which would clearly hinder the forgiveness process. The fearful attachment category in Bartholomew and Horowitz classification system reflects negative views of self and others. While it is not clear how this classification maps onto the AAI classifications, the underlying negative views of self and others would clearly seem to be a barrier to the forgiveness process. As predicted, the dismissing group reported higher levels of forgiveness than preoccupied and fearful, but were not significantly different than the secure group. This makes sense based on their deactivating affect regulation strategy and disavowal of need for others. In other words, our findings may suggest a type of deactivating forgiveness that may represent more of a lack of felt need for others than

true forgiveness. This might be more aptly conceptualized as a type of “pseudoforgiveness.” Further research with implicit measures will be needed to corroborate and elaborate on this notion.

The secure group reported the highest levels of spiritual community on indicators of spiritual friendship, sense of support from one’s spiritual community, and a sense of purpose in life. This supports our hypothesis that the secure group both desires close relationships more and tends to have more positive relational experiences than the other three attachment classifications. An interesting direction for future research would be to explore the dynamic patterns and mechanisms of experiences in spiritual community for the various attachment groups.

The preoccupied and fearful groups reported higher levels of anxious attachment to God than the secure and dismissing groups, which generally replicates numerous previous studies (e.g., Beck & McDonald, 2004; Brokaw & Edwards, 1994; Hall & Edwards, 1996; Rowatt & Kirkpatrick, 2002). It is noteworthy that the dismissing group does not report higher levels of anxious attachment to God than the secure group, which makes sense; however, they also do not report higher levels of avoidant attachment to God, which we would expect. In much of our data, and in numerous other studies (e.g., Beck & McDonald, 2004), the avoidant attachment to people and God dimension does not seem to discriminate on various outcomes. Further research will need to explore possible measurement issues indicated here.

At a more general level, these findings support the notion that the dynamics inherent in the various IWM’s do correspond to individuals’ spiritual functioning at an implicit level. Furthermore, our results do not support a compensation model at the implicit level as we predicted. Moreover, compensation is also not supported when it is defined more precisely as insecurely attached individuals exhibiting concurrent higher levels of spiritual functioning in the explicit domain. We found, as predicted, no association between human attachment and explicit spiritual functioning. Our results also indicated that the correspondence findings hold across levels of parental religiosity. Although we used different indicators of child religiosity than Granqvist (2002), these findings do not lend support to the socialized correspondence model.

Stated differently, our findings suggest that implicit relational knowing in general predicts implicit

knowing with respect to “how to be with” God, as well as “how to be with” a spiritual community. This supports the theoretical notion, argued previously by a number of authors (e.g., Benner, 1998; Hall, 2004) of the inseparability of the psychological and spiritual domains of functioning. This is the essence of the correspondence hypothesis as we have conceptualized it, which we believe to be consistent with attachment theory: that individuals’ implicit, “gut-level” knowledge of how to be with human attachment figures also governs their automatic appraisals, or implicit knowing, of God and spirituality.

On the flip side, although compensation as we have defined it cannot be ruled out based on the lack of a significant effect, our findings add one more piece of evidence suggesting that implicit relational/spiritual knowledge embedded in IWM’s does not reliably predict explicit aspects of spiritual functioning over which people have more direct control. Our findings suggest that being religiously committed and engaging in certain religious/spiritual practices, *by themselves*, simply do not tell us much about a person’s implicit relational-spiritual dynamics and maturity level. This is supported by the work of Lyons-Ruth (1999) who argues that the development of “enactive relational representations” comes not in the form of linear stages, as in Piagetian theory, but rather through “varied and context specific ‘skills’” (p. 597) that are increasingly complex and integrated ways of being. She states: “development is viewed as a process of developing concurrently along a number of pathways that may be only loosely or not at all coordinated by level of articulation achieved” (p. 597). Thus, the pathways of spiritual practices and symbolized knowledge may not be coordinated with deeper, implicit representations.

However, when placed in a broader theoretical context, spiritual behaviors and practices are tremendously important because they have to do with intentionality. Intentionality is a more explicit form of functioning similar to Emmons & Crumpler (1999) notion of strivings. Strivings represent mid-range goals—things people are consciously and actively trying to do. As such, these intentional spiritual strivings do not have a *direct* influence on implicit (spiritual) functioning, but rather an *indirect* one. Spiritual practices or strivings influence one’s relational environment and context, which in turn directly influence implicit relational knowledge. Our contention based on this theoretical framework is that spiritual practices moderate the association between attachment

dynamics and implicit spiritual outcomes. There are a number of possibilities for what this moderation might look like (see Hall, 2004) and there is some preliminary evidence supporting this notion (Hall & Hill, 2003). Our hope is that future research will elaborate on IWM correspondence at the implicit level, and the role of explicit RS beliefs, behaviors and intentionality within a broader “relational spirituality” theoretical model.

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